



Manual

WinGuard - X4 2018



Manual

WinGuard - X4 2018

Revision 7 dated 2018-11-28 - as of X4 Build 5.1

Advancis Software & Services GmbH

Table of contents

1	Introduction	1
1.1	How to use the Manual	1
1.2	Styles	2
1.3	Terms	3
1.4	Change History	12
2	Installation	15
2.1	General Information about Installation	15
2.2	System Concept	18
2.2.1	Standalone System	19
2.2.2	Network System	19
2.3	Workstation Installation	22
2.3.1	Setup with AutoRun	23
2.3.2	Setup Programs (new)	24
2.3.3	Setup Programs (modify)	29
2.3.4	Setup Project Data	31
2.4	Network Installation	34
2.4.1	Requirements	34
2.4.2	General Workstation Installation	34
2.4.3	Server	36
2.4.4	Client	43
2.4.5	Client with Interface Server	51
2.4.6	Client with Local Server Function	51
2.4.7	Display (VideoDisplay)	51
2.5	Installation as a Service	55
2.6	Silent Setup	56
2.7	Data Storage and Management	58
2.7.1	Programs	58
2.7.2	Data	59
2.7.3	Shared Data Storage	60
2.7.4	Data Segmentation	62
2.7.5	Managing WinGuard Projects	63
2.8	Autostart	64
2.8.1	Autostart PC (BIOS)	64
2.8.2	Autostart Operating System	64
2.8.3	Autostart WinGuard	66
2.9	Inspector	68
2.9.1	Installation	68
2.10	OPC Server	69
2.10.1	Installation	69
2.10.2	Settings	72
3	Update	74
3.1	Update Manager	74

3.1.1	Operation	75
3.1.2	Controlling Workstation	80
3.1.3	Update Package	80
3.1.4	Execute Update	81
3.1.5	Update Process	82
3.1.6	Logging	83
3.2	Manual Update	84
3.2.1	Update Content	85
3.2.2	Before Update	85
3.2.3	Standalone System Update	85
3.2.4	Network System Update	87
3.2.5	Interfaces	89
3.2.6	Special Program Files	89
3.3	Incompatibilitys and Adjustments	90
4	Licensing	91
4.1	License Model	92
4.1.1	System	92
4.1.2	Components	92
4.1.3	License	92
4.1.4	Modules	93
4.1.5	Datapoint Units	97
4.2	SoftKey License	99
4.2.1	Binding licenses	99
4.2.2	Usage	99
4.2.3	License selection	99
4.2.4	Activation	99
4.2.5	Configuration	100
4.2.6	License file (LIC file)	101
4.3	Dongle License	103
4.3.1	General	103
4.3.2	Dongle Update	103
4.3.3	WibuKey Driver Update	103
4.3.4	Error Messages	104
4.4	Key Manager	105
4.4.1	Operation	105
4.4.2	Update	109
4.5	License Manager	110
4.5.1	Operation	111
4.5.2	First-time use of license	115
4.5.3	License update online	116
4.5.4	License update offline	117
4.5.5	SoftKey activation online	119
4.5.6	SoftKey activation offline	120
4.5.7	SoftKey emergency aktivation online (PIN)	122
4.5.8	SoftKey emergency aktivation offline (PIN)	124
5	Operation	127
5.1	Help	128
5.2	User Interface	129

5.2.1	Terms	130
5.2.2	Menu	132
5.2.3	Toolbar	133
5.2.4	Explorerbar	133
5.2.5	Display Areas / Panes	135
5.2.6	Layouts	138
5.2.7	Operation of Display Areas / Panes	139
5.2.8	Event List	141
5.2.9	Status Bar	142
5.2.10	Shortcut Keys	144
5.2.11	Control Panels	144
5.3	System Access	146
5.3.1	System Start	146
5.3.2	Login	148
5.3.3	Logoff	149
5.3.4	Changing a Password	149
5.4	Standard Menu	151
5.4.1	System	152
5.4.2	Edit	157
5.4.3	View	158
5.4.4	Functions	162
5.4.5	Database	164
5.4.6	Graphic	165
5.4.7	Text	166
5.4.8	Other	167
5.4.9	Windows	170
5.4.10	Help (?)	171
5.5	Standard Toolbars	172
5.5.1	System	172
5.5.2	VideoDisplay	174
5.5.3	Event List	174
5.5.4	Event Display	176
5.6	Explorer	178
5.6.1	Segmente	178
5.6.2	Locations	179
5.6.3	Datapoints	182
5.6.4	Persons	188
5.6.5	Graphics	190
5.6.6	Symbols	192
5.6.7	Texts / Workflows	193
5.6.8	Graphic Content	195
5.6.9	State Counter	195
5.7	Events	197
5.7.1	Event Context	197
5.7.2	Event Display	197
5.7.3	Event Handling	198
5.7.4	Event List	199
5.7.5	Event Filter	200
5.7.6	Event Groups	204
5.7.7	Event Graphics	207

5.7.8	Workflow	210
5.7.9	Event Log	211
5.7.10	Event Report	212
5.7.11	Event Attachments	214
5.7.12	Prioritization	216
5.7.13	Visibility	217
5.8	Control Panels	219
5.8.1	Datapoint Control Panel	219
5.8.2	Camera Control Panel	221
5.8.3	Intercom Control Panel	224
5.8.4	Telephone Control Panel	226
5.8.5	Notification Control Panel	227
5.8.6	Audio Control Panel	229
5.8.7	Interface Control Panels	231
5.8.8	Event Simulation	231
5.8.9	Command Monitor	233
5.8.10	Set Value	234
5.9	User Alarm	236
5.9.1	User Alarm (pre-defined)	236
5.9.2	User Alarm (via Explorer)	237
5.10	System Operation	240
5.10.1	Control via Explorer	240
5.10.2	Controlling via Control Panels	242
5.10.3	Graphics and Text Commands	242
5.10.4	Control Operations	243
5.11	Control Operations	244
5.11.1	Terms and Definitions	245
5.11.2	Behaviour	250
5.11.3	Table view	255
5.11.4	Calendar view	264
5.11.5	Form view	265
5.12	Video	277
5.12.1	VideoManager	277
5.12.2	Monitors	285
5.12.3	VideoDisplay	286
5.12.4	Video Banks	289
5.13	Video Archive	291
5.13.1	Terms and Definitions	291
5.13.2	Behaviour	292
5.13.3	Table views	292
5.13.4	Form views	298
5.13.5	Create bookmark	303
5.13.6	Layout window	305
5.14	Event Archive	307
5.14.1	Filter View	307
5.14.2	Table View	313
5.14.3	Event View	315
5.15	Logs	316
5.15.1	System Log	316
5.15.2	State Log	321

5.15.3	Interface Log	325
5.16	Analysis	330
5.16.1	Reports	330
5.16.2	Event Reports	332
5.16.3	History Display	332
5.16.4	CSV Export	334
5.17	Monitoring	335
5.17.1	Net Monitor	335
5.17.2	Interface Monitor	338
5.18	Database Functions	341
5.18.1	Files	341
5.18.2	Analyze	345
5.18.3	Maintenance	348
5.18.4	Update Formats	352
5.18.5	Backup	353
5.18.6	Restore	357
5.18.7	Data Package	361
5.18.8	CAD Preview	370
5.18.9	CSV Export	371
5.18.10	CSV Import	386
5.18.11	SQL Export	390
5.19	Dead man's control	400
5.19.1	User interface	400
5.19.2	Functionality	401
5.20	Other	403
5.20.1	Print Function	403
5.20.2	Screen Keyboard	403
6	Settings	404
6.1	Local Installation	407
6.1.1	System	408
6.1.2	Network	409
6.1.3	Security	415
6.1.4	Printer Profiles	419
6.2	Global	422
6.2.1	System	424
6.2.2	Desktop	442
6.2.3	Contents	450
6.2.4	Explorerbar	455
6.2.5	Event List	466
6.2.6	Event Handling	475
6.2.7	Graphic	485
6.2.8	Video	500
6.2.9	Intercom	513
6.2.10	Modules	514
6.2.11	Other	517
6.3	Workstation Profiles	523
6.4	Workstation	524
6.5	User Profiles	525

7	Setup	526
7.1	Persons	526
7.1.1	Table View	526
7.1.2	Form View	527
7.1.3	Explorer	531
7.2	User	533
7.2.1	Table View	533
7.2.2	Form View	534
7.2.3	LDAP Login	539
7.2.4	Remarks	540
7.3	Workstations	541
7.3.1	Table View	541
7.3.2	Form View	542
7.4	Profiles	546
7.4.1	Table View	546
7.4.2	Form View	547
7.4.3	Remarks	550
7.5	Printer Profiles	551
7.5.1	Table View	551
7.5.2	Form View	552
7.6	Rights	554
7.6.1	Edit Rights	554
7.6.2	Function- and Rights Profiles	557
7.6.3	Activities / Single Rights	557
7.6.4	Rules	564
7.6.5	Preset Rights	565
7.6.6	Effective Rights	568
7.6.7	Hint for Projection	568
7.7	Lists	570
7.7.1	Edit Lists	570
7.8	Tags	573
7.8.1	Edit Tags	573
7.9	Segments	576
7.9.1	Table View	577
7.9.2	Form View	577
7.10	Customizer	580
7.11	Translations	581
7.11.1	Localizer	581
7.12	Calendar	583
7.12.1	Edit Calendar	583
7.13	Schedules	585
7.13.1	Edit Schedules	585
7.13.2	Define Schedule Sections	589
7.13.3	Fill Period in Schedule	589
7.13.4	Delete Period in Schedule	591
7.14	Timer	593
7.14.1	Table View	593
7.14.2	Form View	594
7.15	Sensor Types	597

7.15.1	Table View	597
7.15.2	Form View	598
7.16	Animation Schemes	601
7.16.1	Edit Animation Schemes	601
7.17	Layouts	604
7.17.1	General	604
7.17.2	Editing	605
7.17.3	Layout Properties	609
7.17.4	Controlling Target Panes	627
7.18	Panes	633
7.18.1	Table View	633
7.18.2	Form View	634
7.19	Overlays	636
7.19.1	Define overlays	636
7.20	Columns	642
7.20.1	Edit Columns	642
7.20.2	Data Type Event	647
7.21	Menus	650
7.21.1	Edit Menus	650
7.22	Toolbars	654
7.22.1	Edit Toolbars	654
7.23	Shortcut Keys	658
7.23.1	Edit Shortcuts	658
7.24	Commands	661
7.24.1	Edit Commands / Buttons	661
7.24.2	Define Commands	662
7.25	Gadgets	668
7.25.1	Gadget - Clock	668
7.26	Set up Service (ServicePanel)	670
7.26.1	Installation	672
7.26.2	Overview ServicePanel	674
7.26.3	ServicePanel Operation	676
7.26.4	Hints	683
7.27	Login with Active Directory (LDAP)	685
7.28	Performance Analysis	687
8	Data Supply	691
8.1	Locations	693
8.1.1	Explorer	693
8.1.2	Edit Locations	696
8.1.3	Links with Locations	699
8.2	Interfaces	701
8.2.1	Table View	701
8.2.2	Form View	703
8.2.3	Setup	707
8.2.4	Operation	708
8.2.5	Monitor	709
8.2.6	Control Panels	710
8.2.7	Datapoints	710
8.2.8	Automatic data supply	710

8.2.9	INI Files	711
8.2.10	LNG File	713
8.2.11	Multi Usage	714
8.2.12	Help	714
8.3	Datapoints	715
8.3.1	Explorer	716
8.3.2	Table View	719
8.3.3	Form View	721
8.3.4	Datapoint Tabs - General	727
8.3.5	Datapoint Tabs - Other	734
8.3.6	Automatic Projection	746
8.3.7	Auto-add Datapoints	746
8.3.8	Create Datapoint from Event	747
8.3.9	Special Datapoints	747
8.4	Graphics	756
8.4.1	Explorer	757
8.4.2	Menu Item - Graphic	759
8.4.3	Folder Structure	774
8.4.4	System Settings	776
8.4.5	Display and Print Parameters	776
8.4.6	Graphic Content Explorer	785
8.4.7	Symbols	790
8.4.8	Buttons	795
8.4.9	CAD Graphics	797
8.4.10	GIS Graphics	803
8.4.11	Other	805
8.4.12	Create Event Graphic	807
8.4.13	Test Graphic	807
8.5	Graphic Editor	809
8.5.1	Working with the Mouse and Keyboard	810
8.5.2	Toolbars	811
8.5.3	Context Menus	819
8.5.4	Working With Layers	825
8.5.5	Graphic Properties	828
8.5.6	Graphic Document Tabs	831
8.5.7	General Graphic Tabs	846
8.5.8	Graphic Object Tabs	867
8.5.9	Display Areas in Graphics	886
8.6	Texts	887
8.6.1	Explorer	887
8.6.2	Menu Item - Text	889
8.6.3	Folder Structure	893
8.6.4	User Entries	893
8.6.5	Parameters for Texts	894
8.6.6	Workflow	895
8.6.7	Test Text	897
8.7	Text Editor	899
8.7.1	Working with the Mouse and Keyboard	900
8.7.2	Toolbar	900
8.7.3	Context Menus	903

8.7.4	Text Properties	905
8.7.5	Definition von Workflows	929
8.8	Set Testing Context	931
8.9	Color Selection	933
8.9.1	List for Color Selection	933
8.9.2	Dialog for Color Selection	934
8.10	Variables and Key Words	939
8.10.1	Variables	939
8.10.2	Key Words	943
8.11	Commands	946
8.11.1	Overview	948
8.11.2	Add Attachment	951
8.11.3	Add Log Entry	953
8.11.4	Apply Event Handling	955
8.11.5	Assign Animation Scheme	956
8.11.6	Assign Cameras	957
8.11.7	Assign Tags	959
8.11.8	Change Function Profile	960
8.11.9	Change Language	961
8.11.10	Change User Profile	962
8.11.11	Change Workstation Profile	963
8.11.12	Choose Sound	964
8.11.13	Choose Workstation	965
8.11.14	Complete Event	966
8.11.15	Connect Audio	967
8.11.16	Control Datapoint	970
8.11.17	Control Datapoint - Camera	972
8.11.18	Control Display Device	975
8.11.19	Control Timer	977
8.11.20	Create Bookmark	979
8.11.21	Create Incident	981
8.11.22	Create Report	982
8.11.23	CSV Export	984
8.11.24	CSV Import	985
8.11.25	Don't Save Event	986
8.11.26	Execute Menu Command	987
8.11.27	Execute Text	988
8.11.28	Generate Event	990
8.11.29	Hide Event	992
8.11.30	Ignore Event	993
8.11.31	Login User	994
8.11.32	Modify Event	995
8.11.33	Notify Workstation	996
8.11.34	Play Sound	997
8.11.35	Print Documents	999
8.11.36	Print Graphic	1001
8.11.37	Print Text	1003
8.11.38	Remove Commands	1005
8.11.39	Select Datapoints	1006
8.11.40	Send Email	1008

8.11.41	Send Fax	1011
8.11.42	Send SMS	1014
8.11.43	Send to Pager	1017
8.11.44	Send Voice Message	1020
8.11.45	Server	1022
8.11.46	Set Input	1023
8.11.47	Set Symbol Filter	1025
8.11.48	Show Control Panel	1028
8.11.49	Show Display	1030
8.11.50	Show Text	1032
8.11.51	Show VideoManager	1034
8.11.52	Simulate Event	1035
8.11.53	Start Application	1037
8.11.54	Switch Graphic	1039
8.11.55	Switch Pane	1041
8.11.56	Switch Text	1043
8.11.57	Switch Video Split	1045
8.12	IF Conditions	1047
8.12.1	Editing	1048
8.12.2	Variable	1050
8.12.3	Schedule	1053
8.12.4	State Type	1054
8.12.5	State Change	1054
8.12.6	Rule Set	1055
8.12.7	Context	1055
8.13	Scheduled Commands	1057
8.13.1	Table View	1057
8.13.2	Form View	1059
8.13.3	Execution of Scheduled Commands	1062
8.14	Event Handling	1065
8.14.1	Table View	1065
8.14.2	Form View	1066
8.15	Event Routing	1072
8.15.1	Choose Workstation	1072
8.15.2	Notify Workstation	1073
8.15.3	Other Commands	1074
8.16	Event Display	1075
8.16.1	Script for Event Display	1075
9	Webserver and Webclient	1077
9.1	Webserver	1078
9.1.1	Installation	1079
9.1.2	Configuration	1086
9.1.3	Configuration Program	1088
9.2	Webclient	1096
9.2.1	Installation	1098
9.2.2	Configuration	1098
9.2.3	Start and Login	1102
9.2.4	User interface	1104
9.2.5	Control Operations - Tables	1119

9.2.6	Control Operations - Form	1126
9.3	Hints	1133
9.3.1	Windows Services	1133
9.3.2	System access (firewall)	1133
10	Tips and Help resolving Problems	1134
10.1	Installation Folder	1134
10.2	Restore	1135
10.3	Maintenance	1136
10.4	Encryption	1137
10.5	Certificate	1138
10.6	Debug Log	1139
10.7	System Time Synchronisation	1140
10.8	Helpful Hints about CSV Editors	1141
10.9	Print as Service	1142
10.10	Data Management	1143
10.11	Duplicate Interface Modules (Update File)	1145
10.12	Description Update.xml	1147
10.13	Create File Hash	1152
10.14	Update Helper Service	1153
11	FAQ	1154
11.1	Installation	1154
11.2	Settings	1155
11.3	Network	1156
11.4	Interfaces	1158
11.5	Sounds	1159
Index		1160

1 Introduction

Welcome to WinGuard!

WinGuard is an open, modularly-configured PSIM (Physical Security Information Management) system that serves as an integral platform for security and building technology. Depending on customer requirements, it can be implemented as a single or multi-station system and is thus flexible to meet varying requirements.

Since the system can be expanded with additional function modules, workstations, or interface modules, WinGuard can grow step by step to continue to meet increasing requirements. The open interface concept and large number of available interface modules allow for connection to numerous security and building technology systems.

The linked systems can continue to function autonomously, or, for ease of administration, can be hierarchically interconnected and operated as one unit.

1.1 How to use the Manual

This manual provides basic descriptions of WinGuard functions as well as information regarding licensing, installation, implementation, and operation of the security management system.



Is this your first time working with WinGuard? Is this the first time you are referring to the manual? Are you looking for a quick start and a brief overview of the major functions?



Then the section entitled [Operation](#)¹²⁷ is the right one for you. This section describes the major functions for operating the system in order to give first-time users a quick start. You will find step-by-step instructions for all major program functions and will be surprised how quickly you will achieve your first work objectives.



Are you looking for information regarding licensing, available system modules, and possible system releases?



Then we suggest you refer to the [Licensing](#)⁹¹ section. This section provides basic information regarding the system, expansion options, and available function modules.



Are you already familiar with WinGuard? Are you looking for a solution to a specific problem? Would you like to use WinGuard as efficiently as possible? Are you unclear about a specific program function?



Then please refer to the relevant chapters or use the keyword search.

Enjoy getting to know WinGuard!

1.2 Styles

Some symbols and font types are used in the documentation to identify certain information to facilitate your work with this documentation. They are briefly explained below.



Next to this symbol, we listed the steps you need to follow to achieve a specific result.



You will find this symbol next to additional notes. Notes can be found in places, where requests for clarification might occur or when there are special tips and tricks to facilitate your work. If further knowledge of other WinGuard functions is required, we will also implement a note, to briefly explain the background, so that you do not have to look for the solution elsewhere in the documentation.



This symbol is used if certain points require your particular attention. This may be the case if certain contexts may need clarification or if incorrect operation may lead to further problems.



Next to this symbol, we will ask you a question. We provide possible solutions to the answer, allowing you to decide how to further proceed.

Window

Interface elements, such as edit boxes, commands, etc., as well as other terms and identifiers are displayed in bold, menu commands are always displayed in the format **Menu|Submenu|Command**.

<Key>

Text printed in angle brackets refers to a key on the keyboard.

Button

The button element is displayed in bold with a gray background.

Input

Italic text in quotation marks identifies text inputs or selection texts that can be entered in fields.

<Variable>

Variables are used on different places in the program. They are used for system data, settings and as placeholder.

1.3 Terms

This documentation uses a lot of terms that are important to know in order to understand and operate the system. We therefore recommend that you familiarize yourself with these terms before working with WinGuard or this manual.



The terms are divided by category and listed in logical, not alphabetical, order!

▼ Acronyms

- **AD**
This abbreviation stands for **Active Directory** and it is the directory service of Microsoft Windows servers that can be used for automated program registration.
- **DGN**
The file extension .DGN (**DesiGN file**) represents the vector graphic file format of MicroStation®.
- **DWG / DXF**
The file extensions .DWG (**DraWinG**) and .DXF (**Drawing Interchange Format**) represent the vector graphic file formats of AutoCAD®.
- **CCTV**
CCTV (**Closed Circuit Television**) is commonly used to replace terms such as video systems, video surveillance system, etc.
- **DSN**
The acronym stands for **Data Source Name** and is used in reference to data base access.
- **GIS**
The acronym stands for **Geographic Information System**. Respective functions are available in WinGuard in the area of graphics.
- **LDAP**
This acronym stands for **Lightweight Directory Access Protocol**. It enables the retrieval and modification of information in a directory service (a hierarchical database shared in the network) via an IP network.
- **ODBC**
This acronym means **Open Database Connectivity** and comes from the field of databases or access to them.
- **PKI**
In cryptology, Public Key Infrastructure (PKI) defines a system that can issue, distribute and check digital certificates. The certificates issued within a PKI will be used to secure computer-based communication.
- **PSIM**
Physical Security Information Management is a Software platform, that integrates several non-connected security systems, controlling them by an extensive user interface.

- **PTZ**
This term refers to controllable cameras and stands for **pan, tilt, zoom**.
- **TAPI**
TAPI stands for **Telephony Application Programming Interface**. This refers to an interface between the telephony functions of Windows® and a telephony application.
- **TLS / SSL**
This abbreviation means **Transport Layer Security**, successor of **Secure Sockets Layer**. This is a proceeding or security protocol for encryption and transfer of data in the network.

▼ Program interface

- **Bar**
Bars enable the organization of subsections. The bars in the layout can be moved so that several subsections are visible at one time.
- **Display**
Display refers to a global program window that contains a display area. This display area can show any type of content in any type of layout. The display area may also be subdivided into several areas. Four displays are available and can be selected via the Settings function. Display 1 is the main window of the program.
- **Layout**
A layout defines the configuration of the display area into subsections. For each subsection, specific characteristics, ID, and content can be defined. These contents can be further layouts with their own subsections, etc.
Layouts can thus be used for two different purposes (also in combination): on the one hand, simply to divide the display area into subsections, and on the other, to define complex content.
- **Pane / Display Area / Target Area**
The pane / display areas, also simply referred to as areas, are the basic elements of the user interface. A pane / display area is a field within the interface (comparable to an embedded window) that can be addressed via a freely definable ID and that can display content.
- **Popup**
Popups are subsections that cover the display area in part or in its entirety. They are displayed like windows in the work area and can be handled as such (change size, maximize, etc.). But as opposed to displays, they only exist in the display area and cannot be moved outside of it.
- **Screen**
With the word, screen, we refer to the part of a Windows® desktop that was designed for the placement of windows. To date, only complete Windows® monitors can be defined as screens so that a screen is basically a Windows® monitor.
- **Split**
A split divides an area into two segments separated by a splitter. By moving the splitter, users can adjust the segmentation of the split. Each of the two subsegments of a split can again be divided into two segments, etc. In this manner, users can create any number of windows.

- **Tab**

Tabs organize subsections corresponding to a tab bar. Only the subsections of an active tab are visible. Tabs can be rearranged by drag & drop.
- **Windows**

Windows are subareas that, as opposed to popups, are not bound to display areas and can be moved freely across the user interface. They are similar to application windows and can be displayed and handled as such (change size, maximize, etc.).
- **Work Area**

A work area is basically identical to an pane. Additionally, in the work area, all content can be loaded without submission of an pane / area ID.

▼ Program Modules and Functions

- **Inspector**

WinGuard provides a built-in crash handler that gathers and stores information relating to a program crash. The Inspector is capable of monitoring respective events and maintaining that information. Additionally, in these cases, the Inspector can restart WinGuard automatically.
- **KeyManager**

The KeyManager is a stand-alone application with which content of dongles - also independently from WinGuard - can be displayed and updated.
- **Localizer**

The localizer is a stand-alone application with which the WinGuard language resources can be managed and processed.
- **VideoDisplay**

WinGuard provides the option of installing VideoDisplay, which is a program that displays video and runs on separate workstations.
- **VideoManager**

The VideoManager is a module integrated into WinGuard that enables centralized access to various video systems within the installation. In addition to displaying digital video data, other functions of the VideoManager include control of and access to the video archive as well as control of PTZ cameras (PTZ = "pan", "tilt", "zoom").
- **Watchdog**

Watchdog is a standalone application that can be implemented to monitor WinGuard.

▼ Licensing

- **Components**

Components are individual parts of a system that have the same functions, for example certain workstation types (guard workstation, maintenance workstation, local server, etc.).

- **Datapoint Units**

Within the licensing framework, so-called datapoint units are activated for the systems. The datapoint units limit the maximum number of datapoints that can be used. Different datapoint types can use varying numbers of datapoint units.
- **Dongle**

A dongle is a USB hardware module used to protect the software. Workstation licenses are thus tied to a dongle or softkey.
- **License / Work Station License**

When we are talking about a license, we are always referring to a single license that is used at a workstation and therefore can also be called a workstation license.
- **License Module**

License modules are individual licenses for system or workstation expansions such as CAD support, project development, user layouts, etc.
- **License Manager**

The WinGuard-integrated License Manager allows you to manage your system license directly from the program.
- **Maintenance Contract**

Within the framework of using WinGuard a software maintenance contract can be established. The advantage here is that you will have the opportunity to participate in continual further development of the system, such as further development of functions, interfaces, etc.
- **SoftKey**

When using a softkey license, the license is tied to the computer hardware of the respective workstation.
- **System License**

With the word, system, we refer to a contiguous WinGuard project with defined functions, interfaces, workstations, etc. Without a valid license, the system and individual workstations only operate in demo mode.
- **System-ID**

Each system has its own, distinct system ID that is centrally managed by Advancis.
- **Update Limit**

The update limit refers to a software release date. Your license contains such a date and thus determines the use of respective program versions.

▼ Messages

- **Alerting**

We use this term in relationship to messages that are automatically displayed at certain workstations and have an acoustic alarm.

- **Event Content**

The interface makes several display areas with information available. When individual areas display event-related contents, we are referring to event contents.

- **Event Display**

The event display is used to show event information and the processing thereof. An event can be displayed automatically by the system or displayed manually.

Special display mechanisms, for example graphics, texts, etc. are part of the event display. It should be particularly noted that certain graphic objects can be rendered invisible automatically and that the triggering event is quasi frozen. That means that an additional state change in the datapoint will have no effect on the display of this event.

- The event state of the triggering datapoint or sensor will be frozen.
- The objects linked to datapoints, sensors, locations or groups corresponding to the event criteria will be animated according to the event state and will always blink (colour or symbol change between event state and silence).
- Objects linked to datapoints, sensors, locations or groups but that do **not** correspond to the event criteria will be displayed in the state **Silence** or will be automatically faded out by the system, depending on the defined visibility.

- **Message / Event**

In WinGuard, notices are initiated by events that most often come from linked systems. Upon notification of these events, defined information in the system relating to that event can be displayed and processed.

- **Priority**

When several events are received simultaneously, prioritization determines which event should be displayed first. The higher the indicated value (1-999), the higher the priority of the event.

- **State Display**

The status display is an alternative to the visualization of graphics in the event display. As opposed to the event display, in the status display no graphic objects are automatically rendered invisible and the current status of the datapoint is always displayed.

- The current datapoint states of all objects linked to datapoints or sensors are displayed and animated according to the animation scheme.
- Objects with a location link will, if this link corresponds to the event criteria, animated according to the event state. All other objects with a location link will be displayed as they are drawn.
- Objects with a group link will in general **not** be animated and displayed as they are drawn.
- **No** objects that are linked with datapoints, sensors, locations or groups will be faded out automatically.

- **State Text**

In addition to the state type, a state text can be assigned to the event to provide greater detail. Example: Event regarding a door with state type: **Warning** and status text **door open too long**.

- **State Type / State**

The state type or state of an event is a classification of the event. The state types (such as alarm, fault, shutdown, etc.) are determined by the system.

▼ System / Global

- **Animation**

Animation refers to the manner in which datapoints are graphically displayed, depending on their status. This may take the form of respective changes in color or symbols linked to the datapoint.

- **Automatic Maintenance**

The program has an internal maintenance function. This function automatically deletes runtime data that is beyond the required archive timeframe (archive and log data).

- **Backup / Restore**

The program has internal functions that provide data security (backup) and data recovery (restore).

- **Bookmark**

A bookmark is a link to a time or time period within a video stream - optionally including additional information such as description, event linkage, etc. In general, a bookmark is independent of whether the data of the video stream are only contained in the video system or whether they have additionally been saved as a clip.

- **Client**

Clients are all the workstations that, with a server, form a system. Clients are divided into simple clients, clients with interface server, and clients with local server functions.

- **Clip**

A clip is a video stream sequence that has been exported from the video system and transferred to the video archive for long-term storage.

- **Control Panel**

Control panels are program dialogs with which specific operation of different systems (for example video, intercom, etc.) is easily and uniformly made available.

- **Data Replication**

Almost all data in a multi-client installation is stored locally on the individual workstations while the server maintains the master data and ensures distribution during operation. After a client is started up, a complete data replication between server (master) and client is executed.

- **Hot-Standby**

As an alternative to the traditional WinGuard system that consists of a server and several clients, an additional standby server (Hot-Standby-Server) can also be integrated into the system. In the event of a server disruption, it can automatically take over the tasks of the server.

- **Pan**

Pan or abbreviated (**P**) is the value for the horizontal panning of a camera. The values are between 0°-359° degrees. Usually, cameras can be panned completely around the horizontal axis, after 359°, there will be 0° again, etc.
- **Program Directory**

All WinGuard program modules have to be contained directly in the program directory or in one of the subdirectories. The location of the installation / program directory can be selected by the user.
- **Program Replication**

After the start-up of a client, a complete program replication between server (master) and client is executed.
- **Project / Data Directory**

WinGuard maintains all data that belongs to a project in one directory, the project or data directory. Here you will find all project-specific files such as the WinGuard database, graphics, texts, etc. The location of the directory can be selected by the user.
- **Script**

An executable text module is also often referred to as a script in WinGuard.
- **Server**

In order to operate a WinGuard network system, one workstation is generally required as a server. The server provides all the basic functions to operate the network.
- **Sound**

The integration of sounds is primarily used for the acoustic alarm in conjunction with the event displays. Separate or your own sound files may also be used.
- **Standalone System**

A WinGuard standalone system consists of only one workstation.
- **State Counter / Sum Counter / Subcounter**

State counters are available in the datapoint explorer with the same state and can be pulled together in a list. In the title row of the respective explorer, these are also compiled in a sum counter. Datapoint status can also be displayed through the definition of state counters with subcounters.
- **Tilt**

Tilt or abbreviated (**T**) is the value for the vertical tilting of a camera. The value range mostly is 0°-90° degrees. At 90°, the camera direction is vertically to the bottom, at 0°, it is exactly horizontal.
- **User Profile**

Via user profiles, the appearance and properties of the program interface can be determined for a user or a user group. When setting up the user profile, you will also have the opportunity to define user authorizations.

- **Workstation**

Workstations are the individual system components such as the server and clients that are used to operate the system (practically all).
- **Workstation Profile**

Workstation profiles can determine the appearance and properties of the program interface for workstations.
- **Zoom**

Zoom or abbreviated (**Z**) is the optical zoom factor. The value range starts at 1.0x and, as far as the upper value is concerned, depends on the specific camera.

▼ Data Supply

- **Anti-aliasing**

This term refers to the automatic smoothing of edges in the display of graphic objects.
- **Datapoint**

Datapoints are the central elements of a WinGuard system. The information and commands in response to sensors, detectors, cameras, doors, etc. of the linked equipment are developed and managed with the help of the datapoints.
- **Datapoint Category**

Datapoint categories determine specific functions and characteristics of datapoints. Every datapoint in WinGuard must be assigned to one of the pre-defined datapoint categories (for example, fire, forced entry, camera, etc.).
- **Data Type**

Within the scope of datapoint maintenance, communication via the interfaces requires data types which also determine certain basic characteristics of the datapoints.
- **Detector**

Detectors are elements allocated to a datapoint and can be defined similarly to the datapoint itself. They are often used in fire detection systems as these often contain groups of individual sensors.
- **Detector Type**

A detector type is a datapoint-specific element with a name and an assigned symbol. A detector type can be assigned to every datapoint and every detector.
- **Graphic Frame**

A frame in a WinGuard graphic is an object that can be integrated into another graphic. What is special is that during the display of the graphic, the content of the frame can be dynamically modified.
- **Graphic Layer**

Think of a layer as a transparent foil on which you can draw. On each individual layer, certain parts of a drawing can be defined. Once the layers are placed on top of one another (layered) the entire drawing comes into focus.

- **Graphic Powerclip**

Powerclip is a graphics function available in WinGuard that allows users to influence the visibility (sections) of various objects.

- **Graphic Symbol**

Symbols are used in WinGuard graphics to define commonly used graphic elements such as sensors, fire detectors, etc. The symbols themselves are WinGuard graphics, but with special characteristics.

- **Interface**

We refer to interfaces as the communication modules through which the system can communicate with the linked units.

- **Link**

In general, we use the term link to describe the assignment of a graphic object to a datapoint, detector, or location. The graphic object can display the status through this link with the help of the animation.

- **Text ID**

A text ID is any designation in brackets such as **[bn.close]**, **[dict.cmd.Abort]** etc. If you are using text IDs instead of plain text, the system will show the assigned language dependent (DE, EN, ...) text. The text and the IDs are defined in system language files.

- **Text Macro**

Text macros are entry fields used for the definition of datapoints or detectors. Additional texts or text modules can be assigned respectively.

1.4 Change History

Here you can find information with regard to essential changes of this manual, depending on the corresponding version.

▼ Revision 1

1 Revision 1 dated 2018-05-07 - X4 Build 1

- 1.1 Creation of document WinGuard X4.

▼ Revision 2

2 Revision 2 dated 2018-07-27 - X4 Build 3

- 2.1 General notifications and corrections
- 2.2 Section: Operation
 - Update: [Events](#) [197], [Event List](#) [199], [Visibility](#) [217]
Database Functions - [Files](#) [341], [Maintenance](#) [348], Backup, Restore
- 2.3 Section: Settings
 - Update: [System](#) [424], [Contents](#) [450], [Other](#) [517], Workstation Profiles, [Workstation](#) [524]
- 2.4 Section: Setup
 - Update: [Tags](#) [573], [Segments](#) [576], [Sensor Types](#) [597]
[User](#) [533] - [Table View](#) [533]
- 2.5 Section: Data Supply
 - Update: [Locations](#) [693] - [Edit Locations](#) [696], [Datapoints](#) [715] - Form View - [Data Section Datapoint](#) [723]
- 2.6 Section: Tips and Help resolving Problems
 - New: [Data Management](#) [1143]
 - Removed: Backup / Unicode, Database Compressing, Avoidance of Reference Changes, Swapping out of old Reports and Logs

▼ Revision 3

3 Revision 3 dated 2018-08-31 - X4 Build 4

- 3.1 General notifications and corrections
- 3.2 Section: Operation
 - Update: [Event Archive](#) [307], [Filter View](#) [307], [CSV Export](#) [371]
- 3.3 Section: Settings
 - Update: [System](#) [424], [Desktop](#) [442], [Content](#) [450], [Event Handling](#) [475]
- 3.4 Section: Setup
 - Update: [Functions/Rights](#) [560], [Edit Columns](#) [642], [LDAP](#) [685]
- 3.5 Section: Data Supply
 - Update: [Location Explorer](#) [693], [Datapoint Explorer](#) [716]

▼ Revision 4

4 Revision 4 dated 2018-09-07 - X4 Build 5 - Preview

- 4.1 General notifications and corrections
- 4.2 Section: Operation
 - New: Database Functions - [Data Package](#) [361]
 - Update: Database Functions - [Backup](#) [353], [Restore](#) [357]
- 4.3 Section: Settings
 - Update: [Workstation Profiles](#) [523]

- 4.4 Section: Setup
- Update: [Segments](#)^[576] - [Table View](#)^[577], [Form View](#)^[577]

▼ Revision 5

5 Revision 5 dated 2018-11-13 - X4 Build 5

- 5.1 General notifications and corrections
- 5.2 Section: Installation
- New:
 - Update:
- 5.3 Section: Update
- New:
 - Update: [Update](#)^[74] - [Update Manager](#)^[74], [Manual Update](#)^[84] - [Update Content](#)^[85], [Before Update](#)^[85], [Standalone System Update](#)^[85], [Network System Update](#)^[87], [Interfaces](#)^[89], [Special Program Files](#)^[89]
- 5.4 Section: Operation
- New: Explorer - [Segmente](#)^[178]; Database Functions - [Backup](#)^[353], [Restore](#)^[357], Data Package - [Add to Package](#)^[365], [Restore](#)^[367]
 - Update: Database Functions - [Data Package](#)^[361], [CSV Export](#)^[371] - [Data Supply \(Export and Import\)](#)^[378]
- 5.5 Section: Settings
- New:
 - Update: Global - [System](#)^[424], [Desktop](#)^[442], [Contents](#)^[450], [Explorerbar](#)^[455], [Event Handling](#)^[475]; [Workstation Profiles](#)^[523]; [Workstation](#)^[524]
- 5.6 Section: Setup
- New:
 - Update: [Segments](#)^[576] - [Table View](#)^[577], [Form View](#)^[577]
- 5.7 Section: Data Supply
- New:
 - Update: Locations - [Explorer](#)^[693]; Datapoints - [Explorer](#)^[716]; Graphics - [GIS Graphics](#)^[803], [Map Display](#)^[803]
- 5.8 Section: Tips and Help resolving Problems
- New:
 - Update: [Data Management](#)^[1143]






▼ Revision 6

Revision 6 dated 2018-11-23 - X4 Build 5.1

- 6.1 Allgemeine Korrekturen und Anpassungen
- 6.2 Section: Installation
- Update: [General Information about Installation](#)^[15]
- 6.3 Section: Update
- New: Update Manager - Operation - [Online Pakete](#)^[78]
 - Update: [Update Manager](#)^[74] - [Operation](#)^[75], [Controlling Workstation](#)^[80], [Update Package](#)^[80], [Execute Update](#)^[81]
- 6.4 Section: Operation
- Update: [User Interface](#)^[129]
- 6.5 Section: Settings
- Update: Local Installation - Global - [Event Handling](#)^[475]
- 6.6 Section: Data Supply
- Update: Variables and Key Words - [Variables](#)^[939]

▼ Revision 7

Revision 7 dated 2018-11-28 - X4 Build 5.2

- 7.1 Allgemeine Korrekturen und Anpassungen
- 7.2 Section: Settings
 - Update: Local Installation - [Network](#) 
- 7.3 Section: Tips and Help resolving Problems
 - New: [Duplicate SST Module \(Update File\)](#) , [Description Update.xml](#) , [Create File Hash](#) ,
[Update Helper Service](#) 

2 Installation

WinGuard basically always runs on computers and networks that meet the latest technological standards. Requirements depend on the degree of expansion and size of the system. Platforms use the latest Windows operating systems, which can also be used on virtual machines. Regarding interfaces to subsystems and certain hardware orientations, individual compliance is required.

Please contact Advancis anytime to receive information about current system prerequisites for WinGuard, or you can conveniently look them up on the website. In this section, you will find help regarding installation and setup of WinGuard as a standalone system or multi-client system in a network.



Prior to installing or updating, please be sure to review all news, changes, and expansions on the Advancis homepage "<http://www.advancis.de>"!

2.1 General Information about Installation

In the installation directory (CD, USB-Stick, etc.) you will find the WinGuard installation program **Setup.exe**. With this program you can install WinGuard on one or more computers. The installation includes various modules (interface and program modules) that were available at the time the installation program was created. Please note that it is possible that some required supplementary modules from subsystems or outside developers may **not** be included in the installation and that you may need to request these items from Advancis or the appropriate manufacturer.

During setup of a project, it might be required that interface modules can be used several times or that they shall be able to run independently from each other. In such cases, changes in the program directory have to be made that will also have an impact to further updating (see: [Multi Usage](#)⁷¹⁴).

Licensing can be accomplished using a **hardware dongle** or a **SoftKey**. Without a valid license, the program can only be run in demo mode for evaluation purposes. You can find detailed information regarding licensing in the section, [Licensing](#)⁹¹.

When (un)installed, a log file is created that can normally be found in the Temp folder of the user (usually: **C:\Documents and Settings\\Local Settings\Temp**).

▼ Data in the Installation Directory

- **[Custom]**
Optional: data for customer-specific software adaptations.
- **[Data]**
Directory of the project data. Separate project data may also be added.
- **[Inspector]**
Installation directory of the Inspector that is automatically installed with WinGuard. The installation can also be performed manually.
- **[OPC Server]**
WinGuard OPC server.
Additional files:
 - Subdirectory help

- **[Redist]**
Setup directory of the Microsoft .Net Frameworks and the runtime environment for Visual Studio (C++). This setup is automatically executed with the WinGuard installation. The installation can be executed manually as well.
- **[Webserver]**
Setup directory of the WinGuard Webservers. This setup is not automatically executed with the WinGuard installation. The installation can be executed manually.
- **[Wibukey]**
Driver setup for the Wibukey dongle.
- **[WinGuard]**
WinGuardProgram Directory.
- **AutoRun.exe**
Application is started upon insertion of DVD if this function is supported by the operating system.
Additional program files:
 - AutoRun.inf
 - AutoRun.ini
- **DataSetup.exe**
Copies project files from the **Data** Directory and is started automatically after program setup.
- **LiesMich.htm**
General information in German.
- **OPCServerSetup.exe**
Setup program for the setup of the WinGuard OPC server. The installation does not take place automatically and must be carried out manually if necessary.
Additional program files:
 - OPCServer.xml
- **ReadMe.htm**
General information in English.
- **Setup.exe**
Starts the installation of WinGuard.
Additional program files:
 - Setup.xml
 - unattended.ini
 - WinGuard.ico
- **UpdateHelper.exe**
This program is automatically installed as a service on each workstation to support the update process (see: [Update Helper Service](#) ¹¹⁵³).
- **WebserverSetup.exe**
Starts the installation of the WinGuard-Webserver. This setup is not automatically executed with the WinGuard installation. The installation can be executed manually.
Additional program files:
 - Webserver.xml

If you are installing WinGuard using a DVD, a dialog window should open automatically once the DVD is inserted. You can then start the installation program for WinGuard or carry out one of the other functions.

If the dialog window should not open automatically or you are using a different installation medium to install WinGuard, you can also start the program by double clicking.

Alternatively, you can first click on the Windows **Start** button, then on **Execute**, and then enter the letter of the drive followed by **autorun**, for example, **d:\autorun**. The previously-mentioned dialog window will then appear.

By entering **setup** instead of **autorun**, you can start the installation program directly. Please follow the directions on the screen. After the program files are installed, you can have additional project files copied (please see: [Workstation Installation](#)^[22]). If the setup package is available as a zip file, you must unpack this file to a proper data medium before can execute the setup.

You can then start WinGuard via the respective entry in the Windows start menu or the new shortcut on the desktop. Prior to starting WinGuard, you should also copy your license file into your program directory. If you are using a dongle license, the dongle has to be connected to your PC. If you are using a SoftKey license, it has to be activated. Without a valid license, only operation in demo mode is possible (please see [licensing](#)^[91]). Please also note that WinGuard is to be executed as administrator.

You can access online help for WinGuard at any time by pressing the **<F1>** key. Information about changes and expansions is available on the Internet and can be found on the Advancis Software & Services GmbH homepage "<http://www.advancis.de>".



If you are using a USB hardware dongle, you must perform the installation before connecting the dongle!



WinGuard must be executed under Windows® with administrator rights!



Each workstation, whether server or client, requires its own license in the form of a dongle or SoftKey!

2.2 System Concept

A WinGuard System can consist of one or several participants. Each participant represents a separate functional entity in the system (server, client, etc.). Generally speaking, we also speak of participants as stations of the system. If a system only consists of one station, we will speak of a standalone system, if a system consists of several stations, we speak of a network system. For definition of the different tasks and requirements, a workstation type has to be assigned to each station using its Local Settings.

Workstation types:

- Server - (also Standby Server)
- Client (with local server function) - (location server)
- Client (with interface server) - (interface server)
- Client
- Display (VideoDisplay)
- Standalone

▼ Example: Standalone system

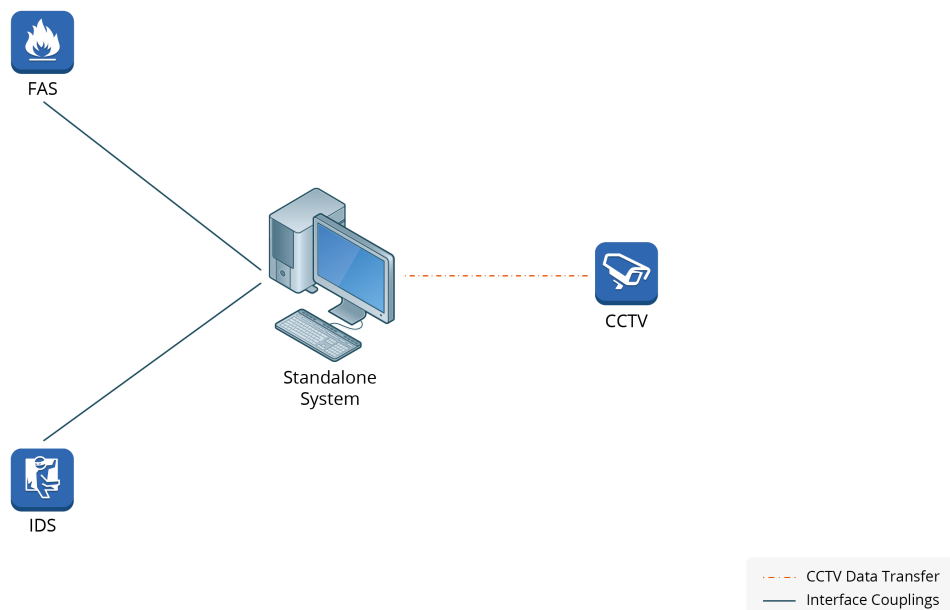


Figure 1: Standalone system

▼ Example: Network system

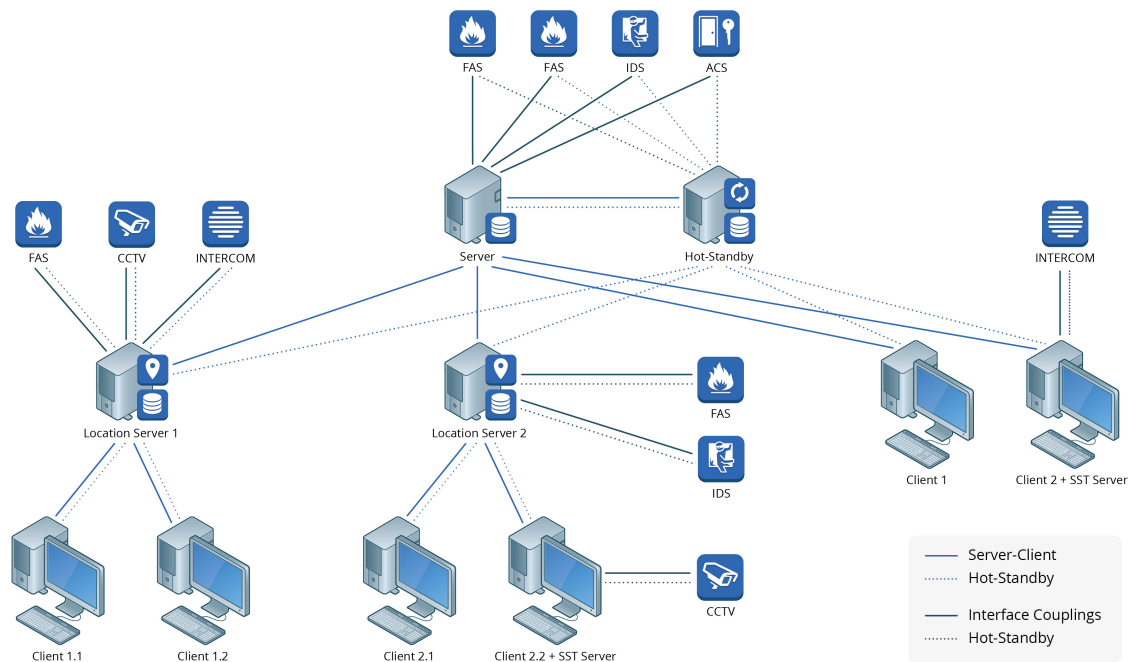


Figure 2: Network system

2.2.1 Standalone System

A standalone system only consists of a station of the type **Standalone**. All functions are taken over from this station only.

- the complete data management
- all interface couplings

The WinGuard network is not active and does not have to be configured. No outgoing IP connections to other stations are established and no incoming IP connections are accepted by other stations. Workstations do not have to be configured and, as a standard, this system always has the station number 1.

For operation of a standalone system, it is only required to execute the installation on the corresponding workstation, as described in the following.

2.2.2 Network System

A network system consist of 2 up to max. 9999 stations. Each station in the network has a unique name that is locally configured in the station's settings. Each station also has a station number between 1 and 9999 that is configured in the workstation table and assigned to the corresponding names. This number is internally used in the system, amongst others for identification of station-local data. The station number is defined once at the beginning, a later change is not intended and might lead to data loss!

In addition, each station has a current role (active server, standby server, etc.) and, if required, takes over specific functions that result from type and role in the system at a given point in time.

The stations in the network communicate with each other via TCP/IP connections, all interactions and

data access within the system is realized via these IP connections only. There are no further "contact points" between the stations, in particular there is no joint database. For communication via the IP connections, the ASIP protocol is consistently used (Advancis Standard Interconnection Protocol).

For operation of a WinGuard network system, the use of a client as a server is required as a standard. In total, it is currently possible to define four different client types in the network. The configuration of the single systems or which and how many clients can be used, depends on the licensing.

For network systems, it is possible to define four different client types in WinGuard. The configuration of the single stations or which combinations can be used from the client types, depends on the licensing.



The maximum amount of all stations in one system is 9999!

Server - (also Standby Server)

Independent from its client number, a server is defined in the system as a server with an additional number (as a standard, 1). For systems with standby servers, the numbering will be up to 3, depending on the amount. The corresponding setting is made via the settings. Depending on which server is currently the active server, interface connections and priorities of the IP connections can be, as an option, configured differently.

The standby concept is realized based on the distributed data retention at servers and clients in WinGuard. The standby servers (2 or 3) are configured just like the active server. At a point in time, one of the servers will take over the role of the **Active server**. The other one or the two other servers therefore have the role of standby servers. With regard to the role distribution, the servers synchronize with each other and solve any conflicts automatically. All master and runtime data are - for the time during which the connection is existing - consistently kept on the servers in parallel and synchronized. Thus, all servers always contain the current total status of the system.

The switch of the active server can be realized manually or automatically. As it is only about a role change, the switch will be executed directly during running operation at the server. If required, a restart of the interfaces concerned by the switch will be performed - transparently for the user.

The current server status can be visualized on the user interface (UI) via datapoint states and events. In addition, the commands and events for the previous **dual mode** (with one server and one standby) are further supported so that an adaptation in existing systems is not required.

Client (with local server function) - (Location server)

A location server has the functionality of an interface server, but additionally offers routing and login functions, i.e. other clients can log in here.

Client (with interface server) - (Interface server)

An interface server basically has the functionality of a client, but additionally offers the possibility to operate interfaces, i.e. interfaces can be assigned to these clients and connected there. All data and commands of these interfaces are available system-wide, just as it is the case for servers.

Display

With WinGuard, you also have the option of installing a **VideoDisplay** client which is a separate WinGuard workstations and is designed for displaying video. The number of useable VideoDisplay workstations is dependent from your license. On each workstation can be defined up to four video windows and each window can be divided by video splits in different video viewing areas.

You can control the cameras of the VideoDisplays remote from your WinGuard workstations via the

display controls of the internal [VideoManager](#)²⁷⁷ of a client.

Client

A client has the functions of a general workstation, i.e. it is primarily used for operation of the system. However, it is also possible to connect specific interfaces with special functions here, such as e.g. SMS, email, video control, etc.

2.3 Workstation Installation





During the installation of WinGuard you will have the opportunity to select the workstation type. The processes for installing the various types of workstations are in large part identical and independent of the workstation that is to be installed. The installations of the program and project data run separately, one after the other.

Before installing, close any running applications and ensure that you are logged into Windows® as a user with administrator rights. Then make the data storage device containing the installation files accessible (DVD, disk, USB-Stick, etc.).

How to install a WinGuard workstation (all type) is described in the following sections.

▼ Installation WinGuard

ToDo: Installing WinGuard:

-  Carefully read through the Help section for installation!
-  Install WinGuard on the respective computers.
-  Define the local system settings on your workstations.
-  Test your installation.

2.3.1 Setup with AutoRun

Starting the program **AUTORUN.EXE** (often automatic with CD) brings up a dialog in which, among other things, the program version and release date of the installation can be seen.

In the AutoRun dialog, you can choose from the following functions:

- **WinGuard Installer**
Starts the setup (installation) of WinGuard.
- **Project Data Installer**
Starts the setup of project data. The project data that is to be installed must be in the Data Folder of the Installation Directory.
- **OPC Server Installer**
Starts the setup of the WinGuard OPC server.
- **WebServer Installer**
Installs the WinGuard webserver.
- **Browse Setup**
Starts the explorer of Windows®

▼ Dialog: AutoRun



Figure 3: AutoRun

2.3.2 Setup Programs (new)

If WinGuard is not yet installed on your system, you must complete a complete installation of the program. After starting **AutoRun.exe**, click on the button **WinGuard Setup**. In the event AutoRun did not start automatically, open Windows explorer, go into the installation folder and start the program **Setup.exe** directly.

Alternatively, select the menu entry, **Run**, from the Windows Start menu! In the selection field, **Open**, enter the letter of your drive that contains the installation folder followed by "**Setup.exe**" and then click on the **OK** button!

The installation program starts and all required entries are completed in respective dialogs. In general, you will be able to confirm your entries with **OK** or **Next**, or to terminate the installation by clicking on **Cancel** or **Abort**. With the **Back** button you can return to the previous dialog.

i *If necessary, the configuration can be changed later at any time from the program. However, this may require the manual installation of additional components!*

! **Always start the program Setup.exe with administrator rights!**

▼ Dialog: Setup Language

First, the dialog **Setup Language** is displayed. Select the desired language and confirm your entry with **OK**.

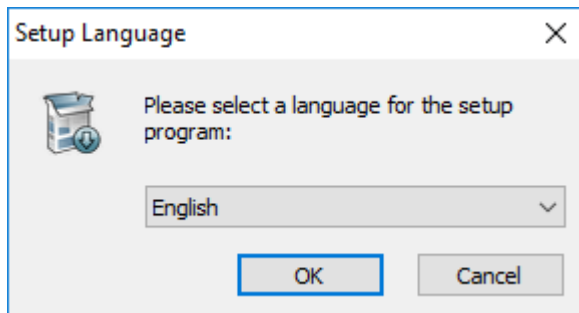


Figure 4: Setup Language

▼ **Dialog: Setup - Welcome**

In the subsequent dialog, **Welcome**, you will be asked to continue the installation. Click on the **Next >** button.

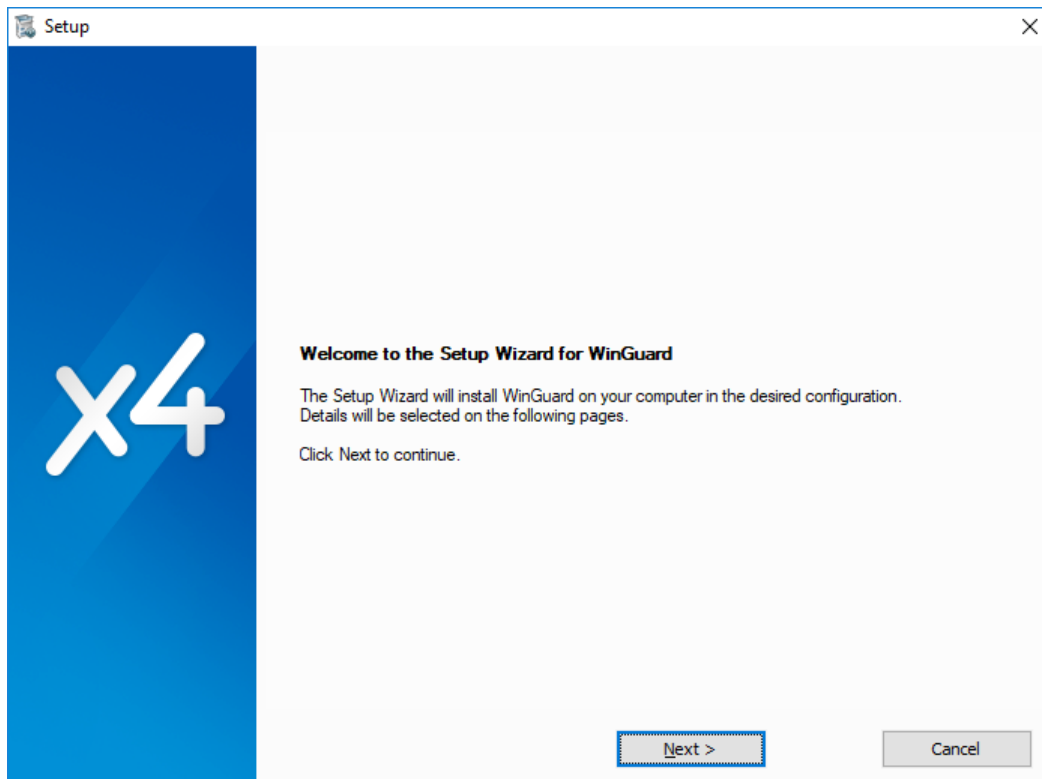


Figure 5: Setup - Welcome

▼ Dialog: Setup - Components

In this dialog, the components (interfaces) that are to be installed are selected. By selecting the first item in the list (interface modules) all interfaces in all areas are selected. In general, this approach is not recommended. Only the individual interfaces that will be used in the project (activated licenses) should be selected.

You select the individual modules by checking the appropriate box. Via the functions (+/-) of the hierarchic structure you can get to the selection of the individual modules.

Once all modules have been selected, click on **Next >** to continue.

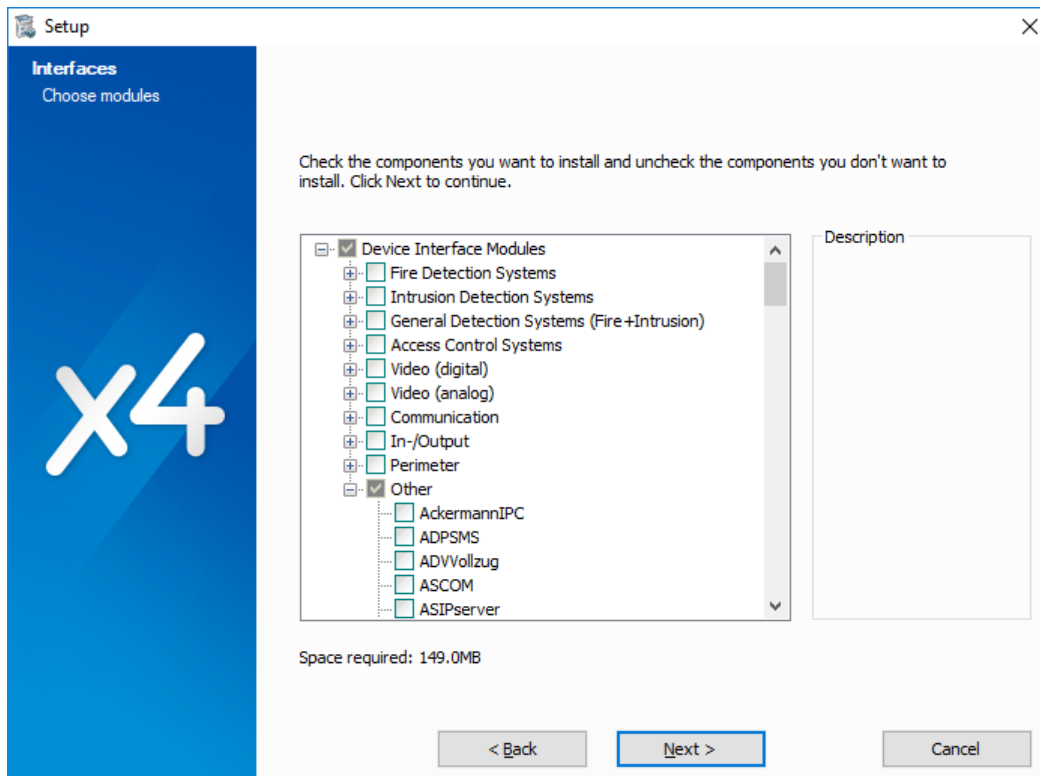


Figure 6: Setup - Components

▼ Dialog: Setup - Folders

Lastly, you can indicate into which folder WinGuard should be installed on your local workstation. The presets are


"C:\Program Files\WinGuard" or

"C:\Programs\WinGuard" for the installation of the programs and

"C:\Users\Public\Documents\WinGuard" or

"C:\Documents and Settings\All Users\Documents\WinGuard" for the data.

By clicking on the **Browse** button, you can open a dialog that allows you to choose a different folder for program and data installation.

 Review your settings!

If they are correct, click on **Install** to start the installation.

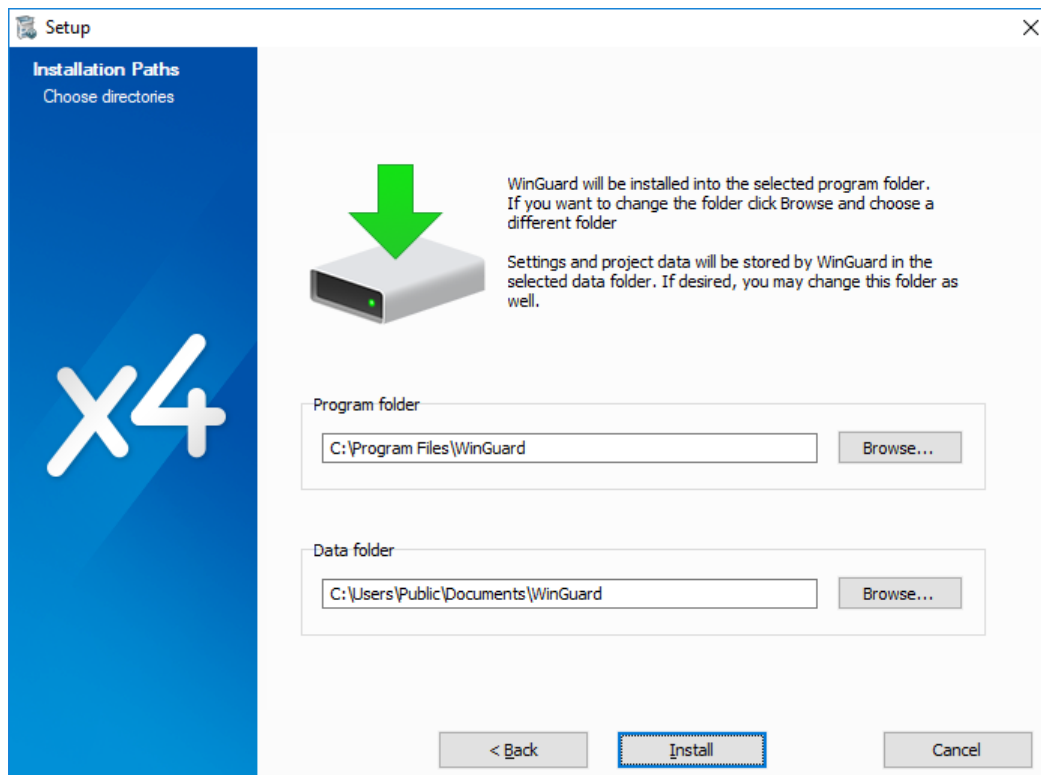


Figure 7: Setup - Folders

▼ Dialog: Setup - Completed

After all the required and/or desired program modules have been installed, the basic WinGuard installation is complete. With the button, **Close**, the setup is finished.

After closing the the setup for programs, the setup program for project files automatically starts (please see [Setup Project Files](#)^[31]).

If you do not wish to install any project files at this time, you can end the setup at this juncture and complete the function anytime at a later date.

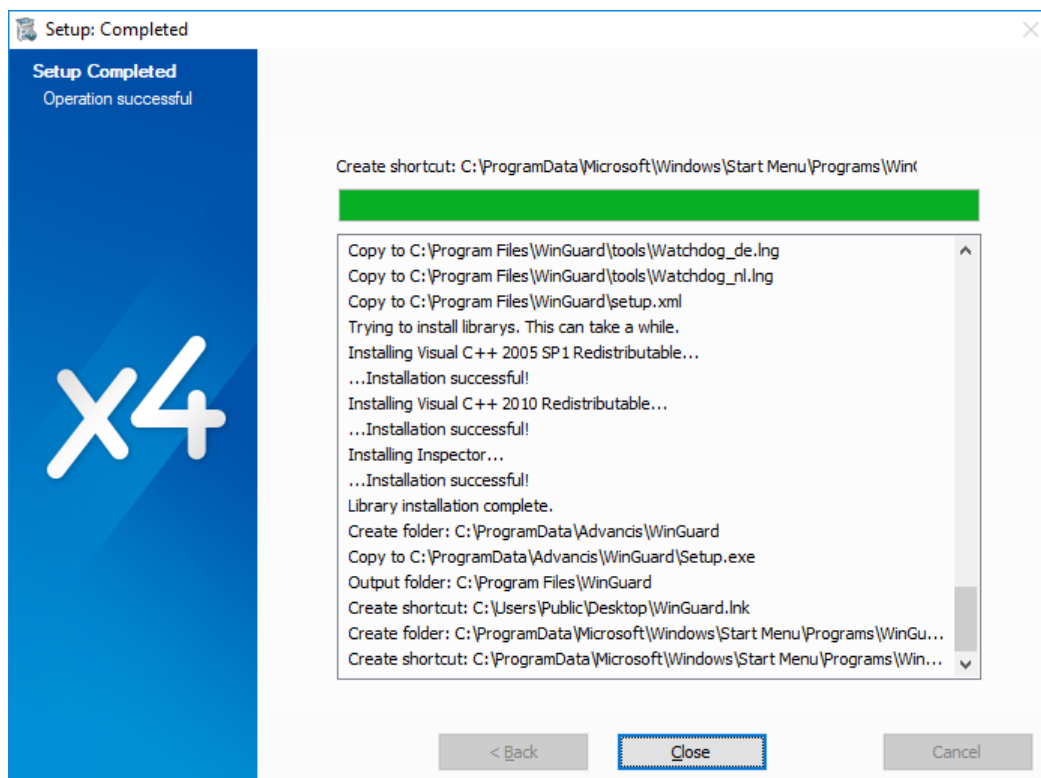


Figure 8: Setup - Completed



After completion of the installation, it may be necessary to restart Windows. The installation program will prompt you if this is required and offer to restart the program.

2.3.3 Setup Programs (modify)

If WinGuard is already installed on your system and you would like to install a current version of the program, you must update the existing version. When the program **Setup.exe** starts, it recognizes automatically if an older version is already installed and then offers an update of the system.

- If the installation is very old, there is the possibility of adding the current version and thus replacing the existing version.
- If a (relatively) current version is already installed, an update to the current version can be performed. This function starts automatically.

▼ Dialog: WinGuard Setup

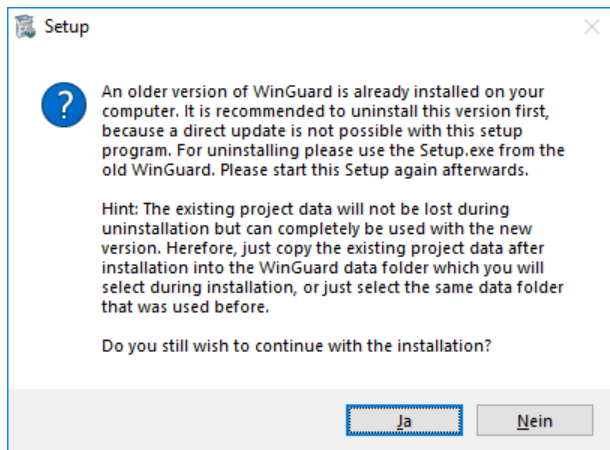


Figure 9: Setup

If a current installation already exists on the workstation, then the dialog for modification of the installation is shown. In this case, you will be able to choose from the following options:

Modify

This option allows you to add new components or delete components that are already installed.

Repair

This options allows you to repair damaged or accidentally deleted files.

Remove

With this option the program with all its components can be removed.

▼ **Dialog: Setup - Change Installation**

This dialog allows you to access the functions to modify the installation.

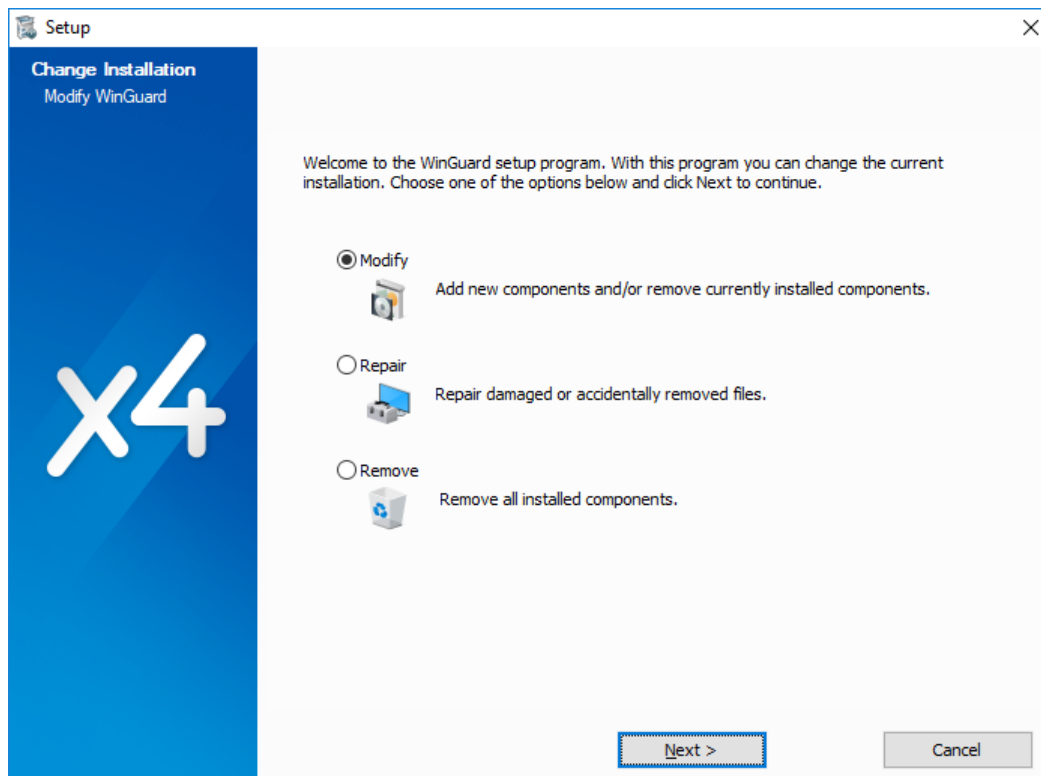


Figure 10: Setup - Change Installation

2.3.4 Setup Project Data

The setup program by the name of **DATASETUP.EXE** for the installation of project data is also located in the installation directory and can be started via explorer. It makes it possible to install project data directly following WinGuard installation. The project data must be located in the **Data** Folder of the installation directory.

⚠ The setup program for the project data is also started automatically after the WinGuard program setup is completed.

▼ Dialog: WinGuard Setup - Copy Project Data

If there is data from various projects in the **Data** Folder of the installation, desired project data can be selected here. As standard, the installation goes into the directory selected during program installation. You can also specify a different directory for the data installation.

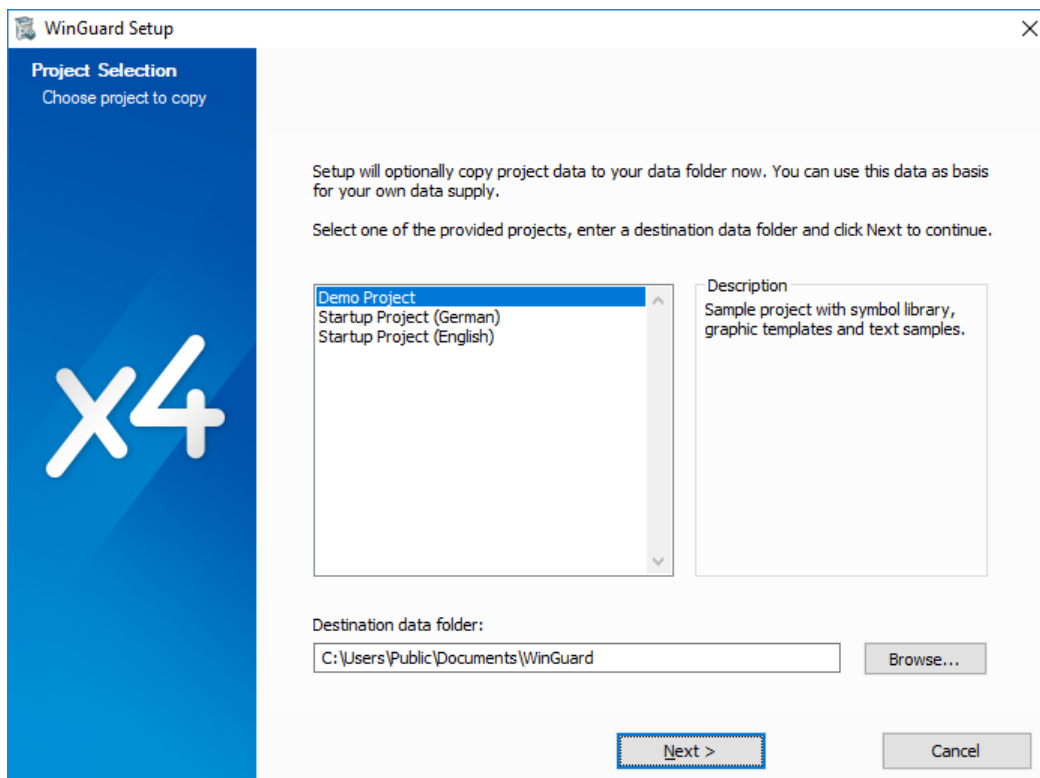


Figure 11: WinGuard Setup - Copy Project Data

▼ Dialog: WinGuard Setup - Copy Project Data

After you have confirmed your selection from the previous dialog with **Next**, the dialog that allows you to start the copying of the project data opens. If data has already been installed in the folder, you have the option of deleting that data or overwriting it. Data can also be installed directly without further specifications.

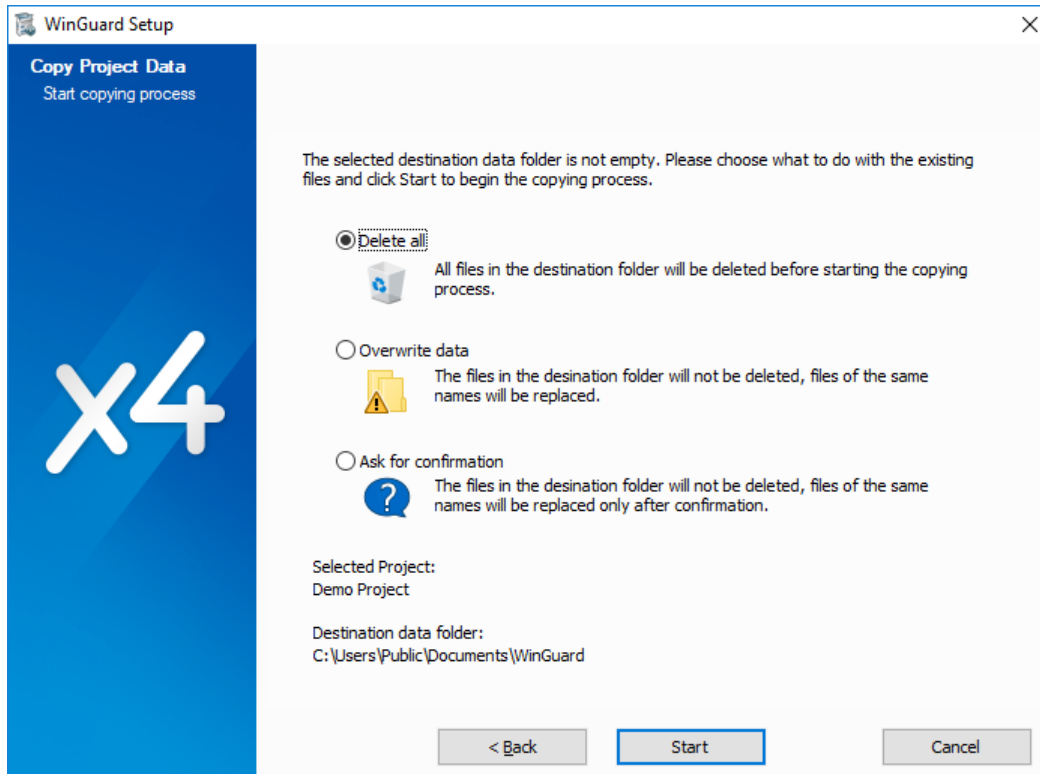


Figure 12: WinGuard Setup - Copy Project Data

▼ **Dialog: WinGuard Setup - Copying process completed**

This dialog shows the progress of the copying process. After all data has been copied, the installation is completed and you can close the setup.

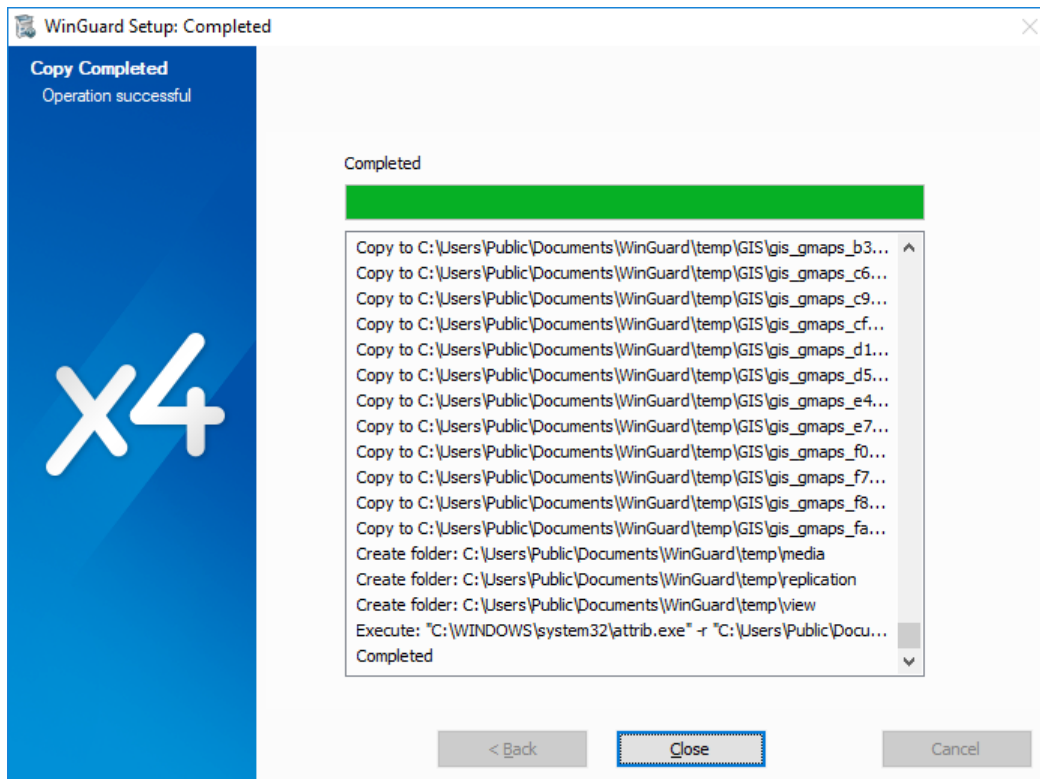


Figure 13: WinGuard Setup - Copy Completed



The data folder should be emptied prior to running the setup!
Files in the destination folder are overwritten without confirmation and files not included in the project data are not deleted.

2.4 Network Installation

In most cases, WinGuard is not implemented as a one-station system (standalone), but a multi-station system (server-client system).

In a network installation into a TCP/IP network, special prerequisites and processes need to be carefully considered. Only if the network is fundamentally set up correctly and correlations within the network are sufficiently understood should a network installation be undertaken.

You can find information regarding the organization of data in a network operation in the [Directories and Data Storage](#) ⁵⁸ section.

2.4.1 Requirements

Network communication takes place via TCP/IP Windows sockets. The TCP/IP protocol must be installed on each network workstation and each workstation must have its own distinct name in the network.

One important requirement for network operation is the synchronization of time between workstations. One workstation, for example the server, should be configured/installed as Windows® time server. All the other workstations can then synchronize time via this workstation. Alternatively, time can also be synchronized through WinGuard, whereby the user logon in Windows® then requires the necessary rights.

A network operating environment consists of one workstation functioning as a server, up to one more standby server, and clients. Clients can be differentiated into simple clients, clients with interface server, and clients with local server function. Clients with interface server function are like clients, but can also support interface integration. Clients with local server function are similar to clients with interface server, but also have routing functions, meaning that other clients can log on to them.

For the communication between server(s) and clients WinGuard itself requires a connection that is established via the port **1234** on a standard basis. The port can be adapted to the properties of the network. Depending on the interfaces used, additional ports may be required.



Communication between the single workstations (Server/Clients) can also be realized in an encrypted way (AES 256)!



Please note that these tasks need to be performed on each respective local workstation (PC)!



Having respective module licenses or their activation is a requirement to operating a WinGuard network.






The time on all workstations must be synchronized!

2.4.2 General Workstation Installation

The steps described in this section are to be performed on all workstations. Through the installation on each workstation, all locally necessary files are placed there. The same release/version of program files and interface modules should be installed on each workstation, otherwise unforeseen problems may arise.

▼ Install Workstation

ToDo: Installing a workstation (general):

-  Install WinGuard on each single workstation as described under [Workstation Installation](#) ^{22!}
-  At installation, select the desired workstation type and follow the installation directions.
-  Check the correct installation on each workstation by starting WinGuard!

▼ **Dialog: Settings / Local Installation / Network**

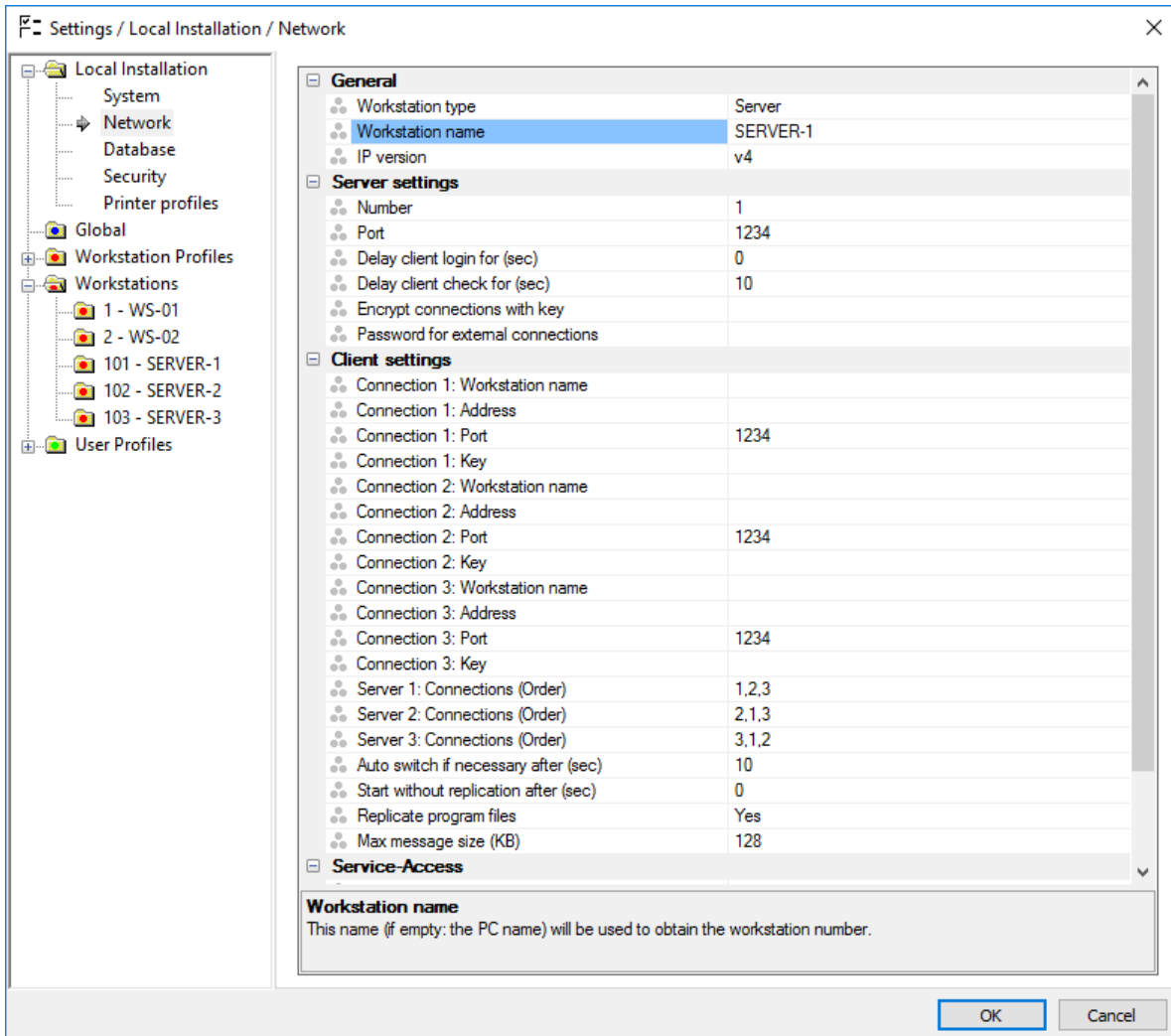


Figure 14: Settings / Local Installation / Network

▼ **Local Installation: Network - General**

These definitions can be made in the dialog, Settings, under **Local Installation|Network** in the **General** section.

▼ **Workstation Type**

Here is where you determine the type of workstation. Please select the appropriate type.

Server - server for network operation

Client - simple client

Client (with local server function) - client with function: location server

Client (with interface-server) - client with function: interface server

Display - workstation is used as VideoDisplay

Standalone (default) - single workstation without a network

Workstation Name

Here you determine the name of the workstation that the client will use. The name must be established when defining a workstation.

Blank (default) - enter the name of your workstation - in this case that of the client.

i *If no name or an undefined name is entered, the name of the computer and the workstation number 1 is used!*

▼ **IP Version**

The IP version of the network to be used is entered here.

The following can be selected: **v4**, **v6**, **v4 + v6**.

v4 (default) - if required, select the version to be used.

Please be sure that the correct dongle is connected to your workstation or the correct SoftKey license is activated.

! **The time on all workstations must be synchronized!**

! **WinGuard must be executed under Windows® with administrator rights!**

i *Every workstation, whether server or client, must have its own license in the form of a dongle or a SoftKey!*

2.4.3 Server

In order to operate a WinGuard network system, one workstation has to be defined as the server. The server makes all basic functions for network operation accessible. Clients can log on to the server and execute a file and software replication. The server is the central element for information distribution, interface integration, and data archive. Alternatively, a WinGuard system consisting of a server and clients may also be configured with Hot Standby servers.

After installation of the server, the server settings have to be defined and the workstations have to be set up. A station is configured as a Server by selecting the corresponding workstation type in the settings. Max. 3 servers can exist at the same time in one system. They are numbered consecutively from 1 to 3. The setting of server numbers is made via the network settings.

i *Please ensure not to assign any server numbers twice as this might lead to misfunctions in the system. In case of servers having the same number, the mutual connection establishment will be prevented!*

▼ Install and Set Up Server

ToDo: Installing and setting up workstation type: server

- ➔ Install the workstation as described in the section [Workstation - General](#)³⁴.
- ➔ During installation, select the workstation type, **Server**, and follow the installation instructions.
- ➔ Check to make sure the installation on the workstation is correct by starting WinGuard!
- ➔ Via the menu command **System|Settings** you can open the dialog for the system settings. Under **Local Installation|Network**, define the respective settings.
 - First, define the **General** section including workstation type and workstation name of the server or standby server.
 - In the section, **Server Settings**, modify the presets to meet your requirements.
 - In the section **Client Settings** under Connection 1, define the parameters for the connection with the standby server (unique server number 1-3!).
 - i** *Only required if configured with Hot Standby server!*
- ➔ In the settings under **Global|System** in the Hot-Standby section, specify the time to elapse before automatic switch (only required on the server).
 - i** *Only required if configured with Hot Standby server!*
- ➔ Define all planned workstations on the server (please see [Workstations](#)⁵⁴¹).
- ➔ Close the server after completion of the definitions and restart it.

The sections below describe the settings required to define a server. Additional settings that need to be defined if the system is configured with a Hot-Standby server and/or the definition of the Hot-Standby server itself are also included.

▼ Define Workstations

The definition of the workstations can be completed in the dialog, **Workstations**, which you can open via the menu command **System|Workstations**. Give each workstation its distinct name and number. Entries in the field, **location**, are optional and only required in some cases (for example, Austrian Standard).

After you have added the workstations and restarted the server, you can see the status of the individual workstations in the status bar. Those designated with a **yellow cross** are not currently logged on to the server.

i *Start numbering clients with the number 1 and assign the highest workstation number to the server (for example, 10 or 100) to provide a better overview.*

i *Workstation numbers cannot be changed later because these are also used for interface allocation, event routing, and other system definitions.*

i *Any changes to the workstations do not take effect until restart of the server.*

2.4.3.1 Settings (Server)

All definitions are executed using the dialog, **Settings**, that can be opened with the menu command **System|Settings**.

▼ Dialog: Settings / Local Installation / Network

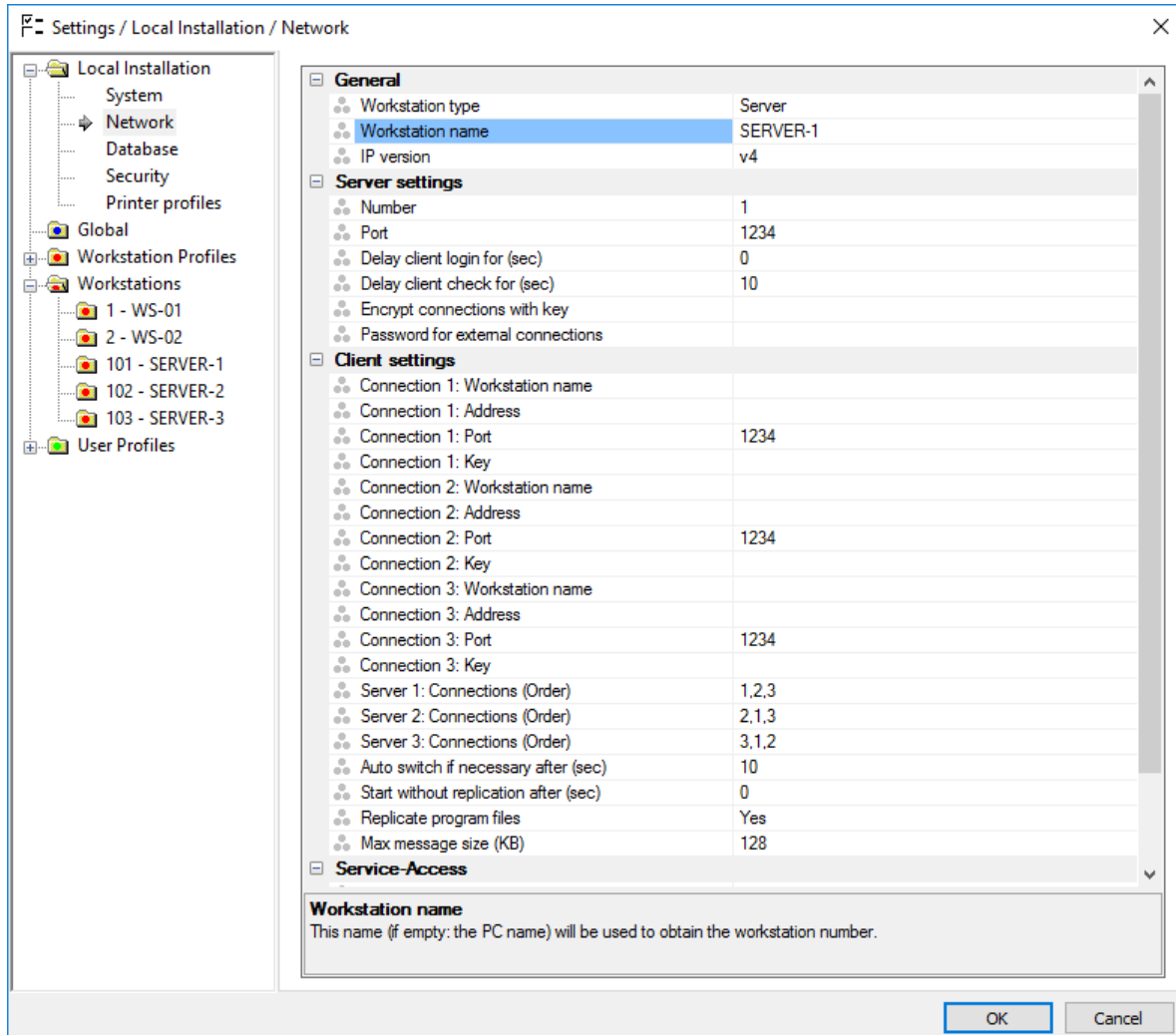


Figure 15: Settings / Local Installation / Network

▼ Local Installation: Network - Server settings

These definitions are also specified in the dialog, **Settings**, under **Local Installation|Network**, in the section **Server Settings**.

In most cases, you can accept the predetermined values.

▼ Number

The number of the server has to be defined here. The server having the number 1 usually represents the standard server. The Standby Servers will receive the numbers 2 or 3. The following can be selected: **1, 2, 3**.

1 (default) - if required, select the number to be used.

Port Lists

IP port opened by the server or standby server and accessible for data exchange.

1234 (default) - enter the port to be used here, if necessary.

i *Usually the same IP port is used for server and standby server, but this is not mandatory!*

Delay client login by (sec)

Here you specify the time that should elapse before the client logs on to the sever after starting. This can be helpful for accelerating the start of the interfaces.

0 (default) - enter the time that meets your requirements if necessary.

i *If 0 is entered, logon ensues directly without delay.*

Delay client disconnect message for (sec)

If a disconnection lasts longer than the time specified here, then a corresponding message is displayed. This allows you to suppress messages for short disconnections.

10 (default) - adjust the time to meet your requirements, if necessary.

i *If a 0 is entered, this function is not active and all respective messages are displayed immediately.*

Encrypt connection with key

Here you can define a text (key) that is used for data encryption during transmission. This key has to be identically defined on all workstations that use this connection.

Blank (default) - no encryption during data transmission.

Not blank - key for encryption.

i *A secure key should contain at least 10 characters!*

Password for external connection

Password to secure an external connection. Log on by the external client is then only possible with the respective password.

Blank (default) - no password required.

Not blank - this password is required for logon.

2.4.3.2 Settings (Standby Server)

As an alternative to the traditional WinGuard system that consists of one server with several clients, a standby server (Hot Standby Server) can also be integrated into the system.

The configuration of the standby server is similar to that of the active server. These two servers are then differentiated by normal operation and fallback operation. Fundamentally, one workstation is always configured as the server and another as the standby server. All master data and runtime data is continuously managed and reconciled in parallel by both workstations - as long as there is a connection. All servers are thus equipped with the current total information in the system.

All definitions are executed using the dialog, **Settings**, that can be opened with the menu command **System|Settings**. The settings below are only required if your system is configured with a Hot-Standby server. These definitions are also completed in the dialog, **Settings**, under **Local Installation|Network** in the section **Client Settings**.

▼ **Dialog: Settings / Local Installation / Network (only Hot-Standby)**

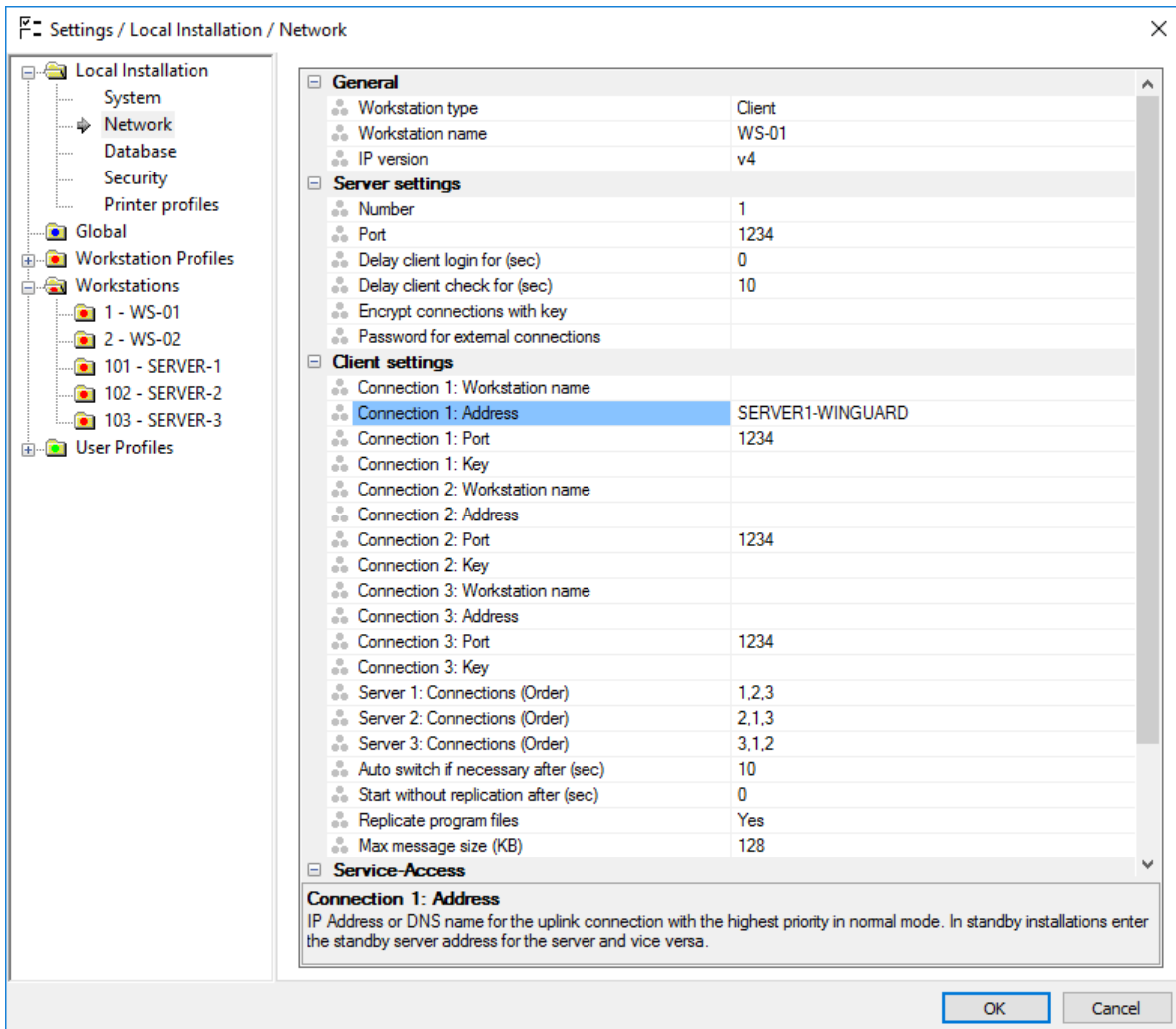
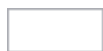


Figure 16: Settings / Local Installation / Network (only Hot-Standby)

▼ **Local Installation: Network - Client settings (only Hot Standby)**



For a server, the following settings are only required for Hot Standby operation and their meaning differs from the client settings!



Connection 1: Workstation name

The workstation name of the uplink partner for connection 1 can be defined here.
Blank (default) - if required, enter the workstation name.



This indication is only required in case of TLS encryption!



Connection 1: Address

For the servers 2 + 3, the IP address or the DNS name of the primary server is entered. (Alternatively, a Standby Server can be entered here, however the order for switching has to be adapted accordingly which is not required!).
Blank (default) - if required, enter the IP address or the name of Server 1 here.



For Server 1 (primary Server), this entry remains blank!

Connection 1: Port


IP port that is made available by the server.

1234 (default) - modify the port of the server 1 if necessary.

Connection 1: Key

Here you must enter the key that is defined on your standby server.


Blank (default) - no encryption during data transmission.

 *A secure key should contain at least 10 characters!*

Connection 2: Workstation name

The workstation name of the uplink partner for connection 2 is entered here.

Blank (default) - if required, enter the workstation name.

 *This indication is only required in case of TLS encryption!*

Connection 2: Address

For the Servers 1 + 3, the IP address or DNS name of the second server is entered.

(Alternatively, a Standby server can be entered here, however the order for switching has to be adapted accordingly which is not required!).

Blank (default) - if required, enter the IP address or the name of Server 2.

 *For Server 2 (Standby Server), this entry remains blank!*

Connection 2: Port

IP port that is made available by the server.

1234 (default) - modify the port of the server 2 if necessary.

Connection 2: Key

Here you must enter the key that is defined on your standby server.


Blank (default) - no encryption during data transmission.

 *A secure key should contain at least 10 characters!*

Connection 3: Workstation name

The workstation name of the uplink partner for connection 3 is entered here.

Blank (default) - if required, enter the workstation name.

 *This indication is only required in case of TLS encryption!*

Connection 3: Address

For the Server 1 + 2, the IP address or DNS name of the third server is entered.

Blank (default) - if required, enter the IP address or the name of Server 3.

 *For Server 3 (Standby Server), this entry remains blank!*

Connection 3: Port

IP port that is made available by the server.

1234 (default) - modify the port of the server 3 if necessary.

Connection 3: Key

Here you must enter the key that is defined on your standby server.

Blank (default) - no encryption during data transmission.

 *A secure key should contain at least 10 characters!*

Server 1: Connections (Order)

The order for connections with the Standby Servers is defined here in case Server 1 is active. Server 1 always has to be at position 1 here.

1,2,3 (default) - only change this order if required.

Server 2: Connections (Order)

The order for connections with the Standby Servers is defined here in case Server 2 is active. Server 2 always has to be at position 1 here.

2,1,3 (default) - only change this order if required.

Server 3: Connections (Order)

The order for connections with the Standby Servers if defined here in case Server 3 is active. Server 3 always has to be at position 1 here.

3,1,2 (default) - only change this order if required.

Replicate program files

If there are new program files on the uplink partner (standby server active), then these are optionally accepted upon start.

Yes (default) - program files are accepted.

No - program files are not accepted.

Maximum message size (KB)

Definition of the maximum package size for message transmission (must be modified or reduced only with extremely slow connections, for example ISDN).

128 (default) - enter the required maximum package size here, if necessary.

▼ **Global: System - Hot-Standby Operation**

The definitions are also completed in the dialog **Settings** under **Local Installation|Network**, in the section, **Client Settings**.

For standby server operation you still need to define the time that should elapse before the **auto switch**. This can also be completed in the dialog, **Settings**, under **Global|System** in the section, **Hot-Standby**. If a value of **0** is entered, **no** auto switch from the server to the standby server occurs, in the event the server becomes unreachable.

 *Only required if system is configured with Hot-Standby server!*

Number of Servers

The number of used servers can be defined and the operation is controlled correspondingly.

The following can be selected: From **Licence, 1, 2, 3**.

From Licence = default - adapt the number to your system.

Auto switch (sec)

Here you specify the time before an auto switch in the operating mode is initiated between server and standby server (and vice versa) following a connection interruption between server and standby server.

0 = default - modify the time to meet your requirements.



If the value remains 0, no auto switch will occur - the function is not active!



Upon operation with two Standby Servers, the system will decide automatically which server will take the role of the active server - this is not adjustable!

2.4.4 Client

Depending on system configuration, clients have the option of using up to three different connections. With this feature, you will have the capability of establishing a connection via another partner in case a connection is not functioning. This capability contributes significantly to the high availability of the system.

After client login at the server, a replication of all WinGuard program files used is performed. This is followed by a replication of all current project files. Replication is always executed from the server (login partner/uplink) to the client, which means that the client, if necessary, receives any varying program files and project data.

In a simple WinGuard network configuration, each client can only maintain one connection. This connection is always to the server - all clients are connected to their server in a star configuration.

All clients are basically capable of integrating certain interfaces, such as those required for video control or sending messages (SMS). Interfaces for the coupling of equipment such as fire and burglar alarms, etc. cannot be activated at a client. In order to couple these types of interfaces, clients with local server function or clients with interface-servers are required.

Install and Setup Client

ToDo: Installing and setting up of workstation type client:



Install the workstation as described in the section [Workstation - General](#)³⁴.



Select workstation type **client** and follow the installation directions.



Test that the installation is correct by starting WinGuard!



Via the menu command **System | Settings**, open the dialog for the system settings. Then define the respective settings under **Local Installation | Network**.



In the **General** section, first define the workstation type and workstation name of the client.



In the **Client Settings**, adjust the default settings to meet your requirements.



Some settings are only required for systems with Hot Standby or clients with local server function!



Shut down the client after completing the definitions and restart it.



Check the connection to the server or primary partner.

▼ **Dialog: Settings / Local Installation / Network**

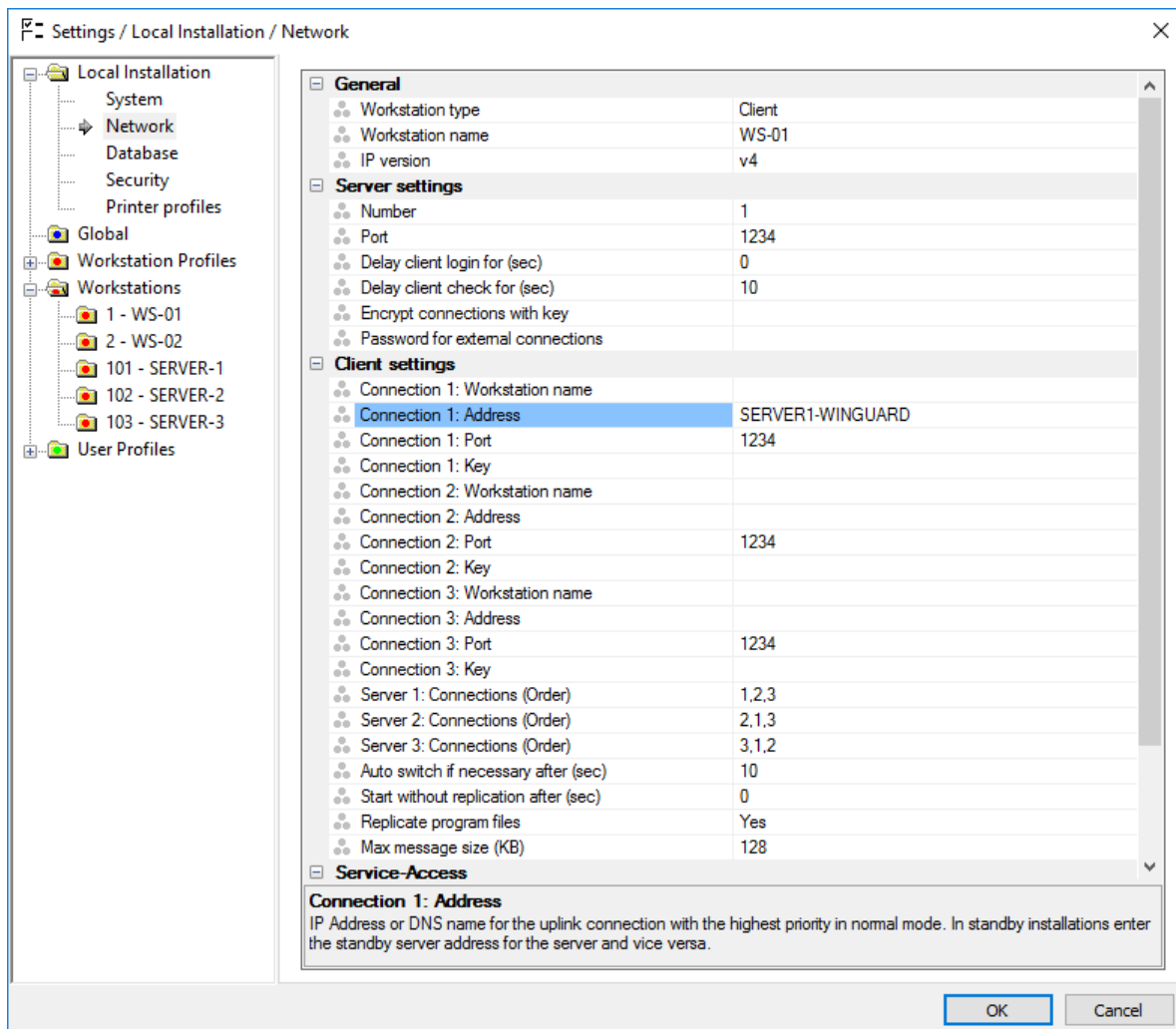


Figure 17: Settings / Local Installation / Network

▼ **Local Installation: Network - Client settings**

Settings in the following sections are required for all clients. But which connections you define here depends on your system configuration. With a simple configuration with one server, only the settings of **Connection 1** must be defined. If you are using a standby server or clients with local server functions, settings for **Connection 2** and/or **3** may also be required.

The definitions are also completed in the dialog **Settings** under **Local Installation|Network** in the section **Client Settings**.

Connection 1: Workstation name

Here you can define the workstation name of the uplink partner for connection 1. So it is ensured that the connection is made with the defined workstation (name and address must be right).


Blank (default) - enter the workstation name if required.

i *The name is only with TLS encryption used (recommended but not required)!*

Connection 1: Address

Here the address of the uplink partner for connection 1 of the client is determined. This can be the server, standby server, or a client with server function. Enter the IP address or the computer name here.

Blank (default) - IP address or name **must** be defined here.

 *In a simple server-client system, enter the server here.*

Connection 1: Port

IP port made available by the uplink partner 1.

1234 (default) - enter the port defined on the partner here.

Connection 1: Key

Here you have to enter the key that is defined for data encryption on partner 1.

Blank (default) - No encryption during data transfer.

Not blank - key for encryption.

Connection 2: Workstation name

Here you can define the workstation name of the uplink partner for connection 2. So it is ensured that the connection is made with the defined workstation (name and address must be right).

Blank (default) - enter the workstation name if required.


 *The name is only with TLS encryption used (recommended but not required)!*

Connection 2: Address

Here the address of the uplink partner for connection 2 of the client is determined. This can be the server, standby server, or a client with server function. Enter the IP address or computer name here.

Blank (default) - no fallback partner is defined.

Not blank - IP address or name of the first fallback partner.

 *In a simple server-client system, this entry remains blank.*

Connection 2: Port

IP port that is made available by the uplink partner 2.

1234 (default) - enter the port defined at the partner if necessary.

Connection 2: Key

Here you must enter the key that is defined for data encryption on partner 2.


Blank (default) - no encryption during data transfer.

Not blank - key for encryption.

Connection 3: Workstation name

Here you can define the workstation name of the uplink partner for connection 3. So it is ensured that the connection is made with the defined workstation (name and address must be right).

Blank (default) - enter the workstation name if required.

 *The name is only with TLS encryption used (recommended but not required)!*

Connection 3: Address

Here the address of the uplink partner for connection 2 of the client is determined. This can be the server, standby server, or a client with server function. Enter the IP address or computer name here.

Blank (default) - no additional fallback partner defined.

Not blank - IP address or name of the second fallback partner.



In a simple sever-client system, this entry remains blank.

Connection 3: Port

IP port that is made available by the uplink partner 2.

1234 (default) - enter the port defined at the partner if necessary.

Connection 3: Key

Here you have to enter the key that is defined for data encryption on partner 3.

Blank (default) - no encryption during data transfer.

Not blank - key for encryption.

Server 1: Connections (Order)

The order of connections (fallback) of the client is defined here in case Server 1 is the active server. If a connection to the partner defined first is impossible, it will be tried to establish a connection with the secondly defined partner, etc.

1,2,3 (default) - only change this order if required.

Server 2: Connections (Order)

The order of connections (fallback) of the client is defined here in case Server 2 is the active Server. If a connection to the partner defined first is impossible, it will be tried to establish a connection with the secondly defined partner, etc.

2,1,3 (default) - only change this order if required.

Server 3: Connections (Order)

The order of connections (fallback) of the client is defined here in case Server 3 is the active Server. If a connection to the partner defined first is impossible, it will be tried to establish a connection with the secondly defined partner, etc.

3,1,2 (default) - only change this order if required.

Auto switch if necessary after (sec)

If, following a disconnect, a connection with a higher priority partner can again be established, the switch to this partner takes place after the time determined here has elapsed (avoids "reducing the uplink priority").

10 (default) - modify the time until the switch if necessary.



This applies only to standby servers or clients with server function!

Start without replication after (sec)

Here you define the time that should elapse before a client starts (offline mode) even when it cannot establish a connection to one of the defined partners.

0 (default) - waits for logon - no offline start.

> 0 - client starts (in offline mode) after this amount of time has elapsed in the event no logon to one of the defined partners could be accomplished. As soon as one of the partners is available again, the connection is established automatically followed by program and data replication.

Replicate program files

If there are new program files on the uplink partner, then these are optionally accepted after start.


Yes (default) - program files are accepted if necessary.

No - program files are not accepted.

Maximum Message Size (KB)

Definition of the maximum package size for message transmission (only needs to be modified/reduced with extremely slow connections, for example ISDN).

128 (default) - modify the required max. package size here if necessary.

 *Changes made in the local settings only take effect after a restart of the client!*

After a restart, the client will immediately try to establish a connection with the primary partner, for example, the server. After a successful connection, first the program files and then the data inventory are reconciled before the client can be used.

In the status bar, you can see the status of the individual workstations. Those designated with a **yellow cross** are not currently logged on to the server (are not active).

If no connection could be established to one of the defined partners, the client continues to try to establish one by cycling through the order of prioritized partners defined in the settings. Clients that are set up to work even without a valid connection must have a **time > 0** entered into the setting for **Start without replication**.

You can activate the client manually as well, by clicking on the button **Start without Replication** in the client start window. This may be necessary, for instance, if you have made an error in the definitions.

2.4.4.1 Settings (Client)

Alle Definitionen erfolgen mit Hilfe des Dialogs **Einstellungen** der mit Hilfe des Menübefehls **System | Einstellungen** geöffnet werden kann (sieh auch: [Einstellungen](#)^[404] - [Lokale Installation](#)^[407] - [Netzwerk](#)^[409]).

▼ **Dialog: Settings / Local Installation / Network**

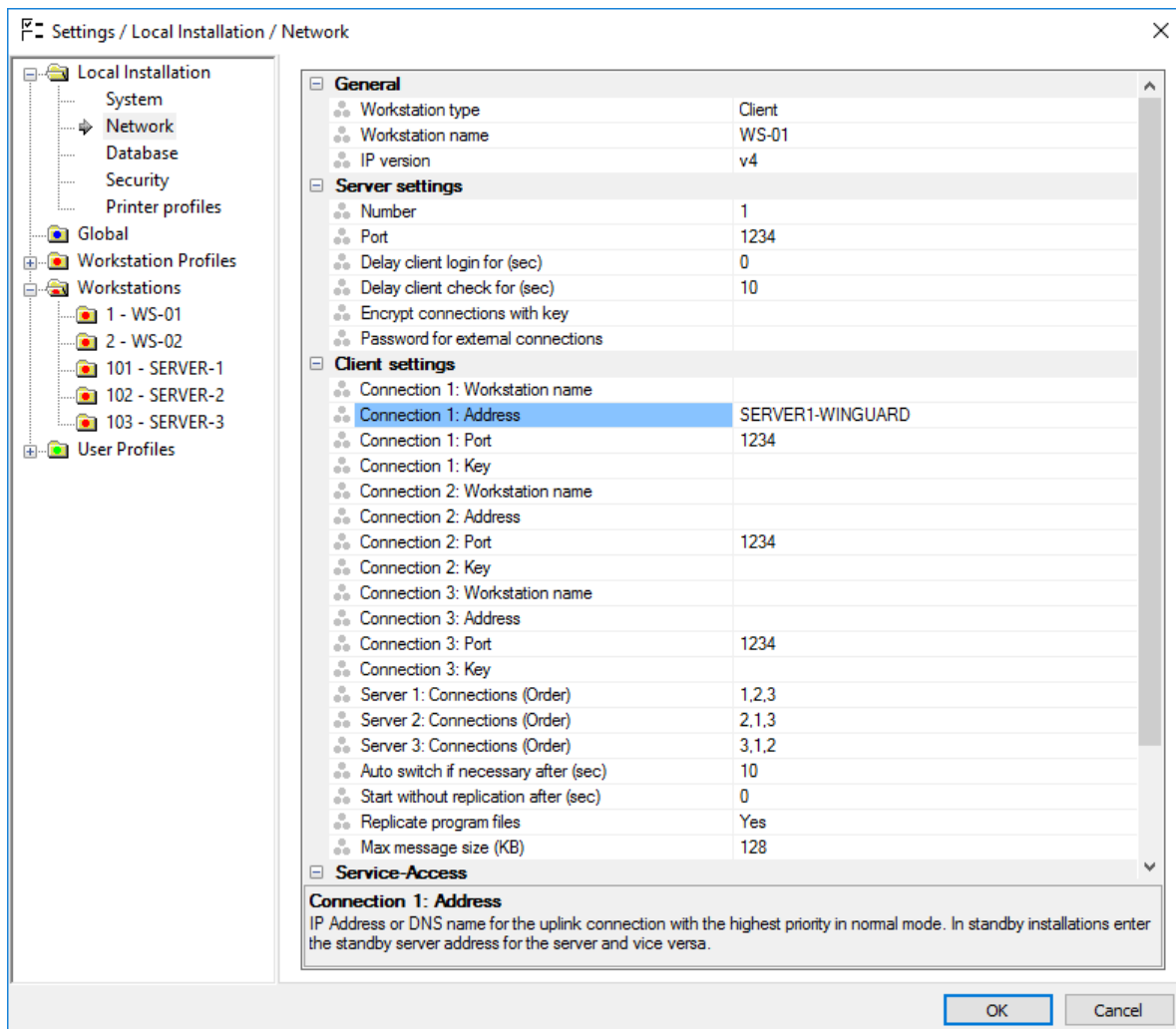


Figure 18: Settings / Local Installation / Network

Einstellungen im nachfolgenden Bereich sind bei allen Clients notwendig. Welche Verbindungen Sie hier definieren müssen ist allerdings von Ihrer Systemkonfiguration abhängig. Bei einer einfachen Konfiguration mit einem Server sind hier nur die Einstellungen von **Verbindung 1** zu definieren. Bei der Verwendung eines Standby Servers oder von Clients mit lokaler Serverfunktion können hier auch die Einstellungen von **Verbindung 2** bzw. **3** erforderlich sein.

Die Definitionen erfolgen ebenfalls im Dialog **Einstellungen** unter **Lokale Installation|Netzwerk** im Bereich **Client Einstellungen**.

▼ **Lokale Installation: Netzwerk - Client Einstellungen (bei Hot-Standby)**

Connection 1: Workstation name

Here you can define the workstation name of the uplink partner for connection 1. So it is ensured that the connection is made with the defined workstation (name and address must be right).


Blank (default) - enter the workstation name if required.

i *The name is only with TLS encryption used (recommended but not required)!*

Connection 1: Address

Here the address of the uplink partner for connection 1 of the client is determined. This can be the server, standby server, or a client with server function. Enter the IP address or the computer name here.

Blank (default) - IP address or name **must** be defined here.

 *In a simple server-client system, enter the server here.*

Connection 1: Port

IP port made available by the uplink partner 1.

1234 (default) - enter the port defined on the partner here.

Connection 1: Key

Here you have to enter the key that is defined for data encryption on partner 1.


Blank (default) - No encryption during data transfer.

Not blank - key for encryption.

Connection 2: Workstation name

Here you can define the workstation name of the uplink partner for connection 2. So it is ensured that the connection is made with the defined workstation (name and address must be right).

Blank (default) - enter the workstation name if required.


 *The name is only with TLS encryption used (recommended but not required)!*

Connection 2: Address

Here the address of the uplink partner for connection 2 of the client is determined. This can be the server, standby server, or a client with server function. Enter the IP address or computer name here.

Blank (default) - no fallback partner is defined.

Not blank - IP address or name of the first fallback partner.

 *In a simple server-client system, this entry remains blank.*

Connection 2: Port

IP port that is made available by the uplink partner 2.

1234 (default) - enter the port defined at the partner if necessary.

Connection 2: Key

Here you must enter the key that is defined for data encryption on partner 2.


Blank (default) - no encryption during data transfer.

Not blank - key for encryption.

Connection 3: Workstation name

Here you can define the workstation name of the uplink partner for connection 3. So it is ensured that the connection is made with the defined workstation (name and address must be right).

Blank (default) - enter the workstation name if required.

 *The name is only with TLS encryption used (recommended but not required)!*

Connection 3: Address

Here the address of the uplink partner for connection 2 of the client is determined. This can be the server, standby server, or a client with server function. Enter the IP address or computer name here.

Blank (default) - no additional fallback partner defined.

Not blank - IP address or name of the second fallback partner.



In a simple sever-client system, this entry remains blank.

Connection 3: Port

IP port that is made available by the uplink partner 2.

1234 (default) - enter the port defined at the partner if necessary.

Connection 3: Key

Here you have to enter the key that is defined for data encryption on partner 3.

Blank (default) - no encryption during data transfer.

Not blank - key for encryption.

Server 1: Connections (Order)

The order of connections (fallback) of the client is defined here in case Server 1 is the active server. If a connection to the partner defined first is impossible, it will be tried to establish a connection with the secondly defined partner, etc.

1,2,3 (default) - only change this order if required.

Server 2: Connections (Order)

The order of connections (fallback) of the client is defined here in case Server 2 is the active Server. If a connection to the partner defined first is impossible, it will be tried to establish a connection with the secondly defined partner, etc.

2,1,3 (default) - only change this order if required.

Server 3: Connections (Order)

The order of connections (fallback) of the client is defined here in case Server 3 is the active Server. If a connection to the partner defined first is impossible, it will be tried to establish a connection with the secondly defined partner, etc.

3,1,2 (default) - only change this order if required.

Auto switch if necessary after (sec)

If, following a disconnect, a connection with a higher priority partner can again be established, the switch to this partner takes place after the time determined here has elapsed (avoids "reducing the uplink priority").

10 (default) - modify the time until the switch if necessary.



This applies only to standby servers or clients with server function!

Start without replication after (sec)

Here you define the time that should elapse before a client starts (offline mode) even when it cannot establish a connection to one of the defined partners.

0 (default) - waits for logon - no offline start.

> 0 - client starts (in offline mode) after this amount of time has elapsed in the event no logon to one of the defined partners could be accomplished. As soon as one of the partners is available again, the connection is established automatically followed by program and data replication.

Replicate program files

If there are new program files on the uplink partner, then these are optionally accepted after start.

Yes (default) - program files are accepted if necessary.

No - program files are not accepted.

Maximum Message Size (KB)

Definition of the maximum package size for message transmission (only needs to be modified/reduced with extremely slow connections, for example ISDN).

128 (default) - modify the required max. package size here if necessary.



Änderungen an den lokalen Einstellungen werden erst nach einem Neustart des Clients übernommen!

2.4.5 Client with Interface Server

Clients with an interface server provide all the functions of a regular client. Additionally, this workstation type supports the linking or operation of interfaces.

The settings definitions are almost identical to those of a simple client. Only the workstation type **Client (with interface server)** must be selected accordingly.

You can find additional information on this topic and the respective settings in the section, [Client](#)⁴³.

2.4.6 Client with Local Server Function

Clients with server function provide all the functions of a regular client. But this workstation type not only supports the linking or operation of interfaces (like a client with interface server), but also the functionality that other workstations can log onto it and it thereby operates like a server from the perspective of those clients.

The settings definitions are almost identical to the settings of a simple client. Only the workstation type, **Client (with local server function)**, must be selected accordingly and the corresponding settings established in the **Server**.

Fundamentally, it is possible that such a client with local server function includes other clients with local server function through the uplink definition of the connections.

Please see the [Client](#)⁴³ section for further information and settings.

2.4.7 Display (VideoDisplay)

WinGuard must be installed on each VideoDisplay workstation (please see: [Installation](#)¹⁵) together with the necessary components of the video interface. Additionally, you must then carry out the usual installation of the required video interface modules.

Using the internal WinGuard VideoManager, you can then test if the interplay between the developer's module and the WinGuard module is functional and display the videos on the specified workstation. Following successful installation, you must then setup the VideoDisplay and, if desired, configure the program for autostart.



With the autostart function, the client can start automatically following startup of the workstation and the respective Windows® user login. You can find additional information on this topic in the section: [Autostart](#)^[64].


To install and run a VideoDisplays some additional things are required.


- A license for all VideoDisplays is required.
- Remote control workstations needs a VideoManager license.
- All VideoDisplays must be installed as WinGuard workstations.
- Users for automatic login with special settings and rights must be defined for VideoDisplays.


▼ VideoDisplay Installation (WinGuard)

ToDo: Installation for VideoDisplay (WinGuard):

- ➔ Carefully read through the help section of your VideoDisplay!
- ➔ Install WinGuard on the workstations on which VideoDisplays is to run.
- ➔ Have the required developer modules for the video system (for example, SDK, etc.) ready on a data storage device (if necessary, request a download link from support).
- ➔ Install the required modules (please see the help section of the interface).
-  **Please refer to the help information of the producer!**
- ➔ Test the video connections using the tools (for example, viewer) of the developer!
 -  *If you are unable to establish a connection here or do not get a display, you will have the same problem in WinGuard!*
- ➔ Configure the workstation as VideoDisplay and establish the server communication.
- ➔ Configure the remote control workstations.
- ➔ Test your installation.


 *Carefully read the information regarding your video interfaces and make the appropriate preparations!*

 *Don't forget to have the firewall configured accordingly!*

 *It is recommended to put a shortcut for the **VideoDisplay** client into the Windows® autostart folder to start the program automatically!*


2.4.7.1 Settings (Display)

As soon as the client is started in VideoDisplay mode, the Windows® taskbar shows a WinGuard icon, the VideoManager windows are opened and the application window is automatically hidden. By right

clicking on this icon  (WinGuard service panel) in the Windows® system tray you will receive a context menu with which you can determine the four VideoDisplay windows. Additionally you can open the client window or shutdown the complete application. If you open the application window the predefined user is already logged in.




In opposite to a normal workstation login you will not see the toolbar logo, the explorer bar and the event list (independent from the settings) in the VideoDisplay application window. Dependent from the active user appropriated functions can be activated via menu or toolbar. For the VideoDisplay an own system standard menu and toolbar (see: [VideoDisplay](#)^[174]) is defined.

Using the dialog **Settings** which can be opened via the menu command **System|Settings**, you can determine the respective definitions. All settings - without local settings - can be defined form other workstation if you have the appropriated rights.

 *VideoDisplays have own **standard** menu- and toolbars!*

▼ VideoDisplay setup

ToDo: VideoDisplay setup:

-  Carefully read through the help section of your VideoDisplay!
-  Define a workstation for each VideoDisplay in your system.
Necessary workstation definitions:
 - Define name and number.
 - Other: activate Usabel as display.
-  Necessary locale settings:
 - Define workstation type (Display) and name.
 - Define network server connections.



2.4.7.2 Settings (Client)

In order to communicate with a VideoDisplay from your workstation, the required settings in WinGuard have to be defined. Basically, you must define the respective Workstation name.

Using the dialog **Settings** which can be opened via the menu command **System|Settings**, you can determine the respective definitions. Information about the settings see section [Settings](#)^[404] - [Global](#)^[422] - [Video](#)^[500].

▼ Setup VideoDisplay

ToDo: Setup VideoDisplay for workstations:

-  Carefully read through the help section of your VideoDisplay!
-  Necessary settings in Global - Video - VideoDisplay:
 - Define presets for remote control.
 - Can change content
 - Can change layout
 - Context menu "All"



Necessary settings in Global - Video - VideoDisplay1..4:

- Select the workstation name for remote control.
- Define split-changes if applicable.
- Define changes for content, layout and Context menu if applicable.

2.5 Installation as a Service

WinGuard can be installed and run with user interface as an application under a Windows® user account or as a service without an user interface. One significant advantage of the service option is that in order to operate WinGuard, no user in Windows® has to be logged on to the respective workstation. This is generally desired for the server, Hot-Standby server, etc. Please note however, that in this scenario, no user interface is available to operate WinGuard.

The **ServicePanel** is the independent tool that enables the setup, administration, and limited operation of WinGuard as a service. The ServicePanel also makes it possible to watch workstations that are not running as a service remotely and carry out certain functions there.

No additional measures are required for the installation of the ServicePanel as it is already installed as part of the WinGuard installation. If you have performed a manual update, then it is sufficient to simply copy the required modules into the WinGuard program directory.

You can find information on how to use the ServicePanel to set up WinGuard as a service in the section, [Setting up as Service \(ServicePanel\)](#)^[670].

2.6 Silent Setup

Silent Setup enables installation by a user registered via the interface in Windows® without display of dialogs (setup parameter /S). Using the configuration file **UNATTENDED.INI** (installation directory), it is possible to pre-configure everything that would be configured via dialogs.

A user and/or user group can be defined via the configuration file for which - in addition to the installing user - rights for the corresponding WinGuard directories as well as for the registry parts relevant for WinGuard can be set.

In addition, different sections can be predefined in the configuration file. Sections for the different workstation types are already available. However, it is also possible to add further user-defined sections. Then, these sections define information for the setup options which overwrite the standard settings in the configuration file. Via transfer of the section name, such sections can be used as further parameters behind the /S Parameter (e.g. /S ABC) upon selection.



In the configuration file, all options are described in English and a commented out user section is available as an example!



Currently, this functionality is only available for installation, but not for updates or deinstallation!

▼ Example: Extract configuration file UNATTENDED.INI

```
[Setup]
; DefaultInstallType: Possible Values are Standalone, Server, Hot-Standby,
; InterfaceServer, Client dependent on the Install-Type defined here the resp.
; sections below are used
DefaultInstallType=Standalone

; DefaultInstallFolder: Specifies the name of the default installation folder
DefaultInstallFolder=%ProgramFiles%\WinGuard

; DefaultProjectFolder: Specifies the name of the default folder for project data
DefaultProjectFolder=%ProgramFiles%\WinGuard

; DefaultSelectedInterfaces: Takes a comma separated list of interface names, which
; are selected by default during setup
DefaultSelectedInterfaces=all

; DefaultStartmenuFolder: Folder name to place the Startmenu items in
DefaultStartmenuFolder=WinGuard

; DefaultStartmenuIcon: Icon name for WinGuard Icon on Desktop
DefaultStartmenuIcon=WinGuard

....

; Sections to overwrite Setup Default Parameter or add Install-Type specific Parameters
[Standalone]

[Server]
StartmenuIcon=WinGuard Server
StationName=Server
Port=1234

[Hot-Standby]
StartmenuIcon=WinGuard Hot-Standby
StationName=Hot-Standby
ServerIP=127.0.0.1
Port=1234

[InterfaceServer]
StartmenuIcon=WinGuard InterfaceServer
SelectedInterfaces=all
StationName=InterfaceServer
ServerIP=127.0.0.1
Port=1234

[Client]
StartmenuIcon=WinGuard Client
```

Installation: Silent Setup

```
StationName=Client  
ServerIP=127.0.0.1  
Port=1234
```

2.7 Data Storage and Management

The directories for WinGuard programs and data can already be determined during installation.

By default, the following directories are used:

- **Programs**
C:\Programs\WinGuard
- **Data**
C:\Documents and Settings\All Users\Documents\WinGuard

After successful installation, users can still change the data directory anytime by selecting a new directory or creating one. The definition for the current project directory (data directory) can be established in the dialog **Settings** under **Local Installation | System** in the **General** section.

WinGuard also provides the option of managing/using several program or data directories on one workstation.



It is recommended that you use separate directories for programs and data!

2.7.1 Programs

All WinGuard program modules are located either in the basic directory or in one of the subdirectories. The main WinGuard program **WinGuard.exe** and supplementary programs can be found directly in the program directory. The subdirectories contain items such as language files, interface modules with the corresponding language and configuration files as well as other supplementary programs/modules.

Program directories:

- **Main Program Directory**
Main program, language files, supplementary programs, etc.
- **help**
Subdirectory for help files (also in various languages).
- **lng**
Subdirectory for program language files.
- **mod**
Subdirectory with the further subdirectories for each interface containing program -, language -, and data modules.
- **setup**
Subdirectory with the further subdirectory **store** which contains all installation modules as update packages. When updating, the subdirectory **update** for update packages currently to be installed is also created here.
- **tools**
Subdirectory for supplementary programs such as SystemManager, Watchdog, etc.

To start WinGuard from a directory, simply run the WinGuard.exe file. This can also be conveniently achieved through a shortcut (implemented during installation) on the desktop.

The configuration files are in the data directory.



When starting WinGuard for the first time, start it from a directory. You will be asked for the project folder and this establishes a corresponding record that is stored in the Windows® registration database. This process requires administrator rights!



WinGuard can only be started with administrator authorizations!

2.7.2 Data

As a standard, WinGuard maintains all data that belong to a project in one directory, the data or project directory. Here you will find the project-specific files such as the WinGuard database, graphics, texts, etc.

An SQLite database is used as database, automatically provided by WinGuard. As an option, database encryption is possible.



*WinGuard supports only the own **SQLite-DB**. The usage of other databases is not possible!*

The total directory structure is realized directly via the database and thus only available in virtually. Each file is represented by an assigned data set which contains a signature of the file. Therefore, only files that have been entered correctly in the database will be accepted by the system. It is thus not possible to make any changes of files and the directory structure from outside the system. The files are stored separately on the hard disk, however, not in a way that is directly usable for the user.

To access the managed files, there is an own, internal explorer in which the virtual data structure is represented and can be edited (menu item: **System|Database|Files...**). Drag & Drop between the Windows®-explorer and the integrated WinGuard explorer is possible in order to add files to the system or to export them.

References of managed files are not directly assigned by the file name. In the UI you will see the virtual name and path of the files but as reference the GUID will be saved. This means, that you can change file or path names, moving file, etc. without losing the assignment.



For administration of internal files, the integrated file explorer has to be used!



A deleted file cannot be restored identically by creating a new file with the same name, as it will have a different ID compared to the original file and therefore it cannot be the target of the original link!

Physical data folders:

- **Main Data Directory**
WinGuard Project folder
- **backup**
Default directory for backups
- **db**
SQLite data base
- **files**
Managed files (virtual file structure)
 - **attachments**
Event attachments

- **core**
Graphics, texts, other files
- **media**
Clips of the media archive
- **temp**
Temporary files (asip, attachments, cad, GIS, media, replication,view, etc.)

Virtual default data folders:

- **Attachments**
Temporary files for attachments
- **Data**
Menu files, Animation schemes, layouts, etc.
Modified INI- and LNG files from interfaces, if applicable in relevant sub folders.
- **Graphics**
Graphic files
 - **Buttons**
Files for buttons in texts (BMP) and graphics (WGD)
 - **Symbols**
Symbol library in WGD format
- **Media**
Media data base with clips, etc.
- **Other**
Other files
- **Sounds**
Sound files (WAV) for acoustic alarms
- **Texts**
Texts, commands, reports, etc.
 - **Reports**
Text files (WGT) available in the selection of reports
 - **Scripts**
Script texts (WGT) such as for the distribution of messages



*The **sounds** directory is not automatically created by WinGuard when establishing a database. Users have to create the directory and copy desired sound files (.WAV) into it!*



Without a "Sounds" directory and corresponding "WAV" files, the system will not emit sounds and there will be no acoustic alarms!

2.7.3 Shared Data Storage

In a WinGuard network differed workstations are connected to complete system. It is a mesh network with directed connections. One station may have more than one incoming connections but only one outgoing. The active sever is located at the top of the tree.

As opposed to most other systems, WinGuard does not use one database to which all clients have to have equal access. Dependent form the defined segmentation ([Daten Segmentation](#)⁶²) the necessary

data in a WinGuard multi-client installation is stored locally on the individual workstations while the server manages the master data and ensures distribution during everyday operations. Consistent availability and operability of all workstations is thus warranted. Through a multi-fallback concept (standby-server), other units can take over the server function should one of the participants fail.

Common problems encountered by centralized client-server solutions during a failure of a network connection or central component can thus be compensated in large part by WinGuard through the locally-stored data. A sophisticated, constant replication of all data inventory ensures that a central entity does retain control during operation and that after the start of the system all data automatically remains consistent.

▼ Data Structure

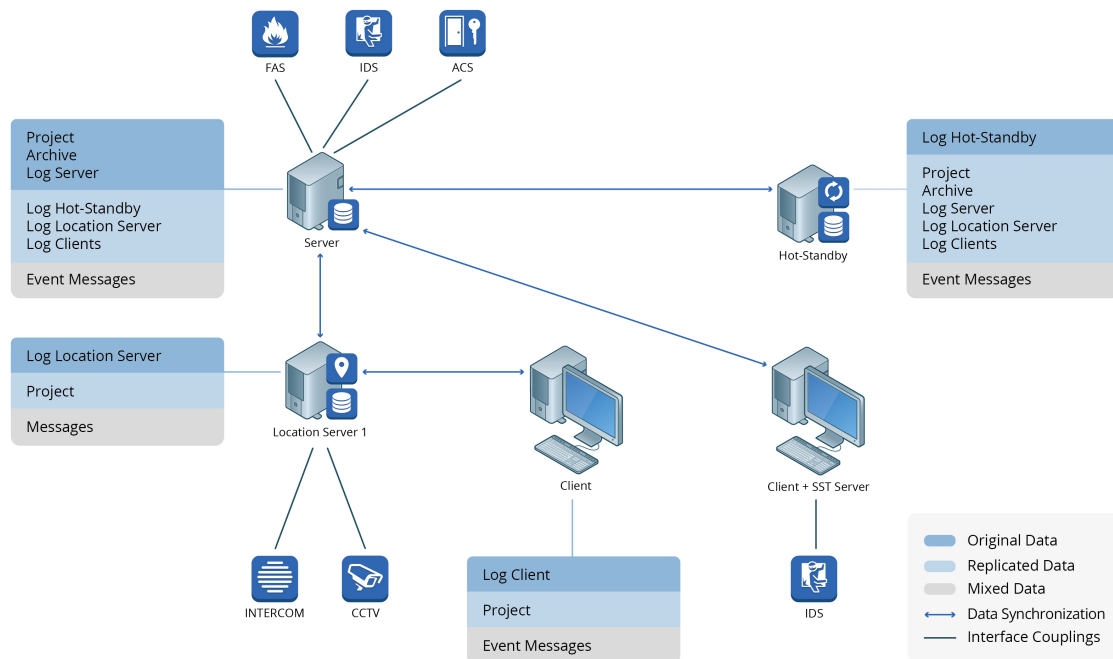


Figure 19: Data structure

2.7.4 Data Segmentation

With the help of segmentation, the existing data of large network systems can, if required, be separated in partial quantities (called **segments**⁵⁷⁶). The segmentation has mainly been designed for realizing a set of logical smaller partial systems within a large network system. It has not been designed for exclusion of specific partial contents at particular stations before transfer (e.g. no graphics at interface servers).

Primary targets of segmentation:

- **Efficiency**

It is not necessary anymore to transfer all data and information to all stations of a large network, but only to such stations that have been defined as part of the segment.

- **Security**

The access to the data of a foreign segment is prevented in a reliable way, not only based on rights, but due to the fact that data is not even transferred to stations outside the segment.

Each data set and each file can only be assigned to exactly one segment. The partial amounts defined by segments are disjoint, except if a data set has not been assigned to any segment, then it will be available in all segments.

Via the workstation definition, it is fixed which segments will be available there. If no segment is indicated for a station, all data will be available there. All segments will be available at the up to three servers, independent of the indication of the workstation definition.

▼ Data segmentation

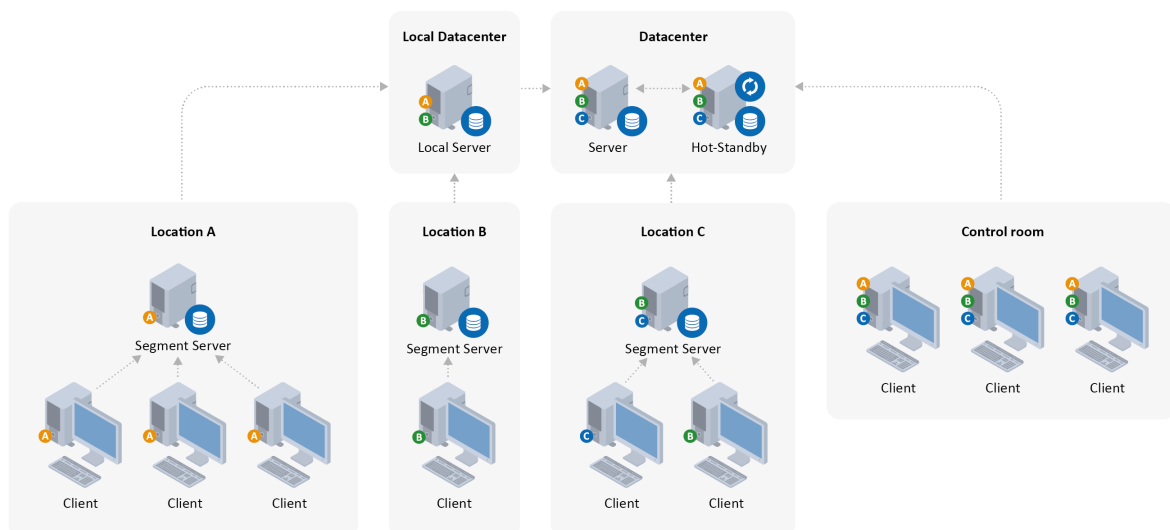


Figure 20: Data segmentation

When realizing the segment assignment for the stations, it has to be considered that subordinated stations can never have more or other segment data as the station that is superordinated in the network. If the superordinated station does not receive any data for a segment, it cannot distribute any data to the subordinated station. In the image Data segmentation, this is made clear by using the segments A, B, C.

2.7.5 Managing WinGuard Projects

For testing purposes, or to allow service employees to perform their duties, it is often necessary to process multiple projects at one workstation. Here, WinGuard provides the option of installing several program or data directories at one workstation. This allows users to access several program versions with varied project data. Management of the program and project data is directory-driven so that changes in one environment will not have any impact on other program or data directories.

To create an additional WinGuard directory, simply copy an existing WinGuard program directory. The program can then be launched directly from the new program directory. After the program start it will be asked for the project folder and then the folder will be saved in the Windows® registry database. If no data base is found, the requisite directories and files are created automatically.

Following start or login (which occurs automatically), the desired data directory can then be changed in the settings (**Local Installation / General** - Current Project Directory). It is thus easy to use not only various data sets from various projects, but also different %WINGUARD%> program releases without these influencing one another.



Launch WinGuard initially from a directory, then it will be asked for the project folder. The currently linked folder is stored automatically in the Windows® registry data base!






Administrator rights required!

2.8 Autostart

The purpose of the autostart function is to ensure that all necessary steps to start WinGuard on the respective workstation are executed automatically after the computer is turned on. The sections below contain important information on how to set up the autostart function on your system.




▼ ToDo: Autostart Settings for WinGuard as an Application

Autostart settings for WinGuard as an application:

-  Configure the BIOS of the PC to start automatically following a power outage!
-  Adjust the WibuKey start option if necessary.
-  Configure the autostart settings of Windows®.
-  Establish a link for WinGuard.exe in the autostart folder of Windows®.
-  Configure the WinGuard start settings.

▼ ToDo: Autostart Settings for WinGuard as a Service

Autostart settings for WinGuard as a service:

-  Configure the BIOS of the PC to start automatically following a power outage!
-  Adjust the WibuKey start option if necessary.
-  Configure WinGuard as a service using the ServicePanel.


2.8.1 Autostart PC (BIOS)

In the computer BIOS you can select the option to have your computer restart automatically following a power outage. The exact designation of the option depends on the BIOS version you are using. With this option, you can ensure that the system will restart automatically after a power outage.

▼ ToDo: BIOS Settings

BIOS settings

-  Configure BIOS of the PCs to restart automatically following a power outage!

 *The settings that need to be applied vary depending on the BIOS version you have. Generally, you can get to the BIOS settings by holding down the <F2> key or the key when the computer starts up!*

2.8.2 Autostart Operating System

When starting the operating system, it is generally desired that WinGuard is also automatically started. To achieve this, various measures may be required, depending on the installation.

WibuKey Settings

By adjusting the settings for your WibuKey configuration, you will have all necessary modules to support your dongle active at the start of the operating system. This ensures that a dongle that is being used is available at the time of WinGuard autostart, directly following user registration.


▼ ToDo: Change WibuKey Start Settings

Changing WibuKey start settings:

- ➔ Open the registration editor (regedit) of Windows®
- ➔ Go to the entry:
HKEY_LOCAL_MACHINE/SYSTEM/CurrentControlSet/Services/WIBUKEY
and define the following settings.
 - Start **0** Type: REG_DWORD

Automatic Windows login

If you want to start WinGuard as an application, it is necessary that a user is logged into Windows® before the program can be started. To have user login occur automatically in %WINDOWS%>, several settings within the operating system must be defined.


 *If WinGuard is set up as a service, login by a Windows® user is not required and the settings described below can be ignored!*

▼ ToDo: change Windows start settings

Changing Windows® start settings:

- ➔ Open the registration editor (regedit) by Windows®
- ➔ Go to the entry:
HKEY_LOCAL_MACHINE/Software/Microsoft/WindowsNT/CurrentVersion/Winlogon
and define the following settings.
(missing keywords to be added)
 - AutoAdminLogon **1** Type: REG_SZ
 - DefaultUserName **<Name>** Type: REG_SZ
 - DefaultPassword **<Password>** Type: REG_SZ

The entries have to be string entries (character sequences). For name, the user name that is to be automatically logged on should be entered. A password must be entered as only users with a password can be automatically logged on.

 *If the **Default Password** value is blank, Windows® will automatically change the value of the key **AutoAdminLogon** from **1** to **0** after the next start. This deactivates the AutoAdminLogon function. This process also occurs when the **Default Password** character sequence is entered, but the password has **no** value or a value of **null**.*

To automate the user logon with Windows® systems (for example. 7, 8, 2008 Server, etc.) without manually changing the registry, the following steps should be taken:

In the **Start Menu** under **execute**, enter **control userpassword2** in order to open the user account administration. Then select the user account that is to be automatically logged on and remove the check in front of the entry **Users must enter user name and password**. After clicking on **Accept** and **OK** you will be asked the user password. At the next start, the user that was just selected will be logged on automatically. This process is not possible when logging on to a domain environment.

You can also find additional information regarding set up of automatic user login at Microsoft Support.



Please note that an automatic user logon always presents a security risk!

2.8.3 Autostart WinGuard

In order to activate WinGuard automatically after a computer has been started, two options are available depending on usage.

- WinGuard as a service (without user interface)
- WinGuard as an application (with user interface)

Starting WinGuard automatically as a service

If WinGuard is to start automatically as a service following the booting up of a computer, the program must first be set up to do so using the application, ServicePanel. The ServicePanel is included in the installation and is located in the WinGuard program directory. With the help of the ServicePanel, WinGuard as a service can be started or shut down anytime manually. Additionally, the program can alternatively be started as an application.

A user login with Windows is not necessary to start WinGuard as a service. But that means there is also no user interface available for operation. Setting up the program as a service is thus generally only appropriate for servers and clients (for example for communication) that will not have any users working on them.



If WinGuard is running as a service, no user can be logged into the program, or in other words, any defined, automatic user logon will be ignored!

▼ ToDo: Set Up WinGuard as a Service

Setting up WinGuard as a service:



Using the ServicePanel, register the program WinGuard.exe as a service on the workstation. By default, the program is set up so that it will start automatically when the computer is started.

Using the Windows administration tool for services, the characteristics of the **WinGuard** service can be viewed or modified at any time.



Additional information about the ServicePanel and how to operate it can be found in the section [Setup Service \(ServicePanel\)](#)!

Starting WinGuard automatically as an application

In order to start WinGuard as an application automatically after starting a computer, a link to the WinGuard.exe program that is to be started must be inserted in the autostart folder of the start menu.

▼ ToDo: Windows® User Settings

Establish user settings in Windows® :



Create a link for WinGuard.exe in the startup folder of the respective Windows® user.




E.g.: C:\Users\\AppData\Roaming\Microsoft\Windows\Start Menu\Programs\Startup

Automatic WinGuard registration

When starting WinGuard, a user can be logged on automatically as long as the program is not running as a service. This ensures that after program start, a desired interface with appropriate functionality is available without manual user login.

▼ **ToDo: WinGuard Settings**

Establish settings in WinGuard:

-  Click on the menu item **System | Settings...** to open the dialog for **Settings**.
-  Select **Global** or the desired **workstation**.
-  Under **System** in the **User Login** section you can select the user that is to be logged on automatically at the start under the entry **Log on automatically at program start**.

2.9 Inspector





WinGuard provides a built-in crash handler that gathers and stores information regarding a program crash. The Inspector has the capability to monitor events and maintain information about them. This information can then be used by Advancis to diagnose and analyze problems. Additionally, the Inspector can automatically restart WinGuard in these cases.

2.9.1 Installation


If WinGuard is updated using an installation medium and there is no version or an older (than the existing) version of the Inspector installed, the installation of the current Inspector occurs automatically. In many cases, though, WinGuard is only updated on the server, and the clients are updated through the automatic program file replication. However, the content of the Tools Directory as well as the Inspector are excluded from this mechanism. That means that at all workstations on which no new installation was performed for the update, the Inspector has to be manually installed.

▼ ToDo: Installation Inspector

Installing Inspector manually:

-  Make your WinGuard installation files available on a data storage device.
-  Install the Inspector by running the installation program **InspectorSetup.msi**.
 -  *Normally, the Inspector is installed without entering any additional parameters.*
-  Test the installation of the Inspector.

In some cases, the Inspector had to be expanded. This requires that particular attention be paid to compatibility with older releases. Generally, it is not of vital importance to install the Inspector manually with every update, even though it is recommended that this be done.

 **During an update through the replication of program data from the server, the content of the Tools Directory and the Inspector are not automatically updated on the clients!**

2.10 OPC Server

In its current version, the WinGuard OPC server is a OPC DA (Data Access) 2.05 / 3.0 server that can communicate the states of a running WinGuard system to a OPC client.

The server with the file name **WgOpcServer.exe** registers itself in the system during installation and from thereon is visible as OPC server for respective OPC clients in the system. Since the OPC server communicates with WinGuard via the ASIP interface (TCP/IP), it is not necessary for it to run on the same computer as WinGuard. This allows the OPC server to run on the same computer as a OPC client with which it is supposed to communicate. In this way, using DCOM with all its related consequences with regard to authentication, etc. can be avoided.

i *As opposed to WinGuard, it is currently not possible for the OPC server to run as a service. The OPC server has the advantage of being able to run on any computer, even for example on the OPC client of an outside system, but if this is not desirable, it typically runs on the computer of the WinGuard server. If WinGuard runs as a service on this computer, it is assumed that the OPC server should also run under the SYSTEM account. However, this is not supported at this time. Therefore, if WinGuard is to run as a service, the OPC server would have to run under a different account than the SYSTEM account, or, as a better solution, on another computer.*

2.10.1 Installation

The installation of the WinGuard OPC server can be done directly from the installation directory. After starting **AUTORUN.EXE**, click on the button **OPCServer Setup**. In the event AUTORUN was not started automatically, open Windows explorer, and go into the installation directory to start the programm **SETUP.EXE** directly.





Alternatively, select the menu entry, **run** from the Windows start menu! In the selection field, **Open**, enter the letter of the drive that contains your installation directory followed by "**\SETUP.EXE**". If your drive is designated by the letter "**E**", you would enter: "**E:\SETUP.EXE**" and then click on the **OK** button.

The installation program is started. All required entries are completed in respective dialogs. In these dialogs, you will generally have the option to confirm your entries with **OK** or **Continue**, or to stop the installation by clicking on **Cancel** or **Abort**. Using the **Back** button, you can return to the previous dialog.

i *WinGuard does not have to be installed on the respective computer. Installation via the program, **OPCServerSetup.exe** from the WinGuard installation directory is sufficient.*

▼ **ToDo: WinGuard OPC Server Installation**

Installation of the WinGuard OPC server:

-  Please carefully read through the help section of your WinGuard OPC server!
-  Install the OPC server on the respective computer.
-  Set up the OPC server.
-  Test your installation.

▼ Dialog: Setup Language

First, the dialog **Setup Language** appears. Select the desired language and confirm the entry by clicking on **OK**.

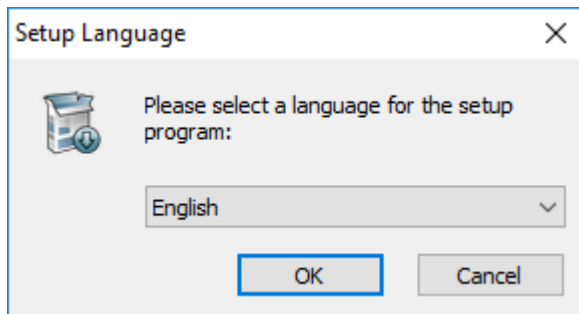


Figure 21: Setup Language

▼ Dialog: Setup - Welcome

In the following dialog that is displayed, **Welcome**, you will be asked to continue the installation. Click on the **Continue** button.

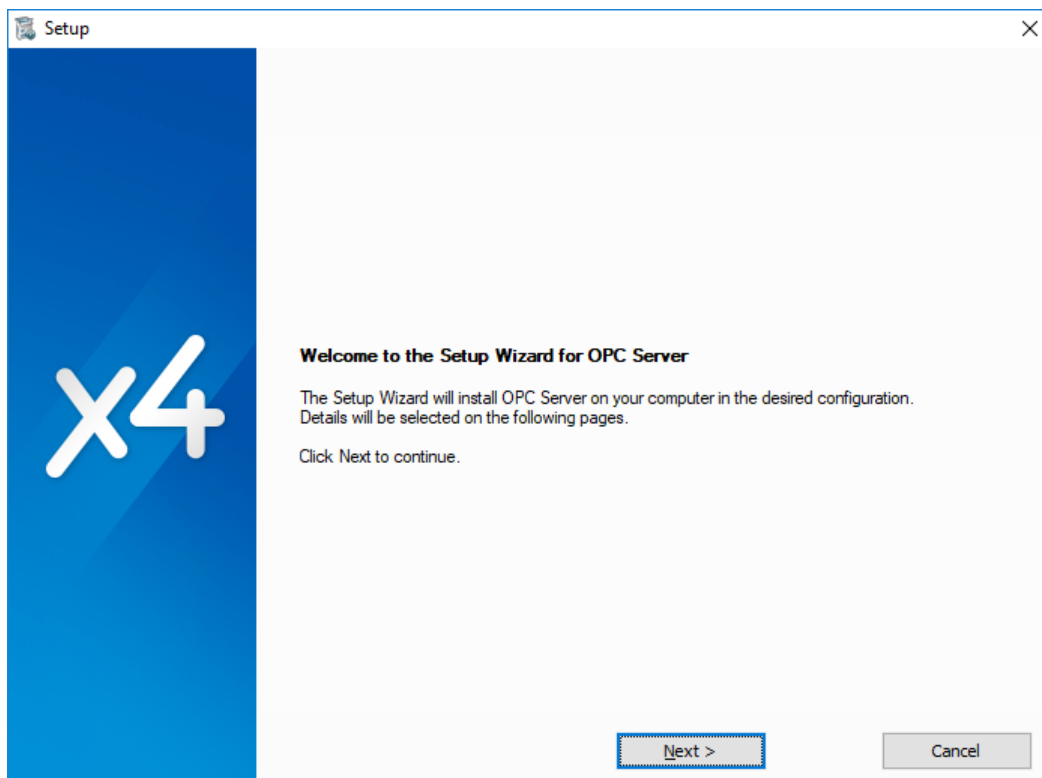


Figure 22: Setup - Welcome

▼ Dialog: Setup - Folders/Directories

Next, you can enter the folder/directory into which the OPC server should be installed on your computer. The default for the installation is

C:\Programme (x86)\OPC Server or *C:\Program Files (x86)\OPC Server..*

By clicking on the **Browse** button, you open a dialog that allows you to select a different folder/directory.

Check the settings! If these are correct, click on **Install** to start the installation.

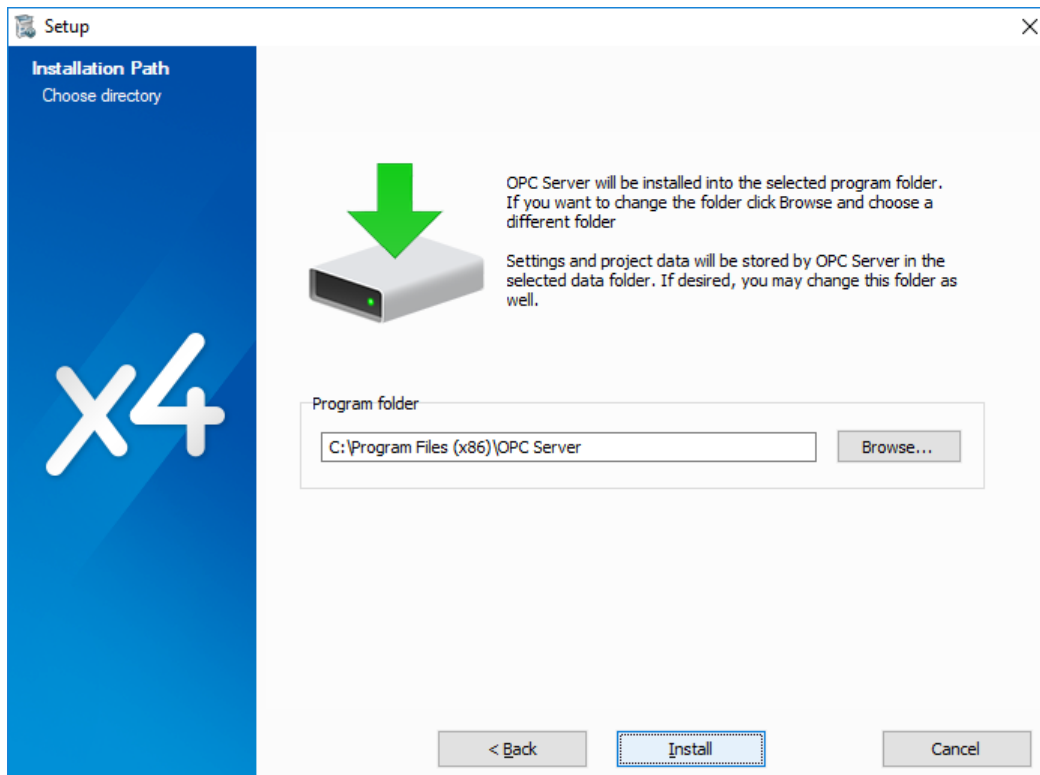


Figure 23: Setup - Folders/Directories

▼ Dialog: Dialog - Setup Completed

After the program module is installed, the fundamental WinGuard OPC server installation is complete. By clicking on the **Close** button, the setup is ended.

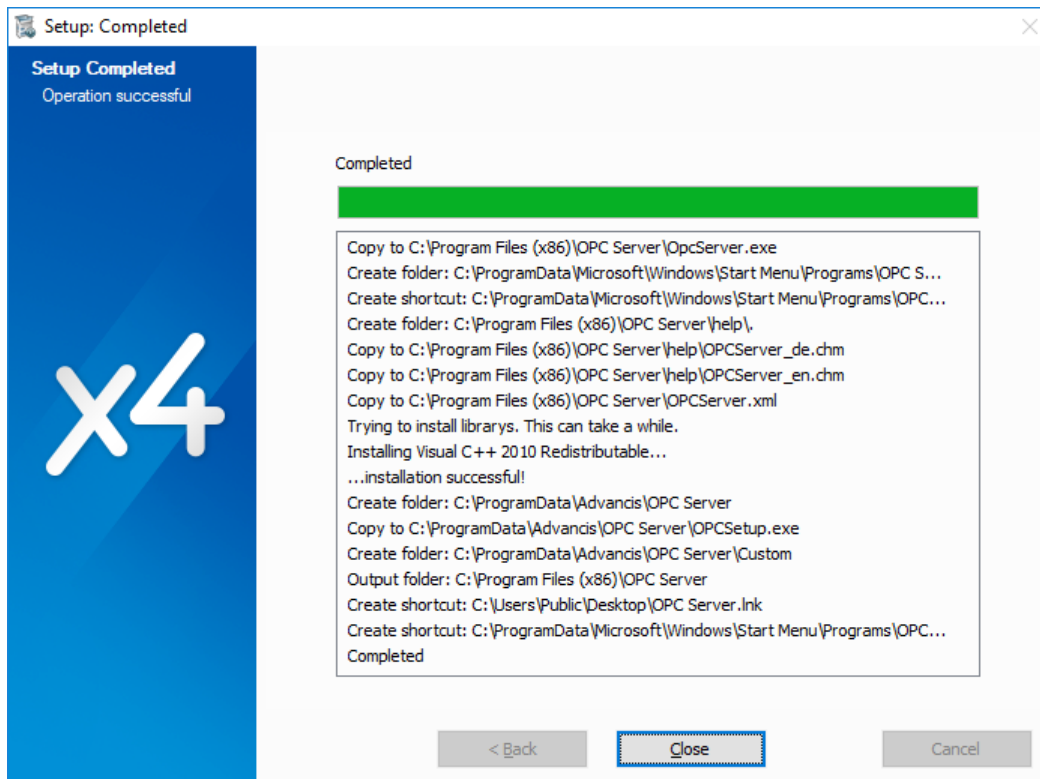


Figure 24: Dialog - Setup Completed



After you have installed the OPC server, you should set it up.

2.10.2 Settings

After installation, the OPC server can be automatically started through any respective OPC client. The program ID (Prog-ID) of the server is **Advancis.WGOpcServer.1**. If the server has been started via a client, a corresponding symbol will appear in the system tray. Double clicking on the symbol opens a configuration dialog. The server can also be started by running the program **WgOpcServer.exe**, which immediately opens the dialog box. Here, several settings can be defined, but they will not take effect until the server is restarted.

▼ Dialog: WinGuard OPC Server Settings

At the moment the dialog is only available in German language.

WinGuard OPC Server Einstellungen

Verbindung

Adresse: localhost : 1234

Key:

Optionen

Sprache: Deutsch (Deutschland)

Trennzeichen: /

Trennzeichen (Property): #

Max. Startup-Verzögerung: 3000 ms

FQN Erstellungsquelle

Textmakro Template: OPC:

Registrierung

Registrierung Deregistrierung

OK Abbrechen

Figure 25: WinGuard OPC Server Settings



For additional information on setting up the WinGuard OPC server, please see the help section of the program!

3 Update

The update process is mainly based on replacing program files by more recent versions and, if necessary, by also updating additionally required files such as e.g. runtime libraries, license files, etc. In case of an update of a version prior WinGuard X4 a new installation of X4 should be done at all workstations. Also an updated license file is required if applicable.

To do a WinGuard X4 update all update packages (ZIP format) for the system are required and must be added and executed with the WinGuard Update Manager. The packages can directly downloaded via the Advancis update server using the Update Manager if an internet connection is available. Alternatively the packages can be made available by a data medium.



Please contact your support before executing an update!



All updates must be done with the integrated WinGuard Update Manager!

For all modules (programs, interfaces, etc.) a signed update package (ZIP format) is required!



If you update a WinGuard version to WinGuard-X4 a new installation of X4 on all workstations is necessary and a new licence file, if applicable!



*Current information with regard to updates can be found in the **SupportInfos_de.chm** in your help file and on the website <http://www.advancis.de> under **Service | Release Notes!***

3.1 Update Manager

The WinGuard Update Manager is included in WinGuard and offers the user the possibility to easily update a system including all clients with current software modules. The update can be executed from any client. Currently available updates can be directly displayed in the window, provided that an internet connection to the update server of Advancis Software & Services GmbH is possible. As an alternative, the update packages can also be selected manually and added to the update.

An [Update Package](#)^[80] (Update zip) contains all files that are required for updating of a WinGuard module (WinGuard itself, interface, etc.). Additionally needed installation modules from other vendors like SDK's, DLL's, etc. are normally not included in the WinGuard update packets and must be updated separately at each of the appropriated workstations.

After download or installation, the corresponding update packages are checked and distributed to the active workstations via the server. The receiving workstations check the received packages for consistency and usability and send a corresponding answer to the workstation currently controlling the update (see: [Controlling Workstation](#)^[80]). Only there, the states of the workstations are visible and the update can be execute simultaneously on all workstations in case of success.

The previous update mechanism (replication of program modules) by synchronization upon establishment of connection is not longer directly supported. So all workstations that have not been active during an executed update will receive and execute the update packets with the next start. Therefore all server will keep all update packages because they are needed to update a client.



Due to this functionality, it is possible to keep the downtime during WinGuard updates (interfaces, main program) as short as possible and to reduce trouble sources by manual installation of updates!



Installation modules from other vendors like SDK's, DLL's, etc. are normally not included in the WinGuard update packets and must be updated separately at each of the appropriated workstations!

3.1.1 Operation

The Update Manager can be opened via the new menu entry **System | Update Manager....** The window consists of three sections in which different information with regard to the update is displayed. Below these display sections, there are the corresponding functions via which e.g. in case of an existing online connection, the available updates are displayed, selected and can be downloaded directly. Without an online connection, the required files can also be selected and added manually via a data carrier. After the corresponding data has been made available, the update of the clients can be prepared, checked, distributed directly executed. Information concerning the process and operating principle can be found in the section [Update Process](#)^[82].



The address of the Advancis update server is defined in the settings under global [System](#)^[424] in the section **Other!**

Content of the three data sections:

- List showing all update packages available locally or on the server and their dependencies.
- List of the new update process or job that shows all required update packages and their dependencies.
- Display of the update status of all workstations.

Window: Update Manager

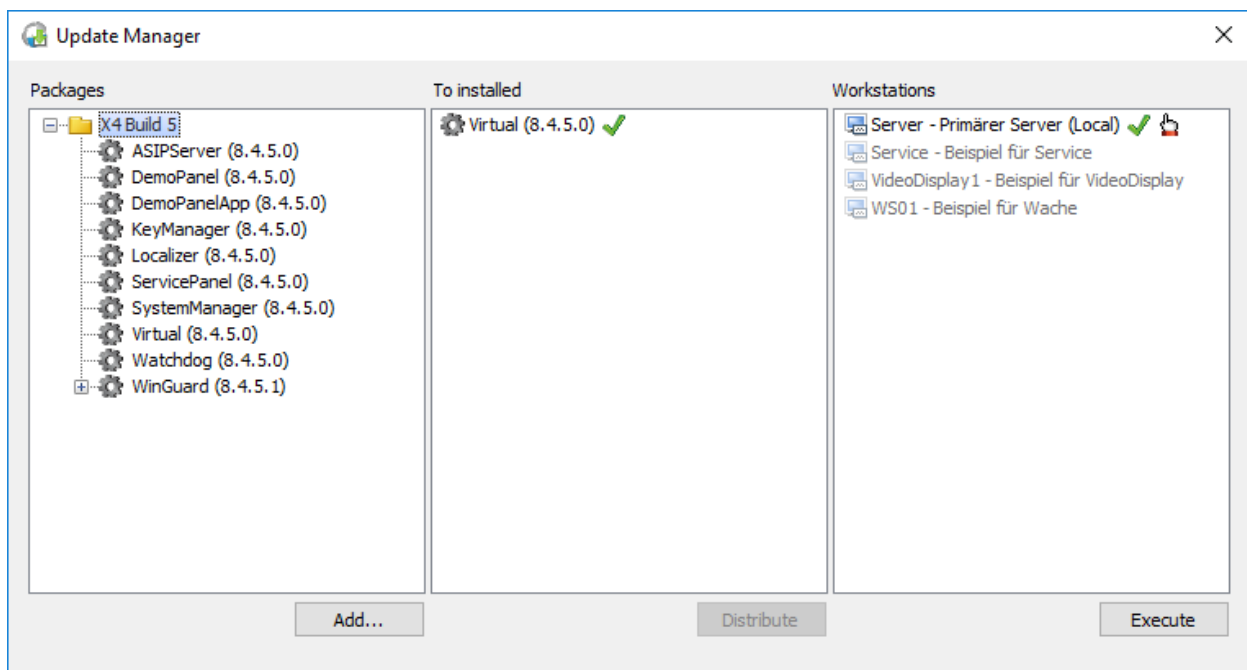


Figure 26: Update Manager

▼ Data section: Packages



(List)









This item contains a list (repository) in which all update packages available locally or on the server and their dependencies are displayed. The display is in the form of a tree containing the available modules with the WinGuard versions and, if applicable, an icon for availability on the control station. Further update packages can be added via the function **Add...** can be added. The corresponding packages can then be added to the list of packages to be installed by drag & drop or via the context menu, whereby multiple selection is also possible.

... - if required, select the elements to be downloaded.

Context menu functions:

- **Delete**
Remove the package from the local store and, if necessary, from the server.
- **Download**
Download package from server if package exists on server.
- **Upload**
Upload package to the server if package is available locally.
- **Add to job**
The package and all its dependencies are selected in the list **Packages** are added to the list **To install**. It is also possible to select packages that are not fully available, the corresponding state will be evaluated when added and displayed in the **To install** list.

Symbols:

-  Folder (with version number)
-  Update packet
-  File is available on the server and can be downloaded.
-  File is available locally and can be uploaded to the server.
-  Down-/upload active.
-  Download completed.
-  Ready for update.
-  Error or warning (note tooltip if necessary).

Button

(Package info)

If exactly one package is selected in the upper package list, this element is displayed and the contents of the package are listed.

Button

Add...

This function opens a context menu where you can choose between local or online data. Depending on the selected function, either the dialog for selecting the local update packages or the dialog for selecting the online packages is opened.

The selection is available: Local, Online.

... - select the function to add.



With this function, update packages can be added locally or online from the Advancis Update Server!

The online function is only active if a URL for the update server has been entered in the settings!

▼ Data section: To install

**(List)**

This list represents the scope of the current update process for all packages required and available for the update, with the packages sorted by insertion order, with dependencies appearing first, then packages without dependencies. The tooltip for entries is the actual filename. During distribution, all dependencies are checked for completeness and presence. The result (OK / Error / Warning) is indicated by corresponding symbols. If all packages are complete and error-free then the local workstation in the **workstations** list is ready in the state **update ready**.


Context menu functions:

- **Delete**

Removes the package and any dependencies no longer needed in the job from the list. If there are dependencies to other packages, the function is not available. The corresponding packages are then deleted automatically after the dependencies have been removed.

... - select the elements you want to use (for example, for deletion).

Symbole:

Update package (a dependent package is additionally marked with the overlay symbol ()).



Download completed.



Error or warning (note tooltip if necessary).

Button

Distribute

This function distributes the update. The button is only active if all packages in the list are complete and error-free and if other operator stations can be reached. The active server must be one of the accessible or even the local operator stations. During execution, a progress bar is displayed next to the button.



*The **Distribute** function is only activated if no problems have been detected here!*






▼ Data section: Workstations



(List)

In this list, the operator stations are displayed with information on their update status.

Symbols:

-  Basic symbol for a control station. If the BPL cannot be reached, the entire entry is grayed out.
-  The workstation is active (connected to the server) and an update is possible.
-  The workstation is the controlling one.
-  This symbol is displayed if the Distribute function has detected problems on the control station and an update is therefore possible. Further information about the error may then be available as a tooltip.
-  This symbol is displayed when the **Execute** function is executed and signals that the update data is currently being transferred to the corresponding BPL.

Button

Execute

With this function the update process is started after a corresponding query. The query can contain additional information about the consequences of the update (e.g. because it is only local and not distributed), etc., such as notification of inaccessible workstations or the need for a restart to complete the update.



*The function is only available if **Distribute** was positive before!*



An update can also be carried out even if the distribution to a workstation did not work correctly. The active server must be ready for the update in any case, otherwise an execution is not possible!

3.1.1.1 Online Pakete

The dialog is used to select update packages available online and permitted for the system and can be opened via the **Add|Online** function from the **Update Manager** dialog.

If the dialog is open, other program parts can still be operated. If the dialog is closed during a download, the download is not aborted and the current progress of the download is displayed when the dialog is reopened. During the download, a progress bar is displayed at the bottom of the dialog.

▼ Dialog: Online available

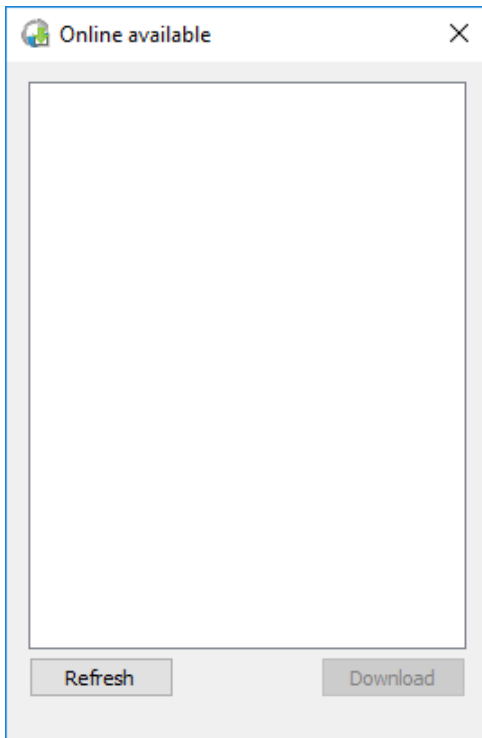


Figure 27: Online available

▼ Functions: Dialog - Online available

(List)

In this list, all currently available update packages and their dependencies are displayed after the **Refresh**. A package can occur several times in the tree as a dependency, but they reference the same package. Only the current (installed) version as well as the latest version of a package per main build is displayed. The list supports multiple selection, i.e. several packages can be selected to download them together. If a group entry is selected and none of its children is selected, all children are indirectly selected.

If an update package already exists in the local update directory, its entry is marked with a green checkmark. If all update packages of a group are present in the update directory, the group entry is also marked with a green check mark.

... - select the packages if necessary.

Context menu functions:

- **Download**
(see button function)

Symbols:

- ✓ Download completed.

Button

Refresh

This function is used to request all currently matching update packages of Advancis Software & Services GmbH and display them in the dialog.



For this function an online connection with the Advancis Software & Services GmbH-Update-Server must be possible!

Button


Download

With this function the selected update packages can be downloaded directly from the Advancis Software & Services GmbH Update Server and stored in the update directory.



For this function an online connection with the Advancis Software & Services GmbH-Update-Server must be possible!

3.1.2 Controlling Workstation

An update should always only be controlled by one workstation which is called **Controlling workstation**. In the Update Manager, this workstation is marked by an overlay (). Only at this controlling workstation, the update states of the other workstations are visible. A workstation becomes a Controlling workstation system-wide if it executes the function **Distribute**. It might be that it thus overwrites a previous Controlling workstation.

After an update has been executed, no Controlling workstation is available anymore. However, the setting of the Controlling workstation remains saved for the program runtime. If **Distribute** is executed locally, the Controlling workstation is reset.



*If a remote **controlling workstation** is active, no local changes to the update directory may be executed!*

3.1.3 Update Package

An update package is a ZIP file that, in addition to the corresponding files, also contains a corresponding update script (**update.xml** in the root of the ZIP). Such an update package usually contains all files for updating of a specific WinGuard module (WinGuard, interface, etc.) and provides them for download on the Update Server. In addition to the file description, the script of a package contains additional indications such as name, version number and software date of the package. According to these indications, it is checked whether a package matches a specific system.

According to the availability of the script, the update package is recognized and differentiated from other ZIP files. In the Update Manager, the update packages are thus displayed differently. An update package is only valid if the script describes the files in the ZIP completely and error-free and if the signature is valid.

With regard to the update packages published by Advancis Software & Services GmbH, the script is additionally signed and thus protected against modifications. WinGuard checks the signature and marks validly signed packages in the dialog correspondingly upon display. Only for such packages, it is ensured that the contents are unchanged and have really been published by Advancis Software & Services GmbH.

If update packages are modified or created by the user, they must be signed by Advancis Software & Services GmbH to be able to use them.



Installation modules from third-party manufacturers such as SDK's, DLL's etc. are not part of the WinGuard update packages and can be made available with the help of self-created packages or must still be manually updated on the corresponding operator stations!

3.1.4 Execute Update

To execute an update of your system with the Update Manager, please proceed as follows:

ToDo: Update - General:



Check / analyze your current installation.

- Check WinGuard and interface versions.
- Check characteristics or adaptations (e.g. INI or LNG files).
- etc.



Consultation of your support with regard to the update.

- Clarification of special characteristics (e.g. licenses, graphics, texts, etc.).
- Actions for updating of older versions (e.g. X2)
- If necessary, checking of the projection by the support.
- etc.



Test of project data with the new program version (Test system / offline).



Backup of data and programs.



Have all additionally needed third party modules available and install these modules before/ during/after the update on the appropriated workstations.



If necessary, create additional update packages for the planned update.

ToDo: Update Manager:



Start Update Manager (at any workstation).



Add current or missing update packages (button **Add...** - Local/Online).

- Online: If required, download the current/missing update packages directly, using the dialog **Online available** using the functions **Refresh** and **Download**.
- As an alternative, the update packages can also be selected manually in the dialog and added. However, this requires having the corresponding packages available on a data carrier.
(e.g. winguard_8_4_5_1_x64.zip, asipserver_8_4_5_0_x64.zip, etc.)



If all desired packages are available in the package list, they can be added to the list of packages to be installed (drag & drop or context menu).



After a successful check, the distribution of the update data can be started via the button **Distribute**. The current status of distribution is displayed for all workstations in the workstation list and has to be checked correspondingly.

- The single workstations automatically check the received data for completeness and ensure that the update process can be executed.
- In addition, it is checked whether the target directory is recordable and if all necessary rights are available.



After completion of the distribution, the update process has to be started via the button **Execute**. This command will be forwarded automatically to all workstations and executed. Depending on the update (only module or program), only the single modules or all workstations will be re-started.



Check or adapt system and settings.

- If necessary, adapt settings for multi-monitor mode or create client profiles.
- Adapt settings under desktop and contents, if necessary, use layouts.
- etc.



Backup after the update (data and programs).



Functional test of the system after the update.

- Check display and user interfaces.
- Check event display with graphics and texts.
- Test/check interfaces and other connections.
- etc.



As an alternative to the dialog, the update can also be completely prepared via the Windows explorer. To do so, the update files have to be stored in the final file hierarchy in the update directory and, if required, update packages have to be saved on the root level. However, in this case, the update itself has to be executed via the Update Manager too!

3.1.5 Update Process

Depending on the single modules of the update, the following actions will be performed by the system.

Behaviour in case of module update:

- The system identifies all modules concerned by the update (interfaces etc.) and shuts them down.
- The system executes the corresponding updates of the modules.
- In case the update process has not been successful, a rollback of the actions performed so far will be executed.
- The system re-starts all concerned modules.

Behaviour in case of program update:

- Check all workstations whether there is a new update program (update.exe) in the update directory.
- The update program will be copied into WinGuard program directory on all workstations.
- Each workstation starts the update program and shuts itself down.
- The update of the components is now executed on each workstation.
- If the process has been successful, there will be a normal start (with already updated software status), otherwise a rollback will be executed before.

3.1.6 Logging

If an update is executed via the Update Manager, this is registered in the system log as action **Update started**. In addition, each workstation memorizes the version numbers of the used components (WinGuard, interfaces). If, upon start, it is recognized that the version number of a component has changed, this is also entered in the system log as **Version changed to ...** including new version number. This entry is made for each workstation.



The version numbers of the additional applications such as Localizer, Customizer, etc. are not monitored!

3.2 Manual Update

Updates should be done using the integrated WinGuard **Update Manager** with the necessary update packages. The packages can directly downloaded via the Advancis update server using the Update Manager if an internet connection is available. Alternatively the packages can be made available by a data medium.


When updating using the installation routine, it should be noted that modules that were added later on a manual basis (i.e., not yet registered) will not be included. These must be installed after the update (please see: [Setup-Programs \(new\)](#)^[24] - Modify Installation).

Basically there are three main update scenarios:


- Update of X4 versions
- Update of X3 versions to X4
- Update of an older version (prior to X3 / X2) to X4

General questions with regard to the planned update:


 Has the Inspector been installed?


 Please check to see if the Inspector has been installed. You will find it in the WinGuard menu under **System | Inspector**. It plays an important role in error diagnosis.


 Which version and/or interface modules does your project use?


 Please go to our website <http://www.advancis.net> and check to see under **Service | Release Notes** which changes or upgrades have been made between your and the most recent version of WinGuard or its interface modules.


 Have any interfaces been added just by copying after installation?

 Please check on our website <http://www.advancis.net> under **Service | Release Notes** which changes resp. extensions have been made between your and the most recent version of WinGuard or its interface modules.

 Have any interface modules been duplicated or INI files been adapted/changed?

 Please check on our website <http://www.advancis.net> under **Service | Release Notes** which changes resp. extensions have been made between your and the most recent version of WinGuard or its interface modules.

 **Please be sure to perform a backup of all your data prior to and after an update and secure your entire program directory!**

 **If you have added a new interface module by providing new files (not using the installation routine), this module is not recognized as "installed". Following a WinGuard update via installation, interface modules added in this manner will be ignored and you have to install these modules at a later date through a "modified" installation.**

3.2.1 Update Content

An update can consist of a complete WinGuard setup, alternatively it can also consist of a collection of current update packages (ZIP files) which can directly be used by the Update Manager.

In case a new interface module is added by the provision of new files without setup, this module will initially be considered as **not installed**. If an update will be executed later via setup, these previously copied interface modules will be ignored, i.e. **not** updated. However, if an update is executed via setup, the corresponding interface modules have to be additionally installed via **Modify**.



If files (e.g. interfaces) have been added to the project without setup, these files will not be automatically considered for the next update with setup!

3.2.2 Before Update

Before updating a WinGuard installation, Advancis should be contacted in order to clarify required commands such as e.g. the provision of the updated license file, required software components, special characteristics of the project, etc. From case to case, in particular for very old program versions, the possibility of support by Advancis for a projection adaptation will be discussed.

Before updating, it is very important to create a backup of the current project. There are two possibilities:

- A projection backup can be created out of WinGuard, in case of multi-client systems this should be performed at the active server. If possible, the runtime data should also be stored, if necessary, two backups can be created, one for project data (without runtime data) and another one containing only the runtime data (event archive, logs, etc. - see: [Backup](#)^[353]). In addition, the corresponding program directory should be backed up, however this can only be done manually under Windows.
- Alternatively, a backup (or copy) of the corresponding files can be created, usually the project directory containing the data and, in addition, the corresponding program directory. WinGuard must be closed before copying.



Please make sure to create a backup of your project data before starting and also after execution of an update! The program directory has to be backed up as well!

3.2.3 Standalone System Update

With a standalone system, first perform a backup of all current project folders (if necessary, also a complete copy of the data directory). Also secure the program directory (copy) and then complete the update and execute the update using the setup or the Update Manager.

Update Standalone-System:



Check / analyze your current installation.

- Check WinGuard and interface versions.
- Check characteristics or adaptations (e.g. INI or LNG files).
- etc.



Consultation of your support with regard to the update.

- Clarification of special characteristics (e.g. licenses, graphics, texts, etc.).

- Actions for updating of older versions (e.g. X2)
- If necessary, checking of the projection by the support.
- etc.



Provide installation files on data storage medium.



Current license file available/existing?



Test of project data with the new program version (Test system / offline).



Backup of data and programs.



If necessary, import new license file.



Shut system down.



Execute update of 3. party modules.



Execute update.

- Execute setup and/or load update packages using the Update Manager.
- If necessary, re-install interfaces that have been added later (setup: Modify).
- Update copied interface modules (re-copying, if necessary with batch file)
- If necessary, import prepared or adapted projection.
(Restore or replacement of the project data directory)



In case of an update with setup to a basis installation, it is often required to install additional updates (from ZIP files)!



Check or adapt system and settings.

- If necessary, adapt settings for multi-monitor mode or create client profiles.
- Adapt settings under desktop and contents, if necessary, use layouts.
- etc.



Backup after the update (data and programs).



Functional test of the system after the update.

- Check display and user interfaces.
- Check event display with graphics and texts.
- Test/check interfaces and other connections.
- etc.



In case of an update a valid license file is required - also for dongles!

i In case of updates, it sometimes makes sense to also update the Inspector for which an installation file (.MSI) is stored in the above mentioned file, e.g. if there is a new release info entry for the Inspector.

i Please make sure to consider the information given in the previous section [Update](#) ^{84!}

3.2.4 Network System Update

For updating in the network, the same applies as described before for [Standalone](#) ^{85!}, however there are some additional points. First of all, also for updates of network systems, a backup of the current projection has to be created, in this case on the server (if required, a complete copy of the data directory). If possible, the program directory of the server should be backed up as well (copy) and execute the update using the setup or the Update Manager.

Update network system:

- Check / analyze your current installation.
 - Check WinGuard and interface versions.
 - Check characteristics or adaptations (e.g. INI or LNG files).
 - etc.
- Consultation of your support with regard to the update.
 - Clarification of special characteristics (e.g. licenses, graphics, texts, etc.).
 - Actions for updating of older versions (e.g. X2)
 - If necessary, checking of the projection by the support.
 - etc.
- Provide installation files on data storage medium.
- Current license file available/existing?
- Test of project data with the new program version (Test system / offline).
- Backup of data and programs.
- In case you have an older version without a license file, the current license file has to be made available at all clients.

i You can import the license file manually into the program directory at all clients. Alternatively, you can import the license file manually into the program directory of the server, shut down the server and re-start it in order to replicate the license file to the clients before updating. In case of non-active clients, the import has to be made manually!
- Switch to the Standby Server or shut it down (if existing).
- Shut server down.
- Execute update of 3. party modules on the server.



Execute update on the server.

- Execute setup and/or load update packages using the Update Manager.
- If necessary, re-install interfaces that have been added later (setup: Modify).
- Update copied interface modules (re-copying, if necessary with batch file)
- If necessary, import prepared or adapted projection.
(Restore or replacement of the project data directory)



In case of an update with setup to a basis installation, it is often required to install additional updates (from ZIP files)!



In case of an update, the LIC file should be distributed to all clients before updating!



Execute update of 3. party modules on all other workstations.



Execute update on the other workstations (Standby-Server, Clients) if an installation with setup is required for them (depends on the version).

- All clients (Standby and clients).
- Execute update.



If necessary, shut down Standby Server (if existing or still active).



Start all workstations (Server, Standby, Clients).

After starting the server, the current files (program and files) will be transferred from the server to the clients within the scope of program replication upon registration of the clients.



If the primary started server are not the last active server, you must set this server to the active server after restart before you start the other (standby) servers!

Otherwise the last active server can be reactivated automatically and the programs and data will be replicated in the wrong direction!



Clients not having a valid license file will be started in demo mode and cannot establish a connection with their server!



Check or adapt system and settings.

- If necessary, adapt settings for multi-monitor mode or create client profiles.
- Adapt settings under desktop and contents, if necessary, use layouts.
- etc.



Backup after the update (data and programs).



Functional test of the system after the update.

- Check display and user interfaces.
- Check event display with graphics and texts.
- Test/check interfaces and other connections.

➤ etc.



The contents of the directory tools resp. 3rd Party Software will not be replicated automatically (**Not replicated program files** ⁸⁹)!



In case of an update a valid license file is required on all clients - also for dongles!



In case of updates, it sometimes makes sense to also update the Inspector for which an installation file (.MSI) is stored in the above mentioned file, e.g. if there is a new release info entry for the Inspector.



Terminate all clients means shutting down all clients, then shutdown of the inactive server (if existing) and finally of the active server.

Start all clients means starting of the active server, then start of the inactive server (if existing) and finally of all clients.



Please make sure to consider the information given in the previous section [Update](#) ⁸⁴!

3.2.5 Interfaces

Some interface modules check upon start if the used INI file makes still sense to be used together with the current interface version. Thus, in case a (usually manually adapted) version of an INI file is used in the file directory and the setup of the INI file is fundamentally changed by updating so that the interface cannot be used any more with the old INI file, there will normally be an error message for the internal datapoint of the interface module upon module start as well as a log entry referring to the problem. In this case, a copy of the current INI file should be adapted according to the requirements and then be stored in the **File directory** using the function **System | Database | Files...**



If copied interface modules are used don't forget to update this modules too!

3.2.6 Special Program Files

Some interface modules require **Remote EXE files** for operation which, in some cases, are not stored in the (automatically replicated) **mod** directory but might be located within directories of 3rd Party Software such as video SDKs. Those files have to be updated manually.

3.3 Incompatibilitys and Adjustments

Due to the concept, automatic adaptation during updating of older system cannot directly take over all previous functionalities. In particular the new design of the user interface and its operation leads to incompatibilities that might require adjustments within the scope of the update.



Further information can also be found on the internet on our homepage:

<http://www.advancis.net>

*as well as in the current support infos **supportinfos_en.chm** in the **help** subdirectory!*

4 Licensing

In WinGuard the licensing is executed in a standardized way with the help of license files (**LIC file**). The single components of a system license can be linked either to a dongle (**dongle license**) or to a computer hardware (**SoftKey license**). The license file defines the total functional scope of your system such as e.g. workstations, data points, functional modules, interfaces, etc.

If you start WinGuard for the first time and the program has not been licensed yet, it can only be operated in the demo mode with a limited functionality. The interfaces, except the demo interface, are deactivated.

The licenses can, if necessary, easily be extended resp. adapted to changed requirements.



Each workstation requires a license file, whereas the single components resp. licenses (e.g. clients) can be either linked to the dongle or to the computer hardware.



For import and administration of the license files we recommend to use the new KeyManager resp. the WinGuard License Manager!



More information can also be found on our website (www.advancis.de).

4.1 License Model

Currently (status 05/2018) the WinGuard License Model contains four main WinGuard versions. These versions mostly vary by functionality limitations, e.g. there are different optional modules, max. data point units and interfaces available for each version.

WinGuard Versions:

- WinGuard X4 EXPRESS
- WinGuard X4 BASIC
- WinGuard X4 PROFESSIONAL
- WinGuard X4 ENTERPRISE

With regard to licenses different terms such as e.g. system, system ID, components etc. are often used. For a better understanding, the following sections provide additional information resp. explanations.

4.1.1 System

System means a coherent WinGuard project with a defined functional scope, interfaces, clients, etc.

Each system has a worldwide unique **System-ID** centrally managed by Advancis in the following format:

- DE-0000-1234
- AT-1234-5678

The first two numbers of the **System ID** consist of the two-digit geographic country code of the project location (ISO-3166-1 encoding list). Apart from the two-digit prefix the rest of the numbers does not have any concrete meaning but are rather assigned randomly. This means that an automatic creation of system IDs is possible.

Each license belongs exactly to one system. The licenses of a system can (normally) only be used together, i.e. it is not possible to access System B from a client of System A. Each license can only be used once within one system.

4.1.2 Components

Components are parts of a system with identical functional definition, such as e.g. certain client types (guard client, maintenance client, local server, etc.).

Such components can be freely configured and named within a system. Usually the naming is made according to corresponding terminologies from the offers, system schematics, etc.

Each license belongs exactly to one component within the system. Via the configuration of the component and the system, the license is thus uniquely configured as well. This means that, by using a certain license, the functional scope of the corresponding part unit of the system is selected.

Further instances of such part units within one system (e.g. an additional guard client) are created by adding a further license to the corresponding component.

4.1.3 License

The terms system license and single license (partly also called client license) are used. System license means the definition of a system by its unique **System ID**.

A system license always contains one or several single licenses. The single licenses are numbered consecutively within one system. In combination with the **System ID** such a single license number

according to the scheme <System ID> # <Local License number> is unique:

- DE-0000-1234 # 1
- DE-0000-1234 # 2
- ...
- DE-0000-1234 # 23
- ...




Every WinGuard.exe has such an assigned single license of one system. On the one hand the used license defines the functional scope, on the other hand also configuration aspects such as product name, project affiliation, etc.

The term license always means a single license that is normally applied at a client and thus also named client license.

4.1.4 Modules

The following table contains the modules that are optionally available independent of the WinGuard version.

Symbols:

-  included (this module is by default included)
-  optionally (this module can be added to the system)
-  not available (this module is **not** available for the system)





As from 2018-05 - Subject to alteration!

Table: Data point units

Module	Express	Basic	Professional	Enterprise
Data point units	max. 3000	max. 5000	max. 25000	unlimited

Table: Features

Module	Express	Basic	Professional	Enterprise
Project data editor (1 x Standalone / Server)				
Operator Alarm				
Voice and Fax- Notification				
Email Notification				
SMS Notification				
CAD Support				
Virtual Module				
Scheduler				
Facility Manager				
User Management plus				
CAD Support plus				

Module	Express	Basic	Professional	Enterprise
SQL-Export	✗	✗	+	+
OPC Server	✗	✗	✗	+
Geo Information System (GIS)	✗	✗	✗	+
Segmentation	✗	✗	✗	+

▼ **Table: System extensions**

Module	Express	Basic	Professional	Enterprise
Mobile App (iOS/Android)	+	+	+	+
Webclient	✗	+	+	+
Client (Workstation)	✗	+	+	+
VideoDisplay	✗	✗	+	+
Interface Server	✗	✗	+	+
Hot Standby	✗	✗	+	+
Location Server	✗	✗	✗	+
System Manager	✗	✗	✗	+

▼ **Table: Workstation extensions**

Module	Express	Basic	Professional	Enterprise
Video Manager (incl. USB Joystick Modul)	+	+	+	+
Video Control	+	+	+	+
Project Daten Editor	✗	+	+	+
Multi Monitor Support	✗	+	+	+

▼ **Table: Interfaces**

Module	Express	Basic	Professional	Enterprise
Interface (existing)	+	+	+	+
Interface (new)	✗	✗	+	+

▼ **Modulinformationen**

- **CAD Support**

System license for basic support (viewing, import and layer control) of DWG, DXF and DGN graphics.

- **CAD Support Plus**

System license for dynamic support (viewing, import, layer control and automatic linking of detectors) of DWG, DXF and DGN graphics.

- **Client**

Workstation license for extension of a WinGuard installation with a further client (required for each WS).

- **Data Point Units (DPU)**

System license for definition of the usable datapoint units, whereas different datapoint categories such as fire, door, camera, etc. can require a different number of datapoints.

- **Email Notification**

System license / module for distribution of incoming event messages via e-mail. Event graphics can e.g. be sent as mail attachment (JPG).

- **Facility Manager**

System license for extension by the module for date and event monitoring of datapoints (systems, devices or tools), whereas up to 3 events can be assigned to each datapoint (e.g. fire extinguisher = visual inspection-maintenance-replacement). The module also contains a control panel displaying an overview of all set up events.

- **Geo Information System (GIS)**

System license for use of graphics with geo information data (GPS). In addition, the use depends on further interfaces.

- **Hot Standby**

Workstation license for extension of a WinGuard installation by a Hot-Standby Server. (Two parallel servers synchronize automatically. In case of failure, the tasks of the main server will be taken over by the Hot-Standby server, providing the same functional scope as the main server.)



For operation, a separate Server PC and, if required, further hardware for coupling of serial interfaces is necessary.

- **Interface**

System or workstation licenses for extension of the system by further device couplings.

- **Interface Server**

Workstation license for an interface server that concentrates device couplings in order to take load from the main server. Up to 10 device couplings are possible per interface server.



Operation or system configuration is not possible at an interface server. For operation, a separate PC and, if required, further hardware for coupling of interfaces is necessary.

- **Location Server**

Workstation license for extension of a WinGuard installation by a location server. The location server represents a local server in a distributed system in order to supply the local workstations and interfaces in case of communication failures to the main server.

- **Mobile App**


System license for extension of the system by access of mobile clients via WinGuard Mobile App (iOS/Android). A mobile client offers well-structured and compact access to the states and event messages of the system, including event processing and control function.



One device per license can register.

- **Multi Monitor Support**

Workstation license for extension of the display of the WinGuard interface for multi-monitor operation. Up to 8 monitors can be defined, of which max. 4 can be defined for WinGuard windows and max.4 for video windows (Video manager).


 *A corresponding graphic card is required.*

- **Operator Alarm**

System license for manual triggering of alarms by the user and for triggering of system-internal or interface-independent events.

- **Project Data Editor**

Workstation license for extension of a workstation by the editor module for projection of the system (relates to graphic, text, datapoints, user management, etc.).

 *This license is included once in the basic system (standalone or at the server) and is required for each workstation at which project data shall be editable.*

- **Scheduler**

System license providing the module Scheduler with calendar, schedules, automatic actions, deadman's control and the control operations module (scheduled and monitored system controls) in WinGuard. Analogous to datapoint groups managed operations are based upon global commands, which are not supported for all data types of all interfaces.

- **Segmentation**

System license for extension of the possibility of date segmentation for different workstations.

- **SMS Module (serial)**

System license for distribution of incoming events via SMS. The functions SMS sending, SMS confirmation and redundancy of modem use (for several modems) are available.

- **SQL Export**

System license for the module SQL export, enabling export of events into SQL databases via ODBC.

- **System Manager**

The WinGuard System Manager manages several independent WinGuard systems spread over different locations. For each system, the toolbar with the current system state is displayed and each system can be directly addressed from there.

- **User Management Plus**

System license for extension of a WinGuard installation by the possibility to manage users and profiles also based on an **Active Directory** (via LDAP). four different authentication methods are available. Independent of the use of Active Directory (via LDAP), this module enables setup of **Single Sign On** for use of the Windows registration for WinGuard. The user registered in Windows can also be selected as fallback user.

- **Video Control**

Workstation license for extension by an interface module for connection of a video control element for control of the video manager resp. of the connected cameras. The connection is established directly at the client.



Please request the currently supported control elements from your sales partner!

- **VideoDisplay**

Workstation license to use a workstation as type Display for transparent display and control of different video systems with max. 4 video windows and selectable split screens. The video display itself will run on its own PC and can be managed by WinGuard workstations via the video manager.

- **VideoManager**

Workstation license for extension of a WinGuard workstation by a video manager. The video manager allows display and control of different video systems in WinGuard. Up to four video windows with selectable split screens, a control panel for PTZ control as well as archive access are available at one workstation. USB joystick control is included. This option is required for each workstation.

- **Virtual module**

System license for extension of the system, for provision of internal routines and datapoints for special controls, e.g. camera tours, internal notes, etc.

- **Voice and Fax Notification**

System license / module for distribution of incoming event messages via voicemail or fax (using SIP). For telephone (TAPI/SIP) / fax, there might be additional hardware or software modules required.

- **Webclient**

Additional license enabling access to datapoints (control and state display), control operations module, locations and events via a WinGuard webclient. Graphics and event texts are directly displayed in the browser, however, event texts cannot be edited here (requirements are HTML5, Javascript and CSS).

- **OPC server**




















Workstation license for operation of the WinGuard OPC server. It is an OPC DA (Data Access) 2.05 / 3.0 Server, providing the datapoint states of a WinGuard system in a corresponding OPCClient. The states of each datapoint or sensor are provided separately (alarm, failure, disablement, ...) as VT_BOOL_values. All values are read-only, controls are not supported.

4.1.5 Datapoint Units

In WinGuard, datapoint categories determine specific functions and properties of datapoints. Every datapoint is assigned to a datapoint category. The combination of datapoint category and datapoint name distinctly define a datapoint.

In your license some of the datapoint categories are using a different number of datapoint units (DPU). You will find the assignment between datapoint categories and units in the following table.

▼ WinGuard Datapoint categories, ID's and DPU's

Symbol	ID	Datapoint category	DPU
	1000	Group	1
	1	Fire	1
	2	Intrusion	1
	3	Technical	1
	4	(Interface - not selectable, only for internal use)	1
	5	Control	1
	6	Panic	1
	7	Tamper	1
	8	Emergency	1
	9	Other	1
	10	Camera	8
	11	Monitor	1
	12	Intercom	1
	13	Light	1
	14	Door	4
	15	Security Area (Lock)	1
	16	Value	2
	17	Audio-In	1
	18	Audio-Out	1
		Structure (Intern without datatype)	0
		Intern (with datatype)	1

4.2 SoftKey License

Every client requires such a license file (**LIC file**), whereas the single components resp. licenses (e.g. clients) can be linked to a certain hardware - a dongle (dongle license) or to the computer hardware (SoftKey license). Within one system the license file is the same for all workstations. Only particular licenses linked to dongles (e.g. service dongles) can be different.

4.2.1 Binding licenses

SoftKey licenses are linked to the individual computer hardware on which the program (WinGuard.exe) is executed. The so called **Hardware ID** is generated based on certain characteristics of the local computer hardware and stored together with the license. Upon starting of WinGuard the hardware ID is determined again and compared to the stored ID so that the license will only be considered valid if both IDs are identical.

A license can only be used actively if such a linkage has been established for it and provided that the corresponding hardware components are really available during the execution of the WinGuard.exe .

With regard to binding licenses it is currently differentiated between two different types of licenses, **SoftKey** and **Dongle**.

4.2.2 Usage

To use a SoftKey license the user has to execute specific actions. The activation can only be made after WinGuard has been installed on the target computer. A new activation has to be made in case of replacement of specific computer components and for usage on another computer.

The data of a SoftKey license are stored in a license file (**LIC file**) which has to be in the same computer directory as the WinGuard.exe. As an alternative resp. in addition, the license file can also be contained in a dongle.

4.2.3 License selection

It can be selected in WinGuard which license shall be used for every particular client. This selection can be made in the settings via **Local Installation / System / Used license** or via the new **License Manager**. In both cases it is stored in the Local Settings for the WinGuard.exe file.

If the special setting **<Auto>** has been selected the newest detected license will be used upon program start. Dongle licenses are always preferred to SoftKey licenses. This is the default setting and is recommended for most of the systems in which normally only one license is available at the client. If the dongle is replaced by another one at such a client, the new dongle is automatically used. If a dongle is inserted during the usage of a SoftKey this dongle will be used, as long as it is present. The selection of **<Auto>** can only be made via the Settings.

In case the license is changed WinGuard has to be re-initialized, similar to a project change. Such an implicit restart will be automatically executed upon the license change (via Settings or [License-Manager](#)).



*Upon selection of the license only the license ID is stored!
If there are several license files with the same license ID (e.g. in the dongle and in the program directory) the license from the file with the most recent creation date is used!*

4.2.4 Activation

The process to connect a particular license with a particular hardware component is called activation. An explicit activation is only required for SoftKey licenses. Upon activation a SoftKey license is linked to a hardware ID that describes the local computer system. This assignment is locally stored in the license

file and centrally stored in the Advancis license server.

The following is used for calculation of the hardware ID:

- Serial number of the system directory
- MAC address of the primary network adapter



Changes to one of these components may lead to a change of the hardware ID. In this case the license has to be newly activated!

Upon activation the corresponding hardware ID is entered into the license file so that it is available for later queries of license information (e.g. in case of changes of the license scope). Thus a new activation (e.g. in case the functional scope of a license is extended) is not required. Further information with regard to how to execute the activation can be found in the section [License Manager](#)¹¹⁰.

On request, you can get an emergency PIN for a license emergency activation. So you can activate once (additionally), for a limited time (one week), each SoftKey license of your system. During this time you have to request a new license from the Advancis Service team.



Without a valid PIN you cannot do an emergency activation!



Every license can only be activated once!

An emergency activation for one week can be done with an emergency PIN!

To re-activate a license, i.e. to link it to a changed computer hardware, this has to be requested from the Advancis Service team!

4.2.5 Configuration

The particular licenses can be configured freely for the total system resp. for the single system elements. The single elements are divided in three sections then. The information are provided to the system by the corresponding license file (LIC file).



Please note that the following indications are only presented to give a general overview as well as for a better understanding!

As from 05/2018 - Subject to alteration!

▼ Configuration: System

The following can be configured for the overall system:

- System ID
- System name
- Product name
- Product type
- Service partner (Usability of service dongle)
- Service access (only for service licenses etc.!)
- Data point units
- Interfaces (currently not used!)
- Clients (currently not used!)

- Layout signature (only for service licenses etc.)
- Update limit
- CAD Support / CAD Support plus
- Hot-Standby / number of servers
- Scheduler
- Operator alarm
- Segmentation
- User Management plus
- File encryption
- GIS (GEO information system)
- SQL export

▼ Configuration: Workstations

The following can be configured for components, i.e. for particular clients:

- Client role
 - Server / Standby server
 - Location server
 - Interface server
 - Client
 - Display
 - Standalone
- Video manager
- Video display
- OPC server
- System manager
- IP Interface
- Multi screen
- Project date editor (Basic projection)

▼ Configuration: Interfaces

Interfaces can be activated separately via their unique Interface ID. Sub functions that can be activated separately (e.g. for ASIP) resp. a limitation of the instances that are possible at the same time (e.g. OPC-Client) are also managed via the license file. In addition it is possible to define runtime limitations for particular interface modules, e.g. for tests.

4.2.6 License file (LIC file)

The license data are stored in so called license files (LIC file). In case of SoftKey licenses the license file is located in the program directory together with the WinGuard.exe (here the CST file has to be saved too). It is also possible to save several license files here. License files are always saved under the name

of the contained system ID. License files named differently will automatically be re-named. The directory can only contain one license file for each system. The license files will not be replicated together with the program files. In case of dongle licenses the license file is located in the storage of the dongle itself and replaces the previous settings. However a dongle can also be used with an external license file.

In principle a license file is an XML file with a certain format and specific entries. Notes with regard to the meaning of the entries can be found in the section License scope. The content of a license file can be viewed with any text editor. License files can also be saved as a packed file (ZIP). The function will not change.

To prevent a license file from changes, each license file has a signature that is calculated from its content. In case of content changes the signature is not valid any more so that the license file also loses its validity.

In addition, each license file has a time stamp indicating the creation date. In case of several files having the same system ID this time stamp decides which of the files is to be currently used. In addition, the time stamp is used for the adjustment of license files in the WinGuard network.



Between WinGuard stations in the network, only the currently used license file is adjusted and only if the license files contain the same system ID.

This also applies to the manual insertion/removal of license files via the License Manager. The corresponding actions are only executed at the clients that currently use a license file with the same system ID.

4.3 Dongle License

Each license is linked to a dongle with a serial number. The license information is normally registered in the license file. If there are any changes required (system, interfaces, etc.) there is no need to change the information of the dongle, only the new license file must be saved in the program folder. Even the switch to another computer is easily possible with this method.

In some special cases (e.g. service dongle) the license can be stored directly in the dongle. If the license informations are stored in the dongle and there are any changes required (system, interfaces, etc.), the license file in the dongle must be updated each time.



If the license information are used from a dongle, than you must update the dongle each time if the license is changed!

4.3.1 General

It is recommended to execute the dongle update before updating WinGuard. Thus it is ensured that after the update of particular clients (if necessary) these can immediately be tested resp. re-started. However, in principle the dongle update can also be executed after the WinGuard update.

It has to be considered that in special cases it might be possible that the installed WinGuard version and the dongle drivers installed therewith have already reached such an age that the updated dongle does not function with the old driver. Therefore, if the dongle update fails, please update the dongle driver ([WibuKey Driver Update](#)^[103]).

The driver suite for the dongle is called WIBU software and has to be installed on the computer at which the dongle is used. Upon installation of WinGuard this software is automatically installed as well.

Without a valid license (dongle or SoftKey), WinGuard can only be operated in the demo mode. In this case it is not possible to activate any interfaces except the demo panel.

Please also note that the dongle updates have to be installed in the correct order, as they are serialized so that otherwise the update cannot be executed. If several dongle updates are in circulation and an older update has not been installed you will receive an error message as described ([Error Messages](#)^[104]).

4.3.2 Dongle Update

Dongles are also limiting the WinGuard version that can be used together with the dongle. Thus, in the course of a WinGuard update, it can be necessary to update the dongle license as well. In this case please import the corresponding license file with the License- or KeyManager into the dongle.



To update a license, the license file (.LIC) has to be stored into the WinGuard program folder. Alternatively, but only in special cases, the license file can be saved in the dongle.



License files can only be stored in a dongle with additional storage!

4.3.3 WibuKey Driver Update

In some cases it can be necessary to execute an update of the WibuKey driver installed in your operating system. If e.g. the dongle update fails please use the corresponding WinGuard installation CD to make an update and therewith execute an implicit update of the WibuKey drivers.

There is a directory named WibuKey on the installation CD in which the corresponding installation files are stored so that a manual driver installation can be executed.

4.3.4 Error Messages

If you receive an error message, it will have the following format:

wibukey32: Error WK2205 - Remote programming requires WIBU-BOX program counter x instead of y.

x < y The dongle update has already been executed and now the installation is tried again.

Solution: Not necessary - the update has already been executed successfully.

x > y One or several previous update files for the dongle have not yet been installed.

Solution: Execute the missed updates and install the older update files for this dongle first, in ascending order of their numeration. The numeration of the single update files that have been delivered for this dongle either consist of a letter or an underline with attached number directly in front of the ".rtu" file name, whereas a number n would be equal to the nth letter of the alphabet. If the corresponding older update files not yet installed are not available anymore please contact Advancis, as older update files will be kept for such emergency cases.



Please also note the currently valid instruction for dongle updates which is sent together with the dongle update files.

4.4 Key Manager

The Advancis KeyManager is an independent application with which dongle contents can be displayed and updated, even independent of WinGuard. The program can easily be started via Windows (without installation). The KeyManager is able to download the current license files (RTU and LIC) directly from the Advancis license server.

After starting the KeyManager all dongles locally connected to the computer are read in and displayed in a list. This list is automatically updated upon insertion and removal of dongles. Thus it is possible to import existing updates for your dongles separately and directly in the respective dongle via the Advancis license server.

Without an existing internet connection the respective updates can also be imported offline with the KeyManager. However the required files have to be requested from Advancis before.



Please remember, that the KeyManager directly store the license file in the dongle. This should only be done in some special cases e.g. a service dongle, because the license file is normally located in the program directory!



License files can only be stored in a dongle with additional storage!

The license data is stored in the license file (LIC file). For the use as SoftKey license the license file must be stored in the program directory where the program WinGuard.exe is stored as well. There can be only one license file for each system in the directory and it is always stored under the name of the contained System ID.

The use of a dongle license is also defined in the license file where the license is basically assigned to the serial number of the dongle. This is the reason that there is no additional work to update your dongle when you are updating your system license, because your license from the program directory is used. There are only some exceptions (e.g. service dongle) to store a license file in a dongle. If there is a license file both in the program directory and in the dongle the file with the most recent internal date will automatically be used.



The use of the KeyManager is only possible with a dongle. To use the online functions the project data has to be registered in the Advancis license server!

4.4.1 Operation

The user interface of the KeyManager consists of the toolbar (top), the status bar (bottom), the dongle list and the display area for the dongle codes (left) as well as of the license overview (right).

▼ **Window: KeyManager**

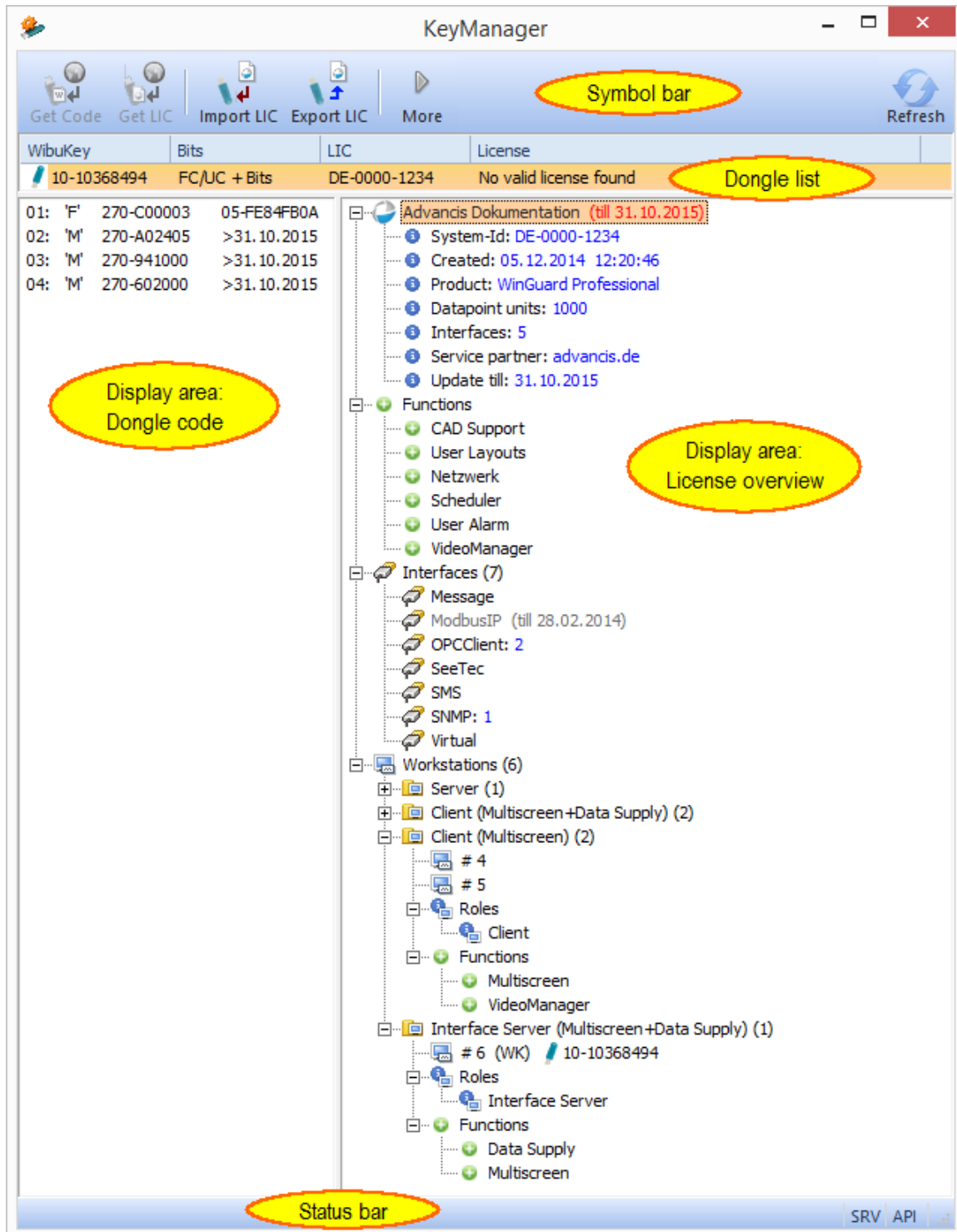


Figure 28: KeyManager




Some functions of the KeyManager require an online connection to the Advancis license server!


▼ **Functions: KeyManager**

The following functions are directly available as buttons in the upper section of the program window:

Button **Get Code**


The most recent update codes for the dongle selected in the dongle list are loaded via the Advancis license server and automatically imported into the dongle.

 **This function is only available if the license linked to the dongle is active and if the bit codes can be clearly determined (i.e. that the dongle is not used for several licenses with a different functional scope).**

 *This option requires an internet connection and is to be used only for the WinGuard versions up to X3 Build 6.x.*

Button **Get LIC**


Imports the most recent license file for the selected dongle via the Advancis license server and writes it on the dongle.

 **The function is only available if the license linked to the dongle is active and if the license file can be clearly determined.**

 *This option requires an internet connection.*

Button **Import LIC**

A local license file can be selected and written into the dongle.

 *A license file in the dongle only makes sense if it also contains a license for this dongle.*

Button **Export LIC**

The license file contained in the dongle will be read from the dongle and stored locally as license file.

Button **More**

A submenu containing further functions for dongle processing will be opened.

Button **Update**

Updates the list of connected dongles and re-requests the license information from the license server.

▼ More functions: KeyManager (More)

The following functions are available via the function **More**:

Button **Create RTC**

With this function an RTC context file can be created for the selected dongle.

Button **Apply RTU**

This function applies the RTU programming file on the selected dongle, i.e. the dongle will be programmed accordingly.

Button **Remove LIC**

This function removes the license file contained in the dongle.


About

This function opens the info dialogue about the KeyManager.

▶ **Language**

This function opens a menu for language selection (de/en).

The display area of the KeyManager is separated in three display ranges, the dongle list, the dongle code display and the license overview.

▼ Display: Dongle list

After starting the KeyManager all dongles connected to the local computer are read and displayed in form of a list. The display of the dongle list is similar to the view of the WibuKey system control and is here separated into the following columns:

- **WibuKey (Dongle-ID)**

The serial number of the dongle is displayed in the format:

„XX-XXXXXXXX“ resp. „X-XXXXXXXX“.

- **Bits (Coding up to X3 Build 6.x)**

Overview of the dongle content. The following display variants are possible:

- Empty field

The connected dongle is not filled yet.

- FC/UC

The Advancis company code and user code are contained in the dongle, however it does not contain any dongle bits (coding) yet.

- FC/UC + Bits

The dongle is an Advancis dongle and already contains a programming (dongle bits/coding).

- **LIC**

Displays your WinGuard system ID from the license file contained in the dongle, if available.

- **License**

The information from the license server (lic.advancis.de) for each dongle is displayed here, e.g. whether the dongle is registered, for which licenses it is used, etc.

Example: DE-0000-1234 # 3

DE-0000-1234 is your WinGuard system ID.

3 is the license number of this system assigned to the dongle.

▼ Display: Dongle Code Display (left)

The coding of the selected dongle is displayed in this window. The coding is displayed in the internal format and can thus only be interpreted with the help of the corresponding documents (not publicly).

▼ Display: License overview (right)

If a license file is stored in the dongle, the information is displayed in a tree structure. Here you find all data with regard to your system such as e.g. functional modules, interfaces, clients, etc. Further information can be found in the sections [License Model](#)^[92] and [SoftKey](#)^[99].

▼ Display: Status bar

There are two status displays on the right side of the status bar:

SRV

SRV displays the current server connection status. If the display is shown greyed there is no active connection to the Advancis license server.

Some possible reasons:

- There is no network connection to the internet.
- The firewall is activated and the port 80 is blocked.
- The proxy server is used with another port than 80.

API

API shows whether and, if yes, in which version the **WibuKey-API** is available. The WibuKey API is required to change the dongle content. If the display is shown greyed no WibuKey-API has been installed. The WibuKey setup can be found on the WinGuard CD.

4.4.2 Update



To update a license please uses the WinGuard Lizenz-Manager!

If there is an active internet connection, the license data can directly be taken with the KeyManager from the Advancis license server to update your project dongle.

If there is no active internet connection you have to request the license data at Advancis to be able to execute the update offline.

The request of the license data and the dongle update can be made on any computer on which WinGuard resp. WibuKey is installed, provided that the dongles are connected to the PC.

A license file is used for licensing, no matter if the licensing is realized with a dongle or via SoftKey. There is only one license file for the total system. This file has to be located in the program directory of each workstation. In some cases (e.g. service dongle) this file can also be stored in the dongle (additional dongle storage is required).

A description of errors that may occur during a dongle update can be found in the section [Error Messages](#)¹⁰⁴.



If there are license files both in the dongle and in the program directory the most recent file (creation time) will be used.

4.5 License Manager

The License Manager is integrated in WinGuard and can be opened via the menu item **System|License Manager**.


In the choice box at the upper margin all licenses currently available at the client are listed. When opening the License Manager the currently used license is selected. In addition the option **Manual Entry...** is available via which licenses can be imported and activated even without an existing LIC file.

The main display section of the window shows the data related to the selected license. The first layer is structured as follows:

- One entry for the system itself (general information and overall settings)
- One entry for system-wide applications (optional)
- One entry for system-wide functions
- One entry per available interface module
- One entry per system component (client group with the same settings)

The actual licenses with serial number and type are visible in the component entry. Using a license selects the license scope of the corresponding component within the total system.

Each entry mostly has additional functional resp. configuration entries indicating the scope of the total system licensing. The entries on system level are valid for all components, however they can be overwritten for particular components. Basically the display of the functions and their naming corresponds to the known order articles and concepts.

Further details with regard to licensing are described in the section [SoftKey-License](#) .

All operations regarding licensing such as the activation of licenses (online and offline), creation of context files, update and selection of licenses, etc. can be executed via the License Manager. The user requires the right to change settings in order to be able to execute the functions.

4.5.1 Operation

The user interface of the License Manager consists of the drop down list for the available licenses with update function, the display window incl. license overview and the toolbar with the available functions.

▼ Window: License Manager

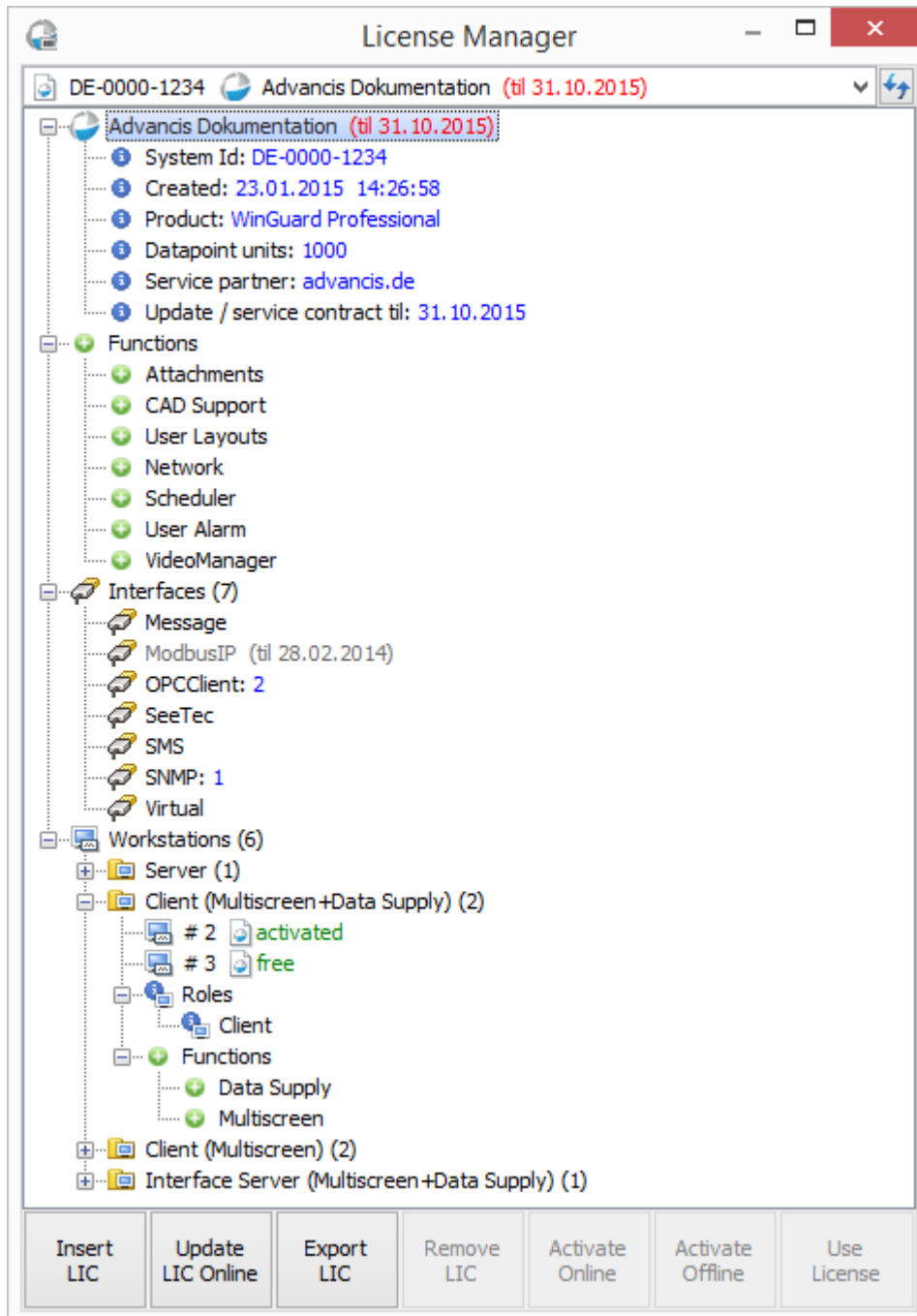


Figure 29: License Manager



Some functions of the License Manager require an online connection to the Advancis license server!



The list is not updated dynamically, i.e. if a **WibuKey** is plugged in the PC whilst the License Manager is opened, the WibuKey entry will only be displayed after an update (button at the right side of the choice box) resp. after re-opening of the License Manager.

▼ Functions: License Manager



License selection (at the top)

This function is for selection of the component to be edited. If the license file is not yet available the System ID can also be entered manually in order to request the license file.



Update (at the top)

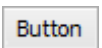
This function updates the contents of the License Manager.



Import LIC

This function imports a license file in the system, e.g. the file received from the Advancis license server as reply to the license request via LIR file. The import can be executed either at the client or at the server.

After import, the license file is automatically distributed to all clients currently available in the network. Clients that are currently not available will receive the license file upon the next start, provided that they use the same System ID.



Update LIC Online

The current version of the license file for the system is loaded from the Advancis license server. In case the license data has changed the license file is locally stored and distributed in the system, replacing the currently used license file.

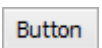


This option requires an internet connection!



Export LIC

Enables exporting the license file of the selected system. The license file contained in a dongle can also be exported by this function.



Write on dongle

This function writes a license file on a connected dongle. If this license file is more recent than the active system the license file of the system contained in the program directory is updated as well.



The function button is only visible if a dongle entry has been selected in the choice box at the top!



Activate online

The hardware ID of the computer is calculated and sent to the Advancis license server together with the license ID. If an activation of the license is possible it will be stored on the Advancis license server and an up-to-date license file will be sent back. This file will be locally stored and distributed in the system. It replaces the license file used so far.



This function requires an internet connection and can only be executed for SoftKey licenses!

Button

Activate offline

This function generates the license request file (LIR file) required for the offline activation of the system. The hardware ID of the computer is calculated and stored in the license request file together with the license ID. This file can, together with further license request files, if necessary, be sent as e-mail attachment to "lic@advancis.de". An updated license file for the respective system will be sent as reply. As soon as this file has been imported into the system, the activated licenses can be used.



This function can only be executed for SoftKey licenses, for activation without a direct internet connection!

Button

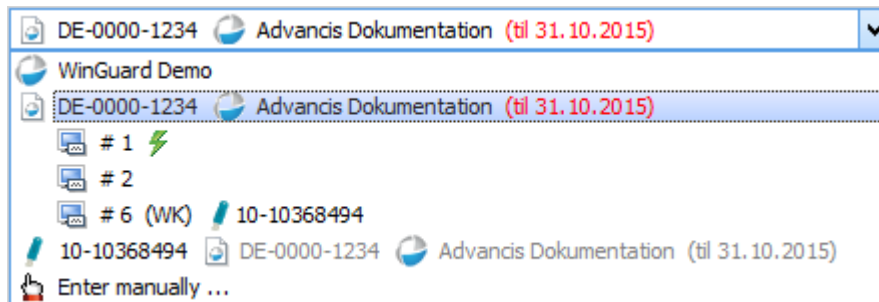
Use license

This function switches over to the selected license. The selected license is also stored in the system settings and automatically used upon the next client start.

The function is only available for licenses that are activated for the local client resp. for dongle licenses provided that the dongle is locally connected.



After a license has been explicitly selected once (even if this is the demo license), the setting "<Auto>" for automatic license selection is not active anymore and can only be re-activated in the Settings!

Function: License selection**Figure 30: License selection**

▼ **Window: License Manager (manual entry)**

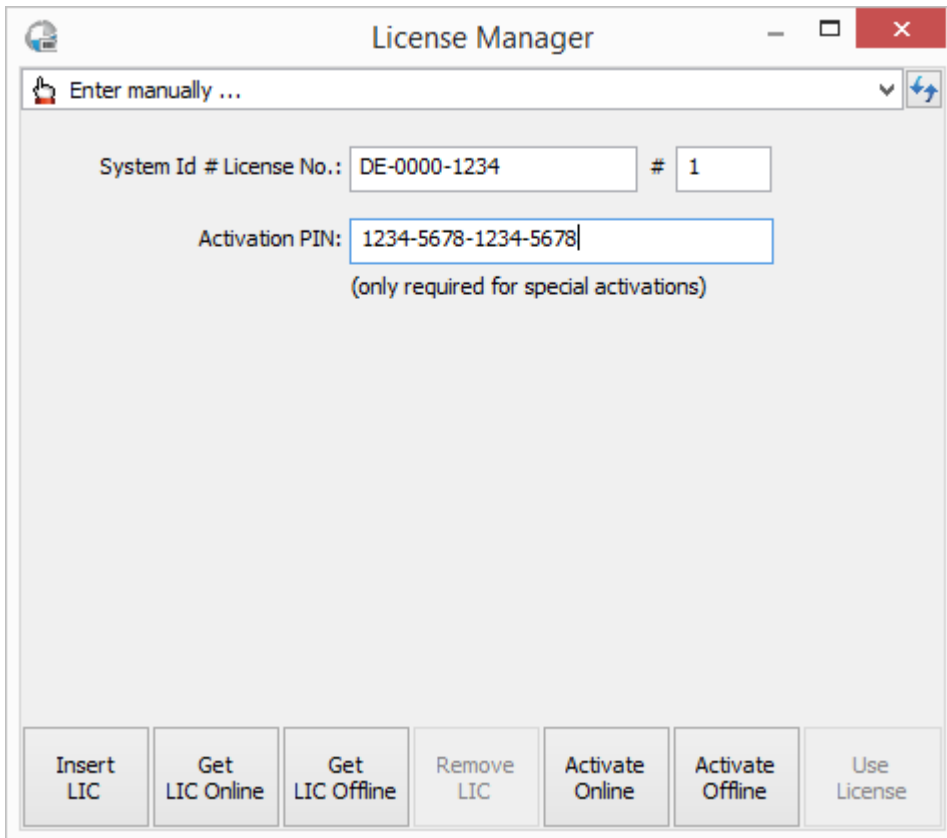


Figure 31: License Manager (manual entry)

▼ **Definitions: License-Manager (manual entry)**


- System-ID**
At this place, you must enter your System-ID (Format "XX-nnnn-nnnn").
You can find the System-ID at the license selection.
- License-No.**
Here you must enter the license number of your workstation.
You can find the license number at the license selection (# n).
- Activation PIN**
In case of an emergency activation please enter your PIN.

i *If the license is entered manually this function will create a license request file (LIR) with which the license file (LIC) can be requested from the license server.*

4.5.2 First-time use of license

For the first-time use of WinGuard with the new licensing, no matter if after a new installation or after an update, some particularities have to be respected. This depends on whether you use dongle or SoftKey licenses in your system. First a corresponding WinGuard installation has to be available on all workstations and the license file (e.g. DE-1234-5678.lic) for your system is required. This file is delivered in addition to the installation software resp. to the software update. In case you do not have a license file please contact your sales partner or Advancis directly.










The particular work steps are mainly identical for a first installation or update. However, for SoftKey licenses a one-time activation of the license is required.

 *WinGuard must be installed on the workstation.*

▼ **ToDo: First-time import of license**

The following actions have to be executed to import the system license:

Import system license

-  Install resp. update WinGuard on the target computer.
-  Keep license file on data storage medium ready.
-  Start WinGuard at your workstation.
-  Start the WinGuard License Manager (**System | License Manager**).
-  Execute the function **Import LIC** and select the respective license file for import in the dialogue.
 -  *If the current license file is already in the system you will receive a respective error message.*
-  Dongle: If a dongle license shall be used for this workstation the respective dongle has to be connected with the workstation.
SoftKey: If a SoftKey license shall be used for this workstation it has to be activated (see: [SoftKey activation online](#)^[119]).
-  Re-start the workstation in order to use the license.
-  Execute these actions on all workstations of the system.

When using a SoftKey license on your workstation, it has to be activated after importing the license file ([SoftKey activation online](#)^[119]).

When using a dongle license no further steps are required and the workstation can immediately be used again after re-starting WinGuard.

4.5.3 License update online

This section describes the proceeding for an online license update with the WinGuard License Manager. The process is the same for dongle and SoftKey licenses. An internet connection is required to use this function so that a direct import (online) of license data from the Advancis license server is possible in order to update your system.




If there is no active internet connection please request the license data from Advancis to be able to execute the update offline (see: [License update offline](#)^[117]).

If the system contains SoftKey licenses not activated yet these have to be activated. Further information can be found in the section [SoftKey activation online](#)^[119].

▼ ToDo: License update - online


Please note that these actions usually have to be executed only on one workstation within your system. Only if workstation licenses (dongle/SoftKey) have been changed or if new ones have been added it will be necessary to execute corresponding actions at these workstations.


Update license - online

-  Start WinGuard at your workstation.
-  Start the WinGuard License Manager (**System | License Manager**).
-  Execute the action **Update LIC online**.

The following actions will be executed automatically (online):

- WinGuard sends the system information to the Advancis license server.
- The license server verifies the data and, if necessary, automatically generates a new license file and sends this file back to WinGuard.
- WinGuard will save the new license file locally and ensure its distribution to all active workstations in the network.
- The workstations will immediately take over the new license information.
- Non-active workstations will automatically receive the current license file from the server upon their next start.

-  **Dongle:** When using dongle licenses the dongles have to be connected with the corresponding workstations.
- SoftKey:** If SoftKey licenses shall be used on workstations but have not been activated yet these have to be activated (see: [SoftKey activation online](#)^[119]).

 *Generally these actions have to be executed only at one workstation of the system.*

4.5.4 License update offline

This section describes the proceeding for an offline license update with the WinGuard License Manager. The process is the same for dongle and SoftKey licenses.

If there is no active internet connection please request the license data from Advancis to be able to execute the update offline.

If the system contains SoftKey licenses not activated yet these have to be activated. Further information can be found in the section [SoftKey activation offline](#)^[120].

▼ **ToDo: License update - offline**

Please note that these actions usually have to be executed only on one workstation within your system. Only if workstation licenses (dongle/SoftKey) have been changed or if new ones have been added it will be necessary to execute corresponding actions at these workstations. The following actions have to be executed at a PC with e-mail connection.

1. Send License file

➔ First the license file (LIC) of the system is required. It is located in the WinGuard program directory. The name consists of the system ID with the file name extension LIC (e.g. DE-0000-1234.lic)

➔ Please send this license file as e-mail attachment to the WinGuard license server (lic@advancis.de) and wait for its reply.
(This process might take some time, depending on your e-mail client!)

The following action will be executed automatically:

- The license server verifies the data and, if necessary, automatically generates a new license file and sends it back per e-mail.

➔ Copy the new license file on a data storage medium.

The following actions have to be executed for an offline update of the system license.

2. Update license file - offline

➔ Keep new license file on data storage medium ready.

➔ Start WinGuard at your workstation.

➔ Start the WinGuard License Manager (**System | License Manager**).

➔ Execute the function **Import LIC** and select the respective license file for import in the dialogue.

i *If the current license file is already in the system you will receive a respective error message.*

The following actions will be executed automatically:

- WinGuard will save the new license file locally and ensure its distribution to all active workstations in the network.
- The workstations will immediately take over the new license information.

- Non-active workstations will automatically receive the current license file from the server upon their next start.



Dongle: When using dongle licenses the dongles have to be connected with the corresponding workstations.

SoftKey: If SoftKey licenses shall be used on workstations but have not been activated yet these have to be activated (see: [ToDo SoftKey activation](#)¹¹⁹).



Generally these actions have to be executed only at one workstation of the system.

4.5.5 SoftKey activation online

This section describes the proceeding for an online license activation with the WinGuard License Manager. This process is only necessary for SoftKey licenses.







An internet connection is required to use this function so that the activation information can be directly processed (online) from the Advancis license server and provided to your system.


If there is no active internet connection the activation has to be executed offline (see: [SoftKey activation offline](#) ¹²⁰).

▼ **ToDo: SoftKey activation - online**

Please note that these actions have to be executed at each workstation with SoftKey license within the system.

Activate SoftKey license - online

-  Start WinGuard.
-  Start the WinGuard License Manager (**System | License Manager**).
-  Select the license and your workstation (to activate).
-  Execute the function **Activate online**.
-  The following actions will be processed automatically (online):
 - WinGuard determines the hardware ID.
 - WinGuard sends the system information required for activation to the Advancis license server.
 - It is verified if the license ID is still free and can be activated. If yes, the activation will be executed with the required hardware ID and saved on the Advancis license server.
 - The license server will send the new license file with the activation back to WinGuard.
 - WinGuard will save the new license file locally and ensure its distribution to all active workstations in the network.
 - The workstations will immediately take over the new license information.
 - Non-active workstations will automatically receive the current license file from the server upon their next start.
-  Execute the activation at each workstation with SoftKey license.

 **The activation has to be executed at each workstation with SoftKey license!**

4.5.6 SoftKey activation offline






This section describes the proceeding for an offline license activation with the WinGuard License Manager. This process is only required for SoftKey licenses.

If there is no active internet connection the activation data has to be sent to Advancis so that the activation can be executed at the workstation.

▼ **ToDo: SoftKey activation - offline**




Please note that some of these actions have to be executed at each workstation with SoftKey license within the system. For an offline activation, the following actions have to be executed at each workstation with SoftKey license.

1. Activate SoftKey license - offline

-  Start WinGuard.
-  Start the WinGuard License Manager (**System | License Manager**).
-  Select the license and your workstation (to activate).
-  Execute the function **Activate offline** and save the license request file (LIR) in a directory of your choice.
-  Execute these actions at each workstation with SoftKey license.




These actions have to be executed at a PC with e-mail connection.

2. Request License file

-  First the license request file(s) of the system are required (see above). The name of a license request file consists of the system ID and the license number of the workstation with the filename extension LIR, e.g.: DE-0000-1234#1.lir
 -  Please send this license request file(s) as e-mail attachment to the WinGuard license server (lic@advancis.de) and wait for its reply.
(This process might take some time, depending on your e-mail client!)
- The following actions will be executed automatically:
- The license server verifies if the license ID(s) is/are still free and can be activated. If yes, the activation will be activated with the required hardware ID(s) and saved on the Advancis license server.
 - If necessary the license server will send back a new license file (LIC) with the activation(s).
-  Copy the new license file on a data storage medium.

Upon receipt of the new license file the following actions have to be executed at any workstation.

3. Import license file - offline

-  Keep new license file on data storage medium ready
-  Start WinGuard on your workstation.
-  Start the WinGuard License Manager (**System | License Manager**).



Execute the function **Impot LIC** and select the respective license file for import in the dialogue.



If the current license file is already in the system you will receive an error message.

The following actions will be executed automatically:

- WinGuard will save the new license file locally and ensure its distribution to all active workstations in the network.
- The workstations will immediately take over the new license information.
- Non-active workstations will automatically receive the current license file from the server upon their next start.



The licenses are now ready for use.



You can send more than one LIR-file at once by Mail to the Advancis license server lic@advancis.de.

4.5.7 SoftKey emergency aktivation online (PIN)

In case, that your SoftKey license is not longer valid (e.g. hardware changes) and you cannot ask for a reactivation at once (e.g. weekend), you can reactivate your license temporarily (for one Week) with an emergency activation. To use this feature, you need an emergency PIN for your System (see: [Activation 99](#)).

This section describes the proceeding for an online license emergency activation with the WinGuard License Manager. This process is only necessary for SoftKey licenses.

An internet connection is required to use this function so that the activation information can be directly processed (online) from the Advancis license server and provided to your system.

If there is no active internet connection the emergency activation has to be executed offline (see: [SoftKey emergency activation offline \(PIN\) 124](#)).

⚠ Without a valid PIN you cannot do an emergency activation!

⚠ ATTENTION! The license is only valid for 7 days!

▼ Window: License manager (Manually activation PIN input)

In the following example you will see the license manager, the license information and the page for the emergency activation (with PIN).

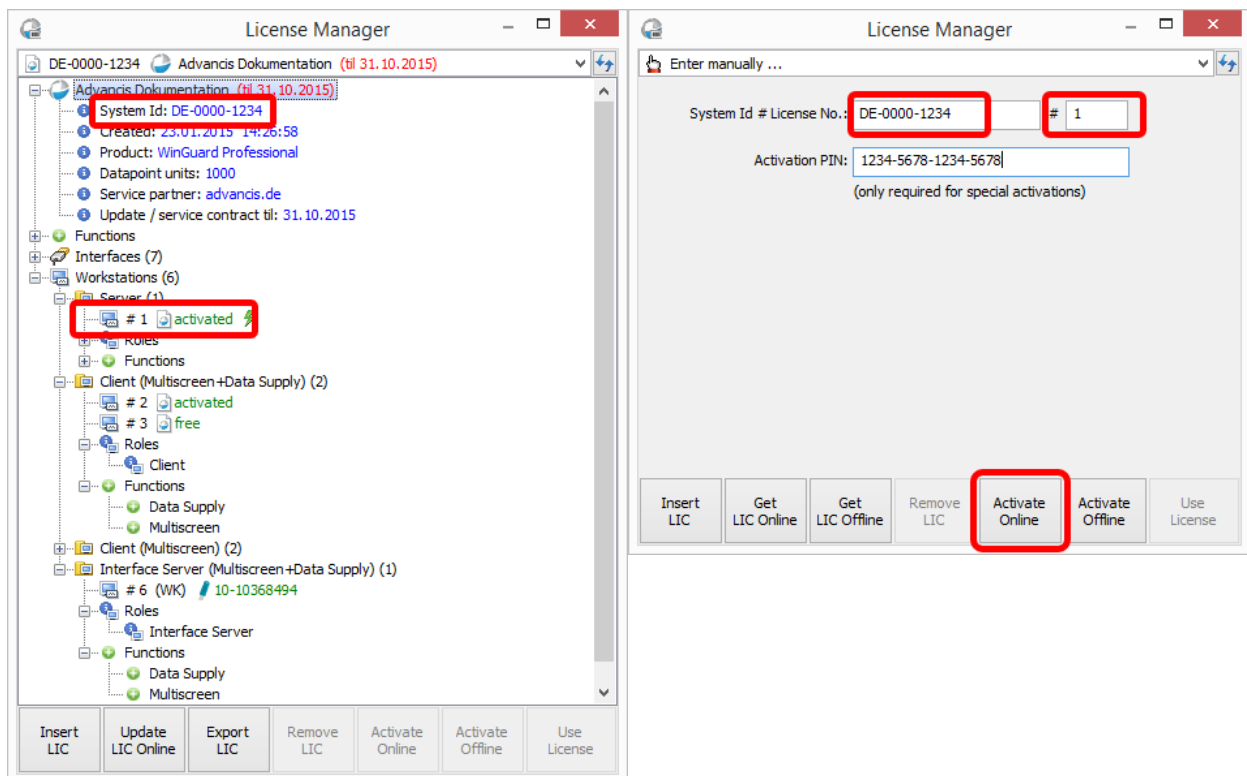


Figure 32: License-manager (Manually input)

Please keep the following information at hand:

- **Your System-ID** (e.g. ID-0000-1234)
- **Your license number** of the workstation to activate (e.g. 1)
- **Your emergency activation PIN** (e.g. 1234-5678-1234-5678)



The activation PIN can be used once per license (workstation).

▼ **ToDo: SoftKey emergency activation - online**

In case of a SoftKey online activation of your workstation, the following actions have to be executed on this workstation.

SoftKey license activation online with PIN (Emergency activation)



Start WinGuard.



Start the WinGuard License Manager (**System | License Manager**).



Select the at the license selection "manual Entry".



Enter your System-ID and your license number of the workstation to be activated.



Enter your emergency activation PIN.



Execute the function **Activate online**.



The following actions will be processed automatically (online):

- WinGuard determines the hardware ID.
- WinGuard sends the system information required for activation to the Advancis license server.
- It is verified if the license ID is still free and can be activated. If yes, the activation will be executed with the required hardware ID and saved on the Advancis license server.
- The license server will send the new license file with the activation back to WinGuard.
- WinGuard will save the new license file locally and ensure its distribution to all active workstations in the network.
- The workstations will immediately take over the new license information.
- Non-active workstations will automatically receive the current license file from the server upon their next start.



The license are now ready for use.



Generally these actions have to be executed only at the workstation for the emergency activation.

4.5.8 SoftKey emergency aktivation offline (PIN)

In case, that your SoftKey license is not longer valid (e.g. hardware changes) and you cannot ask for a reactivation at once (e.g. weekend), you can reactivate your license temporarily (for one Week) with an emergency activation. To use this feature, you need an emergency **PIN** for your System (see: [Activation](#) [99]).

This section describes the proceeding for an offline license activation with the WinGuard License Manager. This process is only required for SoftKey licenses.

If there is **no** active internet connection the activation data has to be sent to Advancis so that the activation can be executed at the workstation.

! Without a valid PIN you cannot do an emergency activation!

! ATTENTION! The license is only valide for 7 days!

▼ Window: License manager (Manually activation PIN input)

In the following example you will see the license manager, the license information and the page for the emergency activation (with PIN).

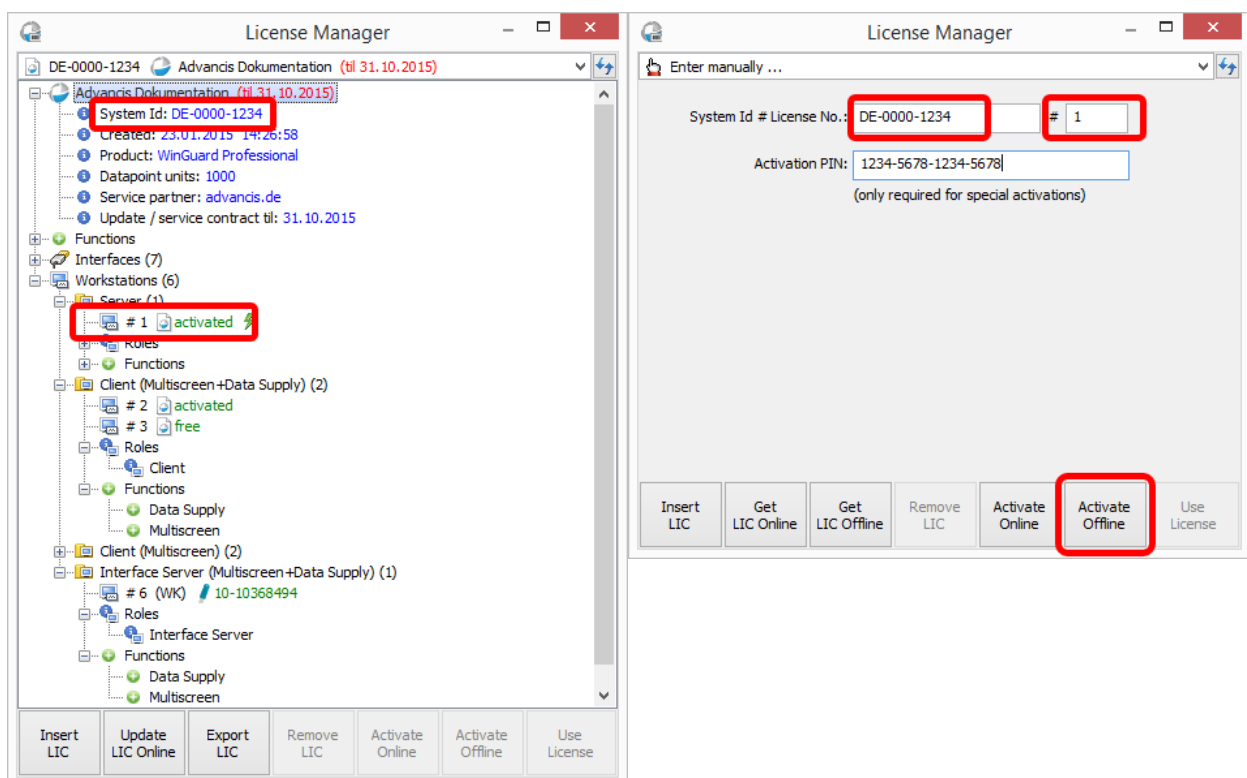


Figure 33: License-manager (Manually input)

Please keep the following information at hand:

- Your System-ID (e.g. ID-0000-1234)
- Your license number of the workstation to activate (e.g. 1)
- Your emergency activation PIN (e.g. 1234-5678-1234-5678)








i The activation PIN can be used once per license (workstation).

▼ **ToDo: SoftKey activation - offline**

In case of a SoftKey offline activation of your workstation, the following actions have to be executed on this workstation.




Please note that you need your emergency activation PIN and you can use this PIN only once for each license (workstation).

1. Generate license request file

-  Start WinGuard.
-  Start the WinGuard License Manager (**System | License Manager**).
-  Select the at the license selection "manual Entry".
-  Enter your System-ID and your license number of the workstation to be activated.
-  Enter your emergency activation PIN.
-  Execute the function **Activate offline** and save the license request file (LIR) in a directory of your choice.
-  Execute these actions at each workstation with SoftKey license.




These actions have to be executed at a PC with e-mail connection after you have generated the license request file.

2. Request license file

-  First the license request file(s) of the system are required (see above). The name of a license request file consists of the system ID and the license number of the workstation with the file name extension LIR, e.g.: DE--00001234#1.lir
 -  Please send this license request file(s) as e-mail attachment to the WinGuard license server (lic@advancis.de) and wait for its reply.
(This process might take some time, depending on your e-mail client!)
- The following actions will be executed automatically:
- The license server verifies if the license ID(s) is/are still free and can be activated. If yes, the activation will be activated with the required hardware ID(s) and saved on the Advancis license server.
 - If necessary the license server will send back a new license file (LIC) with the activation(s).
-  Copy the new license file on a data storage medium.

Upon receipt of the new license file the following actions have to be executed at any workstation.

3. Import license file

-  Keep new license file on data storage medium ready
-  Start WinGuard on your workstation.
-  Start the WinGuard License Manager (**System | License Manager**).



Execute the function **Import LIC** and select the respective license file for import in the dialogue.



If the current license file is already in the system you will receive an error message.

The following actions will be executed automatically:

- WinGuard will save the new license file locally and ensure its distribution to all active workstations in the network.
- The workstations will immediately take over the new license information.
- Non-active workstations will automatically receive the current license file from the server upon their next start.



The license is now ready for use.



Generally these actions have to be executed only at the workstation for the emergency activation.



You can send more than one LIR-file at once by Mail to the Advancis license server lic@advancis.de.

5 Operation

The following pages provide a basic understanding on how WinGuard should be operated, and familiarization with the [user interface](#)^[129] to allow you to respond appropriately to an event. Information regarding the operational elements such as the explorer, event list, etc. can be found in the section, User Interface.

After the system has been set up and the project files have been loaded, it is ready to perform its duties in daily operation. Coupled with various technical security systems, it serves as a central alert and operating entity and can link coupled systems in a hierarchic structure.

Part of the functionality is preset with projection, for example when commands in event routing and with objects are defined that should be executed when events are received or displayed. The user then cannot influence the automated processes that have been established by the administrator.

User functions can be divided into three main categories:

Event Handling:

Event alerts are generated through the relevant interface module by triggering events. Events are uniformly managed by WinGuard independent of the affected system and generally require a response by the user. One of the primary functions of WinGuard is to provide the user with additional information and assistance regarding each event and to support the user in the execution of required measures.

Details regarding event processing and handling can be found in the section, [Events](#)^[197].

System Operation:

Additionally, the program also makes it possible to check on the state of certain objects and areas independent from event handling, and to conveniently operate coupled systems. You can learn more on this topic in the section, [System Operation](#)^[240].

Documentation:

The third area of responsibility is to document various processes in the system in a traceable manner, and to enable detailed searches in the stored data files. These functions are further described in the section, [Logs and Analysis](#)^[316].

Additional functions are also available. For example, [Scheduled Commands](#)^[1057] can be defined that are to be carried out once at a certain time or in regular intervals. The message function (when using the [Notification Control Panel](#)^[227]) enables communication between spatially separated network workstations.

5.1 Help

While working in WinGuard, you have access to comprehensive online help. Using the command **?|Help** or **<F1>**, you can retrieve online help. You can find the relevant sections using the table of contents in the left area of the window, or searching the entire Help contents by key words. The online help is designed in Windows-help format (.CHM).

If you access the online help using the **<F1>** key, the section pertaining to the program context you are currently in opens automatically. For example, if a dialog window is open, then the section describing that dialog window is displayed.

Via the command **?|Info** you can display an information window regarding WinGuard. Here you can find the current program version and license information.

▼ Example: Menu Item - ? - About

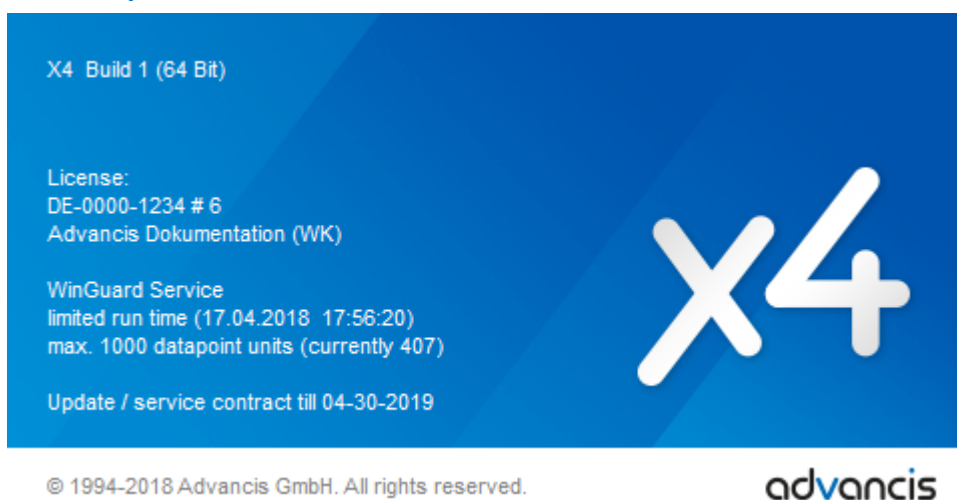


Figure 34: Menu item - ? - About

▼ Popup: Informations

- **WinGuard Version**

Below the title, the current version of WinGuard is displayed:
for example X4 Build 1 (64 Bit)

- **License**

In this area you can find your system ID, license number, and system designation.

- **WinGuard Service**

This section shows information regarding term limits, datapoint units, and expiration of the update / service contract.

- **Copyright**

In the lower part of the window you can find copyright information.

5.2 User Interface

The WinGuard user interface can be fully adapted to project and user requirements. Depending on your license, you can configure up to four windows independently from one another. Up to four additional windows can be set up to show video displays from the VideoManager. The interface always consists of at least the main window which, depending on window configuration displays the project name in the window frame.

A [Menu](#)^[132] and [Toolbar](#)^[133] are located in the upper section for retrieving functions. The [Explorer Area](#)^[133] on the left side serves as central control panel. The lower section contains the [Event List](#)^[141] of currently managed events and the [Status Bar](#)^[142], which displays information regarding system status. Your user interface is generally available in the display area, and, in the event of alerts, the respective events can also be displayed here. The menu and toolbar of the main window contain general functions that can generally always be executed regardless of the type of opened or displayed elements.

The appearance of the main window and/or your total user interface is predominantly openly configurable so that you can define for yourself what should be displayed where. Via the appropriate setting in your user and workstation profiles, you can determine how your user interface should be configured. For instance, you can decide if a menu or toolbar should even be displayed. A definition of menus, toolbars, and [Shortcut Keys](#)^[144] for users or workstations can also be easily established. You can determine system access and individual [User](#)^[533] rights via user profiles.

Display area content can be freely established by defining graphics, texts, layouts, etc. for display. Bringing up these elements can be accomplished via additional tabs or bars as well as additional popups or windows. The layouts allow for flexible configuration of your display area to meet your preferences.

Example: User Interface Main Screen

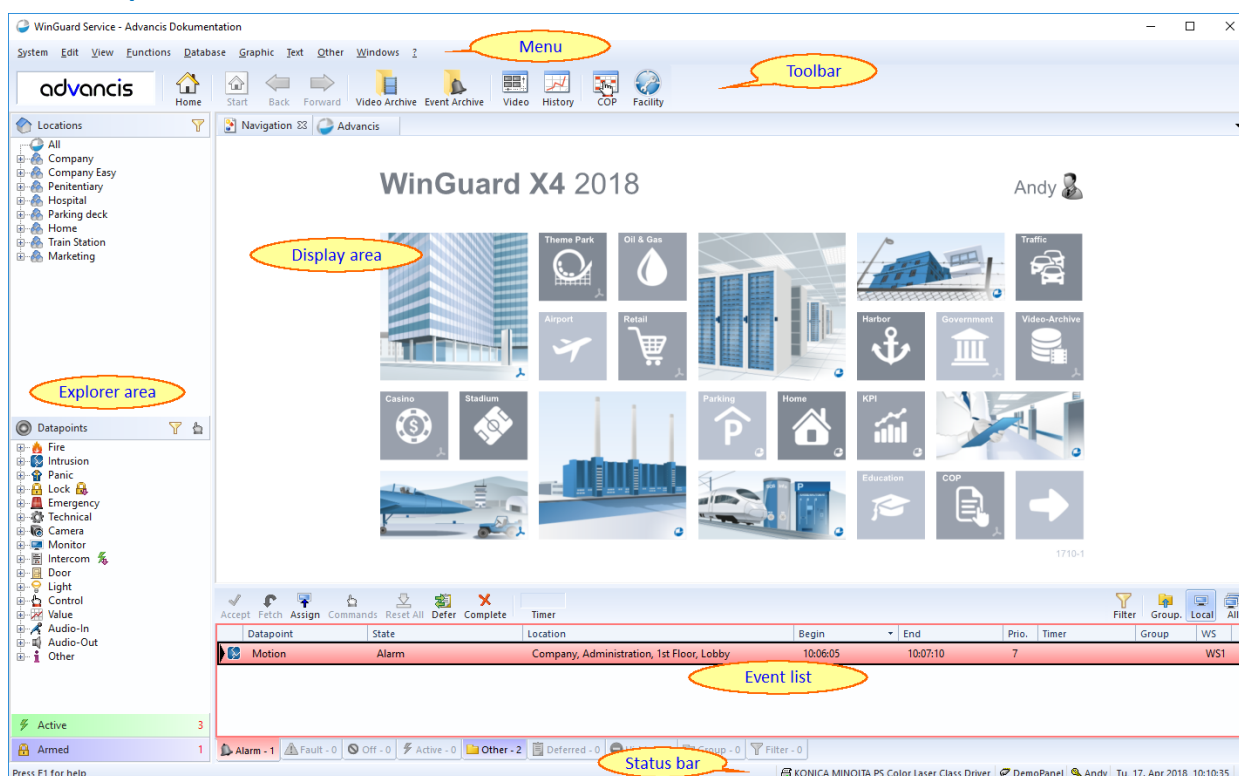


Figure 35: User Interface

The essential elements of the main window are:

- Window title (from license - product name, product type, ...) and window functions
- Menu
- Toolbar
- Explorer area (explorer for location, datapoints, etc. and state counter)
- Display area (viewing graphics, texts, layouts, etc.)
- Event list with toolbar
- Status bar

If several windows (multi-monitor operation) are defined for a workstation, these additional display areas can be configured accordingly.



The menu, explorer, event list, and status bar are only available in the main window!

5.2.1 Terms

With regard to the topic of WinGuard use, we often employ specific terms relating to the desktop. For a better understanding of what these terms mean, we have put together a small list of terms and their brief definitions here.

Screen

The screen is the part of the Windows® desktop that serves as the destination for the placement of windows. At this time, only full Windows monitors are deemed a screen. Therefore, a screen is basically synonymous with a Windows monitor.

Currently, there are eight such screens available that can be configured via the settings. Each one of these screens has its own implicit, distinct ID.

- <Screen1>
- ...
- <Screen8>

With this ID, these screens can be directly addressed in the program via commands (for example, open a display window).



*Content cannot be directly loaded onto a screen. Screens serve as destinations for **Open Window** commands and as destinations for window positioning via the settings!*

Display

Display refers to a global program window that contains a display area. This display area can show a broad range of content such as graphics, texts, layouts, etc. Layouts may subdivide the individual window areas further.

Four displays can be defined via the settings. Display1 is the main window of the program. The setup of options for the displays are mostly identical with the exception that the main window (Display1) also includes a status bar and menu.

The four display areas of Displays 1 through 4 have fixed IDs:

- <Display1>

- ...
- <Display4>

The VideoManager windows are available simultaneously with the displays and can also be defined via the settings.

Pane / Display Area

Panes are basic elements of the desktop and in this text are also simply referred to as areas. A pane / area is a field within the user interface (comparable to an embedded window) that can be addressed via a freely definable ID and can display content. Additional information is also provided in the section, [Pane Tab](#)⁶¹⁷.

Window

The term Windows refers to the program windows of MS Windows as well as the internal windows of the program itself. In most cases, the internal windows in WinGuard are integrated into the user interface, meaning that such a window (also referred to as user window) can be assigned to an area (for example, the graphics editor). Other elements such as the settings dialog are opened directly as windows, but cannot be integrated into the desktop. Areas can be converted to windows during display. As opposed to popups, windows can be moved around freely on the the desktop.

Popup

Popups are sub areas that may cover the display area in part or in its entirety. They are displayed like windows and can be handled as such. However, as opposed to displays or windows, popups only exist within the display areas and cannot be moved beyond its boundaries. Additional information on this topic can be found in the section, [Popup](#)⁶¹³.

Content

Everything that can be displayed in a display area can be defined as content. This includes various program window contents such as elements of an event display, archives, editors, etc. These contents can be displayed anywhere a display area is available, this may also be within graphics.

Several contents such as archives, graphics or text editors, etc. may also be displayed simultaneously. This allows direct comparison of the content.

Content can be differentiated into standard and event-specific content. All areas that can load event-specific content are highlighted in the color of the event. If event-specific content is displayed in an area, it is only superimposed over the prior content. When the event is closed, all event-specific content loads are removed and the prior content reappears. If no content was displayed in that area before, the area is closed.

Event-specific content loads are only possible during event displays and are not carried out otherwise. Explicitly non-event-specific loads can be executed at any time. Additional details regarding the handling of event-specific content can be found in the section, [Event Display](#)¹⁹⁷. More information is also available in the section, [Content](#)⁶¹⁹.



Control panels cannot be used as content in the current program version, but are available as popups!

Split

A split divides a display area into two parts separated by a splitter. The split can be modified by moving the splitter. Each of the two subareas of a split can be further divided into two areas with a split, etc.

Numerous window configurations can be created in this manner. Additional information can also be found in the section, [Split](#)^[611].

Tab

Tabs arrange subareas in accordance with a tab bar. Only the subarea of an active tab is visible. Tabs can be re-arranged by drag & drop. On the right of the tab bar is a menu that enables the direct activation of specific tabs. Tabs can be converted to bars via the context menu.

Bar

Subareas can also be arranged with bars. Bars in a layout can be moved so that several subareas are visible at one time. When a user clicks on a non-maximized bar, that bar is maximized. If a user clicks on a maximized bar, the status of all bars reverts to what it was prior to moving a bar. Bars can be converted to tabs via the context menu.

5.2.2 Menu

Various program functions are retrievable via menu entries. A description of all possible menu commands can be found in the section, [Standard Menu](#)^[151].

If a menu has been set up for display, it is always shown on the upper edge of the window. The content and order of menu commands can be freely determined via a user-defined menu. Please also read the section, [Edit Menus](#)^[650], for more information on this topic.

You can use the menu via the mouse or via the keyboard. To open a sub menu with the keyboard, press **<Alt>** together with the letter that is underlined in the respective menu command. By then pressing on the letter key that is underlined in one of the commands, that command is executed.

During projection, you can determine whether a menu, and, if so, which menu should be displayed for every profile. For a new project, you have a pre-defined standard menu accessible to you. Additional information about the definition of profiles can be found in the sections, [Profiles](#)^[546] and [Settings](#)^[404].

You can open the dialog to edit settings via the menu command **System|Settings**. There you will find the assignment of menus under **Global / Workstations / Profiles** respectively in the area, **Menu**.

The definition of the menus as such (named templates) is accomplished using the dialog, **Edit Menus**, which you can retrieve via the menu command **Other|Menus** (please see: [Edit Menus](#)^[650]).

Example: Menu

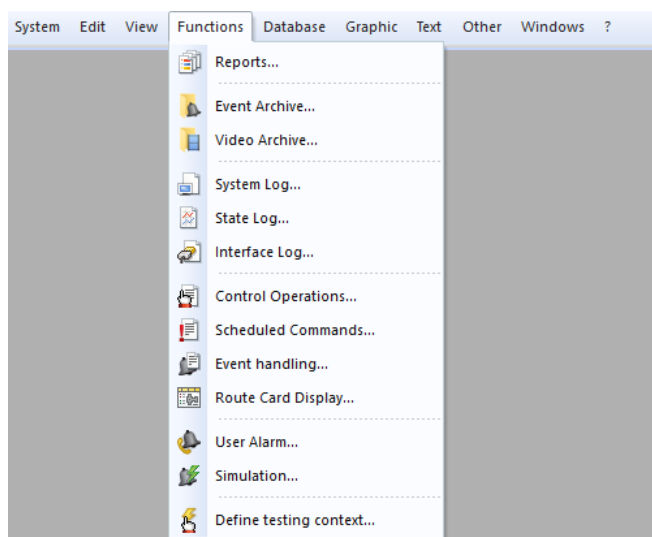


Figure 36: Menu

5.2.3 Toolbar

The toolbar of the main window contains buttons that allow you to carry out general commands that are not dependent on the type of sub windows displayed. The number and order of the buttons in the toolbar can be determined by the user. The tool bar can be displayed in the upper or lower edge of the main window. Please also see [Edit Toolbars](#)⁶⁵⁴ for more information on this topic. You can find a description of possible commands under [Menu / Command Overview](#)¹⁵¹.

During projection, you can determine if and what kind of toolbar should be displayed for different profiles and workstations. Furthermore, you can define how the text should be displayed, the size of the buttons, as well as where the toolbar should be placed during login. A pre-defined standard toolbar is already available to you.

Via the menu command **System | Settings** you open the dialog for editing the settings. Here you will find the assignment of the toolbar under **Global / Workstations / Profiles** respectively in the area, **Toolbar**.

The definition of the toolbar itself (named templates) can be accomplished using the dialog **Edit Toolbars** that you can access via the menu command **Other | Toolbars** (please see [Edit Toolbars](#)⁶⁵⁴).

Example: Toolbar Main Window



Figure 37: Toolbar Main Window

5.2.4 Explorerbar

Many program functions are not just available via menus and toolbars, but can also be easily accessed via individual explorer windows (also referred to simply as explorer) in the Explorerbar. Here, hierarchical representations, drag & drop mechanisms, clear representations of system status, direct control options, and other numerous tools to facilitate operation are available for users.

You can open more than one explorer in the explorer bar at one time. Each opened explorer has a title bar that is always visible. By clicking on the title bar of the explorer, the corresponding window is opened to the active window. Among the opened explorers, only one can be active at a time. The only

exception is the window for locations. This window can always be displayed in conjunction with another explorer window.

On the right edge of the title bar, some explorers feature buttons through which individual commands can be executed, or settings for the explorer can be determined. In the datapoint explorer, filters can be defined to search for certain elements.

Which of the explorers is available for the individual user is determined by the definition of the assigned menu list. Only explorer windows that are available under **View|Explorer Window** can be displayed.

The following explorer windows are available:

- Segments
- Locations
- Datapoints
- Persons
- Graphics
- Symbols
- Texts
- Graphics Content
- State counter list

With the command **View|Explorerbar** you can turn the display of the Explorerbar on or off. This function is also available in the standard toolbar (please see: [System](#)¹⁷²). You can find additional information about the individual explorer windows in the section, [explorer](#)¹⁷⁸.

▼ **Example: Explorer windows**

These figures show an example of explorer windows. Each of the opened windows features a title bar that is always visible.

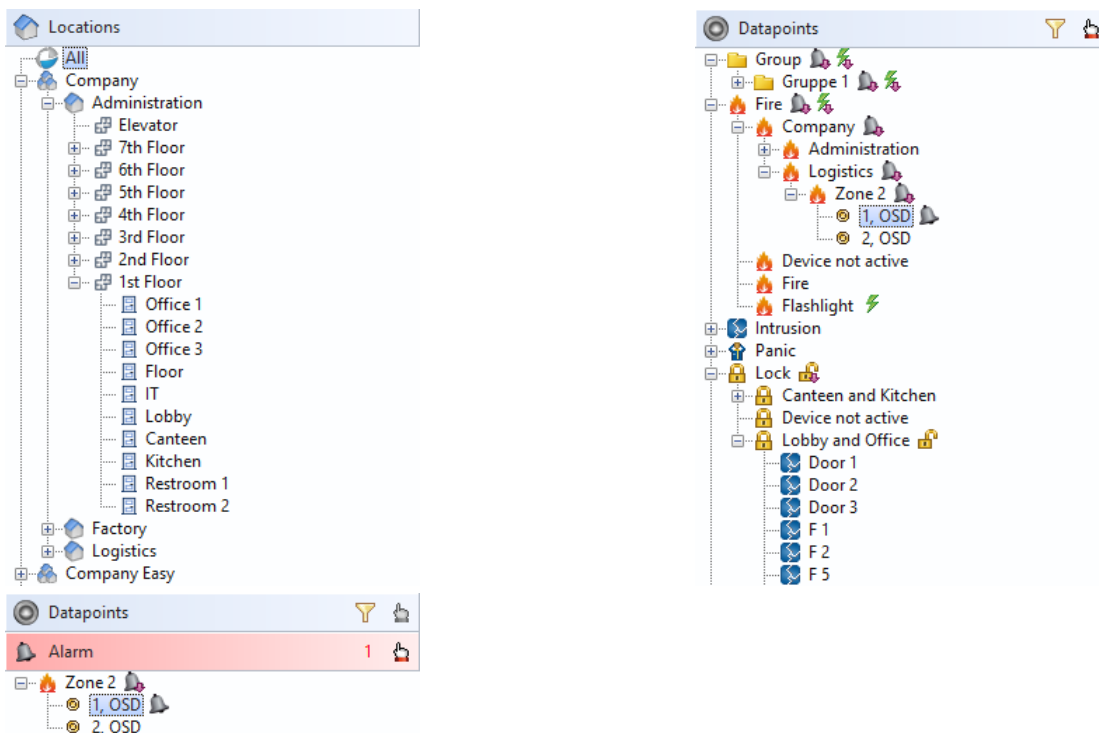


Figure 38: Explorer windows



For every user profile or workstation, you can determine if the explorer should appear immediately after login, and, if so, which windows should be displayed therein and which window should be active first!

5.2.5 Display Areas / Panes

The display areas in WinGuard windows are the central elements for control of the system and representation of information. Here is where the user has access to the display, control, navigation, or various documentation. The design and content can be configured to meet the requirements of the user / workstation.

In the event of an alert, the graphic(s), text(s), or other event-related information such as system logs or event attachments associated with that datapoint can be shown in the display area.

Parts of the display area are dedicated to the display of editors (graphics, texts, datapoints, persons, etc.) and the various output elements (archives, listen, etc.). You can find additional information about these functions in the section [Operation of Display Areas / Panes](#)¹³⁹.

Content definition of the display area (or areas in multi-monitor operation) is generally accomplished through the assignment/definition of layouts. In the **Settings** dialog, you can find these definitions under **Desktop** and **Contents**.

Selection

You select an area by clicking on it. Area selection can also be done via the window menu. The currently selected area is marked by a frame and the title is highlighted, if applicable.

Only one area in the user interface can be selected at one time. All program and layout commands that do not have an explicit destination area are executed in the selected area. This includes window menu commands. If no area is selected, these commands are ignored.



For example, the menu command, Print, is only active if an area has been selected!

Work area

The work area is generally the first area in the display area unless it was explicitly placed somewhere else. Here is where all content that does not have an explicit destination area is opened.

In the system, one area is always set up as the work area. At the start and on the Home page, this is **<Display1>**. Going forward, the work area is automatically maintained according to opened layouts, user interface operations, etc.

The work area can be explicitly placed in a certain location via the menu command **Window** or the **context menu** of the displayed windows/areas.



Individual tabs or bars cannot be designated as a work area. The respective superordinated area becomes the work area!

▼ **Example: User Interface with Display Area**

In this example, a layout for the definition of the display area in the main window (Display1) is used.



Figure 39: User Interface with Display Area

▼ **Example: User Interface with Event Display**

In this example, a layout is used for the display of an event. The layout itself is displayed in the display area (Display1). It contains four areas and the first area again contains a layout with event graphics.

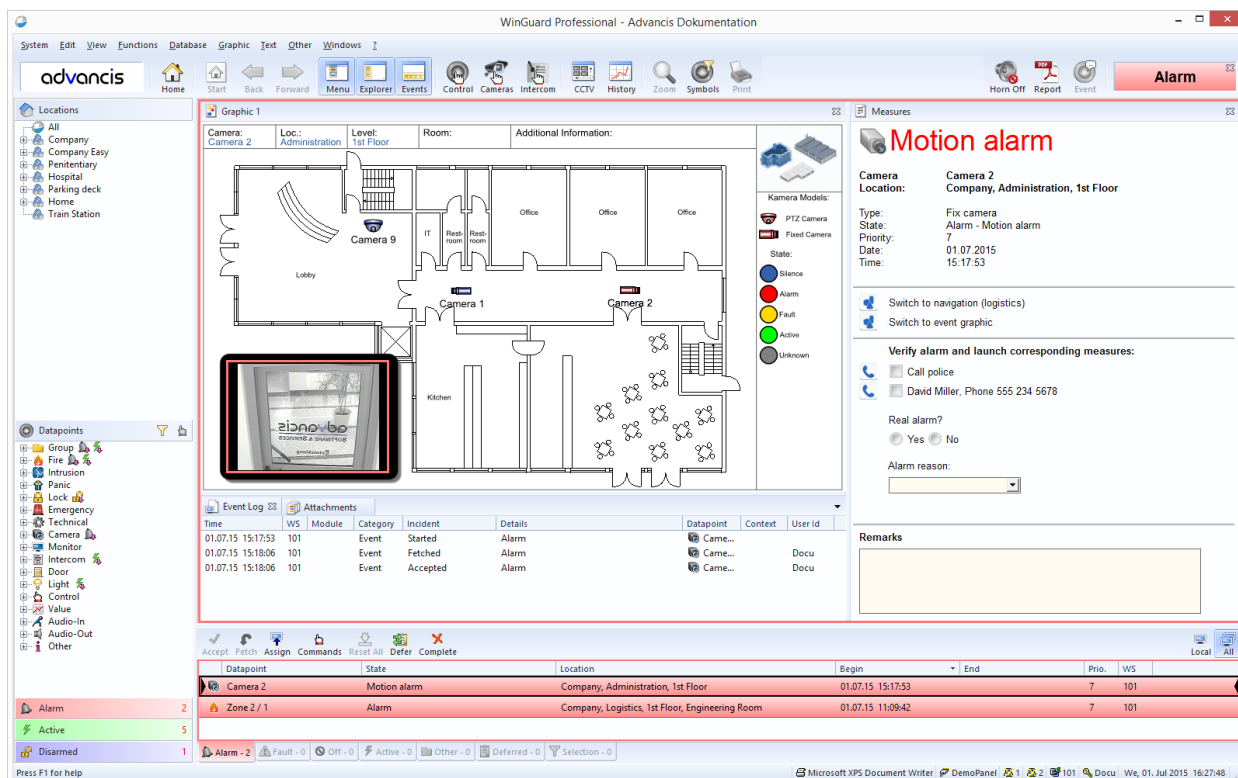


Figure 40: User Interface with Event Display

5.2.6 Layouts

Layouts are a special type of contents. A layout defines the configuration of the display area into subsections, and for every subsection specific properties, ID, and contents can be defined, and those contents can again consists of layouts with their own subsections, etc.

Layouts can be used for two distinct purposes (also in combination): 1) to subdivide a display area into subsections; and 2) to define complex content.

Implicit layouts, which are created automatically when an additional content is placed in the display area as a tab or bar are as special kind of layout. The definition of such an implicit layout is stored right there in the content of the display temporarily.

For the processing or creation of layouts, the system provides a layout editor (note licensing). You can find th layout editor under the menu item **Other | Layouts**. You can also find additional information on this topic in the chapter [Setup](#)^[526] in the section, [Layouts](#)^[604] (example, please see: [Display Areas / Panes](#)^[135]). Operating information can be found in the section [Operation of Areas](#)^[139].

The context commands in the display areas and layouts depend on the settings, contents, and rights of the respective user. This is why these commands are only conditionally available.

▼ Example: Layout Representation

This example shows an alarm using a layout in the display area of the main window (Display1).

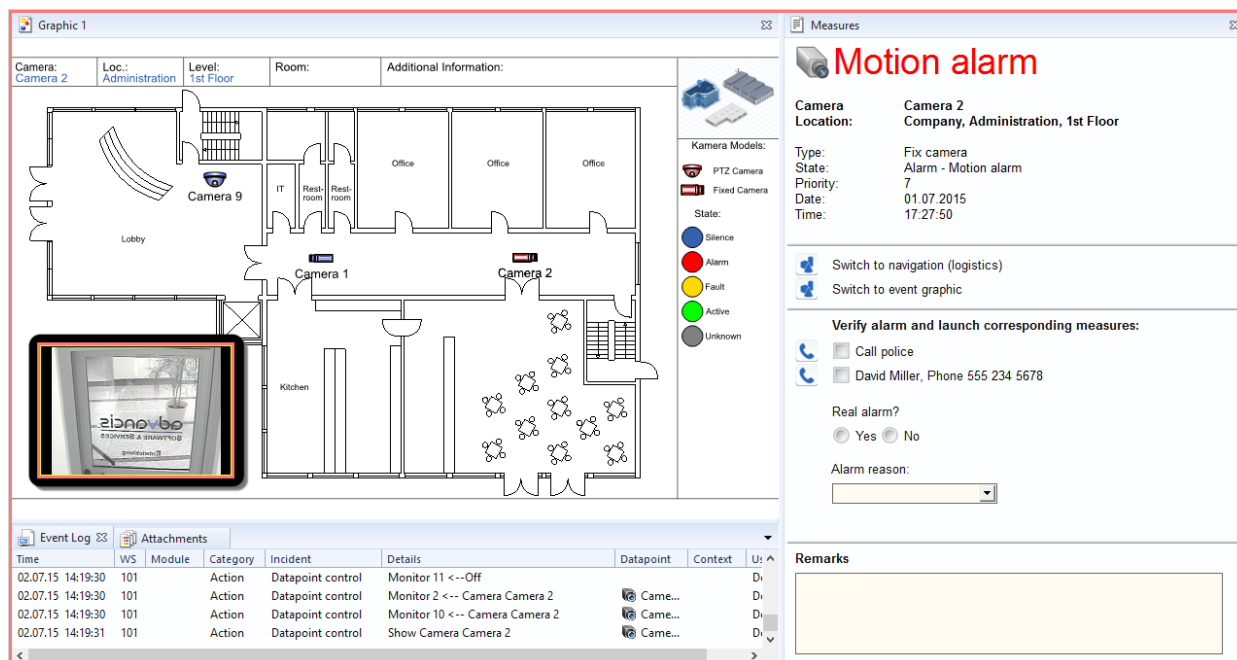


Figure 41: Layout Definition

i Self-defined or unsigned layouts can only be used with the respective license module!

i The number of usable layouts you have available depends on your system license.

5.2.7 Operation of Display Areas / Panes

Information presented in the display areas can be processed in various ways by the user. The user, however, must have the appropriate rights and the desktop (areas / content) must be set up to allow these user commands. Elements from your display area can be changed into freely movable windows or windows may be reintegrated into your desktop. It is possible to split existing areas and fill them with additional content, or to delete individual areas of the display. The active area is selected by mouse click and is identified by a colored frame (default: dark yellow).

Areas can be moved via drag & drop on the user interface. This is done by clicking on the title of the area and dragging it to the desired destination. During the dragging process, the content that is being moved is displayed as an icon at the cursor. At the destination, an area is highlighted in color where this dragged area can be inserted. You can determine the destination surface by moving the mouse into another position.

If the mouse is positioned right, left, top, or bottom of the destination area, the destination area is split accordingly and the moved area is inserted as a split. If the mouse is placed in the middle, the moved area is inserted as an additional tab or bar into the destination area.

i If the mouse is placed in the tab bar or on the area title, the area is inserted as an additional tab!

Areas can also be dragged completely outside the program. In these cases, the dragged area is placed into a new display window there.

Via the <CTRL> key you can switch between detach and docking mode. The function of the key depends

on whether the dragged area was a display window, a popup, or an embedded area prior to moving.

If the area was embedded, it is detached using the <CTRL> key, otherwise, it is embedded using the <CTRL> key.

Popups can only be dragged from an area using the <CTRL> key, but cannot be placed as a popup into an area.



Whether the drag & drop function is available and which commands are allowed is defined in the Settings!

▼ Example: Context Menu - Display Area

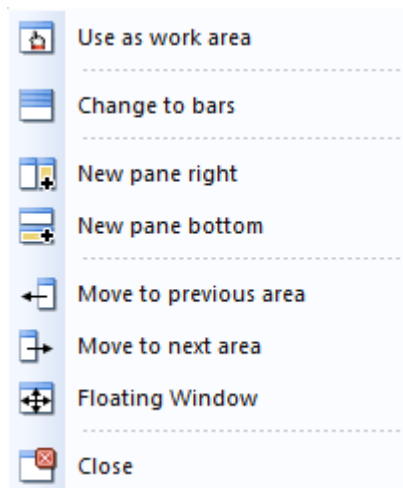


Figure 42: Context Menu - Display Area

▼ Functions: Context Menu - Display Area

This context menu depends on the rights of the user and the settings of the individual areas.



Use as work area

With this function you turn your active area into a work area. All content that is loaded via menu commands without explicit destination information is opened in the work area. This is the case with most system windows.



Change to tabs

This function converts the bars of an area into tabs. Tabs arrange sub areas according to a tab bar. Only the sub area of an active tab is visible.



Change to bars

This functions converts the tabs of an area into bars. Bars in a layout can be moved so that several sub areas may be visible at one time.



New sub area

In the selected area, a layout that has exactly one sub area is placed as content.



New pane right

This function places a new area (split) to the right of the active area. With a tab or bar, this function serves to turn the active element into the new area.

**New pane bottom**

This function places a new area (split) at the bottom of the active area. With a tab or bar, the function serves to turn the active element into the new area.

**New pane left**

This function places a new area (split) to the left of the active area. With a tab or bar, this function serves to turn the active element into the new area.

**New pane top**

This function places a new area (split) above the active area. With a tab or bar, this function serves to turn the active element into the new area.

**Move to previous area**

The selected area is moved to the previous area within the display.

**Move to next area**

The selected area is moved to the next area within the display.

**Floating Window**

With this function you can detach an area from the desktop and convert it to an independent window. The window can be moved freely on your screen.

**Close**

This function enables you to close the current area, current window, or popup, etc.

5.2.8 Event List

In the lower portion of the WinGuard main window, you will find the event list. The list can contain various, via filter definable areas, with current pending events. The event list has its own two toolbars that are used for event handling.

The height of the event list can be adjusted anytime by dragging it with the mouse within the predefined limits. You can define the settings for the display, appearance, and properties of the event list during projection.

You can find the definitions for the event list in the dialog, Settings, under **Global / Workstations / Profile** in the area, **Event List**.

The functions available for the handling of events or details on working with the event list are described in the section, [Events](#) ¹⁹⁷.

Example: Event List

Datapoint	State	Location	Begin	End	Prio.	WS
Camera 2	Motion alarm	Company, Administration, 1st Floor	01.07.15 15:17:53		7	101
Zone 2 / 1	Alarm	Company, Logistics, 1st Floor, Engineering Room	01.07.15 11:09:42		7	101

Toolbar: Alarm - 2, Fault - 0, Off - 0, Active - 0, Other - 0, Deferred - 0, Selection - 0

Figure 43: Event List

Additional helpful hints on how to use the event list are also contained in the user manual.

5.2.9 Status Bar

The status bar contains various information about your system or workstation. If you move your mouse over a button in the toolbar or over a menu entry, a brief help text is displayed on the left side of your status bar. On the right side you will find information regarding your active workstation printer, the status of interfaces, workstations, users, etc. Some of the fields (for example the printer) are also set up as a button so that you can execute functions directly here.

In the dialog, Settings, you will find definitions for the status bar under **Global / Workstations / Profile** in the area, **Status Bar**. For each profile, you can determine if a status list should be displayed and, if so, how.

Using the menu command **View|Status Bar** you can turn the display of the status bar on or off. If the status bar is visible, the icon of the menu item is shaded in color.

From left to right, the status bar contains the following fields:

- Function help (left)
- Printer selection
- Interfaces
- Workstations (only with multi-client systems)
- User ID
- Date and Time

▼ Example: Status Bar

On the left side of the status bar, additional help information is displayed (for example, help texts about the icons in the toolbar).

On the left in all systems:

Press F1 for help

The first example shows the status bar of a **Standalone System**. Here the two interfaces DemoPanel and Virtual are active (no yellow "X") but they are not presented as a summation status field.

Right side of Standalone System:

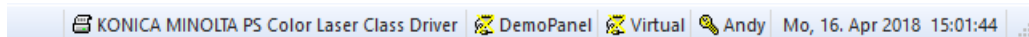


Figure 44: Status Bar Standalone System

In the two examples below (**Multi-Client System**) both interfaces, DemoPanel and Virtual, are inactive, as is workstation 1 (yellow **X**). Workstation **101** is the server, and one's own workstation (here **2**) is always on the far right in the workstation list. The figures show the status bar without or with summation status field for interfaces and workstations.

Multi-client system without summation status field (Client 2) on the right:

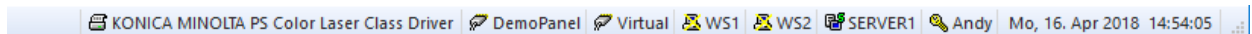


Figure 45: Status bar multi-client system without summation status field

Multi-client system with summation status field, (Client 2) on the right:

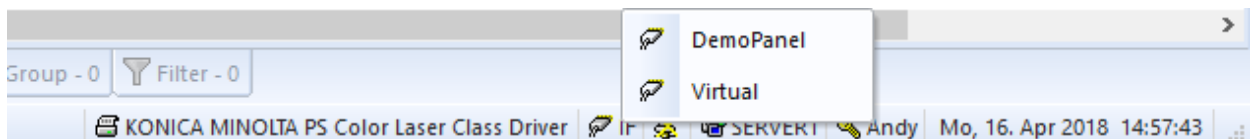


Figure 46: Status bar mutli-client system with summation status field

▼ Display/Function: Printer selection

Here is where the name of the currently selected printer is displayed. By clicking on the field, a context menu opens that allows you to directly change the selection. You can choose from the printers installed at the workstation, as well as those from the defined printer profiles. The preset for the standard printer can be set in the dialog, Settings.

▼ Display/Function: Interfaces

Depending on the settings, there is either a respective field for every projected interface with the identification of that interface, or there is a shared field for all interfaces. Interfaces that are not connected to the local workstation but to a workstation in the network are indicated in the lower edge via a symbolized network cable. If a workstation is not working correctly, the respective symbol is marked with a yellow **X**.

If a shared field for all interfaces exists, it is designated by IF. A symbol with a yellow **X** indicates that at least one of the interfaces is not working correctly. Otherwise, the symbol is displayed normally. By clicking on the window, a context menu opens that shows the status of all projected interfaces.

▼ Display/Function: Workstation (only multi-client system)

Depending on the settings, there is either a respective symbol with workstation number for every workstation, or there is a symbol for the current workstation and a shared symbol for all others. Other workstations are identified via the symbolized network cable on the lower edge. If there is no connection to a network workstation, for instance because it was turned off or WinGuard was not started there, the respective symbol is marked with a yellow X.

In cases where there is a shared symbol for all other workstations, you can click on the symbol to open a context menu that shows you the status of the other workstations and the ID of their respective logged-on users.

The workstation symbols play another role in notification functions. As soon as there are unread notifications, this is signaled by a flashing yellow envelope in the symbol of the local workstation. By clicking on one of the workstation symbols, you can directly open the [Notification Control Panel](#)²²⁷. If there is a shared field for all workstations, you can select the respective workstation from the context menu.

▼ Display/Function: User ID

Here is where the ID of the currently logged-on user is displayed. By clicking on this field, the dialog, **Login at Workstation** is opened (please see: [Login](#)¹⁴⁸).

▼ Display: Date and Time

In the field on the far right, the status bar gives you the date and time.

5.2.10 Shortcut Keys

With shortcut keys, we are not referring to a visible component of the desktop. Instead, we refer to the definition of a key or combination of keys that allows users to directly retrieve a WinGuard function.

Respectively, a set of these shortcut keys is active at each workstation and determines the function of the keys on the desktop. This can be defined freely via user-defined shortcut keys. Please also review the section [Edit Shortcuts](#)⁶⁵⁸.

You can determine which set of shortcut keys should be active for each profile or workstation. A set of pre-defined standard shortcut keys is available. User-defined sets of shortcut keys can also be defined and assigned.

5.2.11 Control Panels

In addition to the regular interface elements, WinGuard also provides other popups for steering the system, so-called control panels. For example, under the menu item, [view](#)¹⁵⁸, you will find a sub menu that lets you open the standard control panels.

Standard Control Panels:

- Datapoint Control Panel
- Camera Control Panel
- Intercom Control Panel
- Telephone Control Panel
- Notification Control Panel (only with multi-client systems)

- Audio Control Panel
- Command Monitor

Several of the interfaces also have their own [control panels](#)²¹⁹ for enhanced system display/control.

5.3 System Access

In WinGuard, user interfaces (layout, background, display elements, etc.), available functions, and rights depend on the profile created. In the system, individual user and workstation profiles can be defined and one or more specific items can be assigned to each user. Each one of these profiles defines a specific user interface, and user profiles also establish user rights. When logging in, the user can then select from the profiles assigned to him. If a user does not have an assigned profile, after login, that user will be on a predefined standard interface with all rights (administrator).

▼ Manual Login

After WinGuard is started, a highly simplified interface will normally be displayed. There is no menu and the only functions available are:

- Login
- Close program
- Help
- Info

▼ Automatic Login

Alternatively, in the system settings, a user may be defined globally or per workstation and set up to log on automatically at program start. In this case, entering a password is not required and the standard profile of the user is always applied.

Only after successful login is access to additional functions granted. The start process and appearance of the interface can be modified or changed through corresponding configuration.

i *If unexpected difficulties arise that may be related to the dongle, you can test its function with the WIBU-KEY network monitor that was part of the installation. You can find the program in Windows under **Start | All Programs | WIBU-KEY**.*

5.3.1 System Start

You can start WinGuard via the respective entry in the Windows start menu or via the icon added to the desktop during installation, entitled WinGuard.



After starting, the start window of the program appears. There are several functions available to define how the program should start. Additionally, this window provides information on the progress of the start tasks. If the start can be completed without any problems, the start screen defined for that particular workstation comes up in a few seconds. Here you can log in to the system (please see: [Login](#) ¹⁴⁸).

i *If you execute the program first time from a directory or is there no assigned data directory defined in the Windows registry, then a selection dialog is shown where you can choose the data directory!*

▼ Example: Window at Program Start




Figure 47: Window at Program Start

▼ Window Functions:

- **Start without replication**

This function cancels the wait for a connection from the client to the server in the event the server is not available. The client then starts with its local database (as of last use) without a replication with the server.

 *This function is only available for clients!*

- **Cancel**

The start of WinGuard is terminated.

▼ Window Information:

- **WinGuard Version**

Below the title, the current version of WinGuard is indicated:
for example, X4 (Build 1)

- **Task**

Approximately in the middle of the window you will find information on the current start task:
for example, reconcile settings..., replicate database..., etc.

- **License**

In this area you will find your system ID, license number, and your system designation.

- **WinGuard Service**

Here you can find information regarding term limitations, datapoint units, and how long the update /service contract is valid.

- **Copyright**

Copyright information is contained in the lower portion of the window.

5.3.2 Login

With the command **System|Login**, by clicking on the field in the status bar with the key icon, or by pressing the key combination **<Ctrl>+<L>** you can call up the dialog **Login at Workstation**. Here you can enter your login ID or name and password. Under profile, you can choose from the available profiles that are assigned to your login ID.

If you have a new installation of the program, you can log in without entering your login ID and password. You are then logged in as administrator with all rights. After the first user has been added, logging in without entering a login ID or name and password is no longer possible.

Please be sure to remember your password and ensure that the user has the respective rights because you will not be able to log in otherwise or will not have the requisite rights to make changes.

Alternatively, login can be achieved directly via LDAP to an active directory (Windows® server required) You will find additional information in section Settings|Global|[System](#)⁴²⁴, Setup|User|[LDAP Login](#)⁵³⁹ and Setup|[Login with Active Directory \(LDAP\)](#)⁶⁸⁵.

▼ Dialog: Login at Workstation

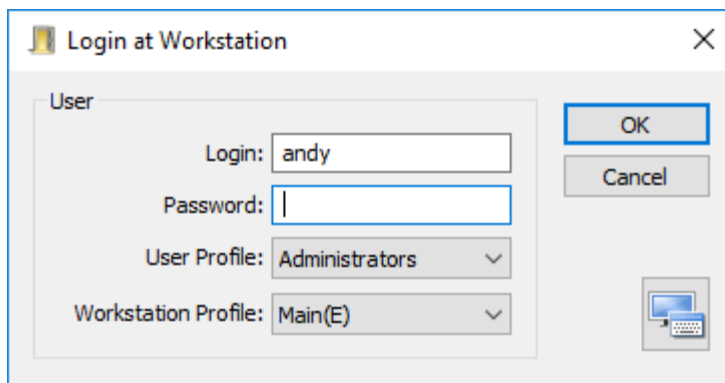


Figure 48: Login at Workstation

▼ Functions and entry/selection fields

Button **OK**

Login is executed with submitted data and the dialog is closed.

Button **Cancel**

Login is terminated and the dialog is closed.



(On-screen keyboard)

This function blends the keyboard onto the screen. This allows login information to be entered without a physical keyboard.

▼ Data section: User

Login

Here you must enter your login ID or your login name.

i *The user must first be defined in the system!*

Blank (default) - enter your ID or login name.

Password

Enter your login password here (upper- and lower case is distinct).

i *The password can also be left blank (in the event none was defined)!*

Blank (default) - enter your password if applicable.

▼ User Profile

Here is where you select a user profile. Without a specific selection, the user's standard profile is applied. If no profile is available, the user is logged in with a default profile (with all rights).

Std-Profile (default) - select a profile if applicable.

▼ Workstation Profile

Here is where you select a workstation profile. Without a selection, the standard profile defined for the user is used. If no profile is available, the user is logged in with the default workstation profile.

Blank / Std-Profile (default) - select a profile if applicable.

After login, you automatically reach the user environment that has been defined through your profile. If your workstation has a user defined for the system start, then the login of this user occurs automatically when the program starts.

i *If no user has been added to the system, then you are automatically logged in as a user with all rights!*

5.3.3 Logoff

A user that is logged into the system can log out of the system at any time. Logging out can be achieved via the command **System|Log Out** or via one of the respective functions in the icon bar. After this command has been initiated the user interface reverts to the screen displayed at program start. A user does not have any kind of further access to program functions.

However, we recommend that log out to the fallback user is activated in the settings. For this user, a defined interface, for example with alerts, can be set up. However, for processing or handling, the respective logon to the system is first required.

5.3.4 Changing a Password

After login, a user can change his/her password at any time. Use the command **System|Change Password**. The **Change Password** dialog is then displayed.

Enter your previously valid password and the new password. The new password is active immediately after saving.

▼ **Dialog: Change Password**

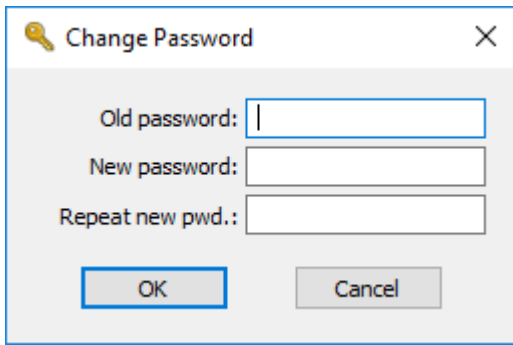
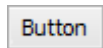


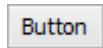
Figure 49: Change Password

▼ **Functions: Dialog**



OK

The new password is accepted.



Cancel

Terminate the change password process, the dialog is closed.

▼ **Data section: Change Password**



Old password

To prove you are authorized for this process, enter your old password.

Blank (default) - old Password.



New password

Here you must enter your new password (can also be left blank).

Blank (default) - new Password.



Repeat new pwd.

Here you must re-enter your new password or confirmation.

Blank (default) - new Password.

5.4 Standard Menu

The menu provides central access to all WinGuard functions. In this section, all available commands in the standard menu are explained. During [system set up](#)^[526], separate menus can be defined for various requirements (please see: [Menus](#)^[650]). This is why WinGuard users generally have different menus in their environments (profiles).

Example: Standard Menu

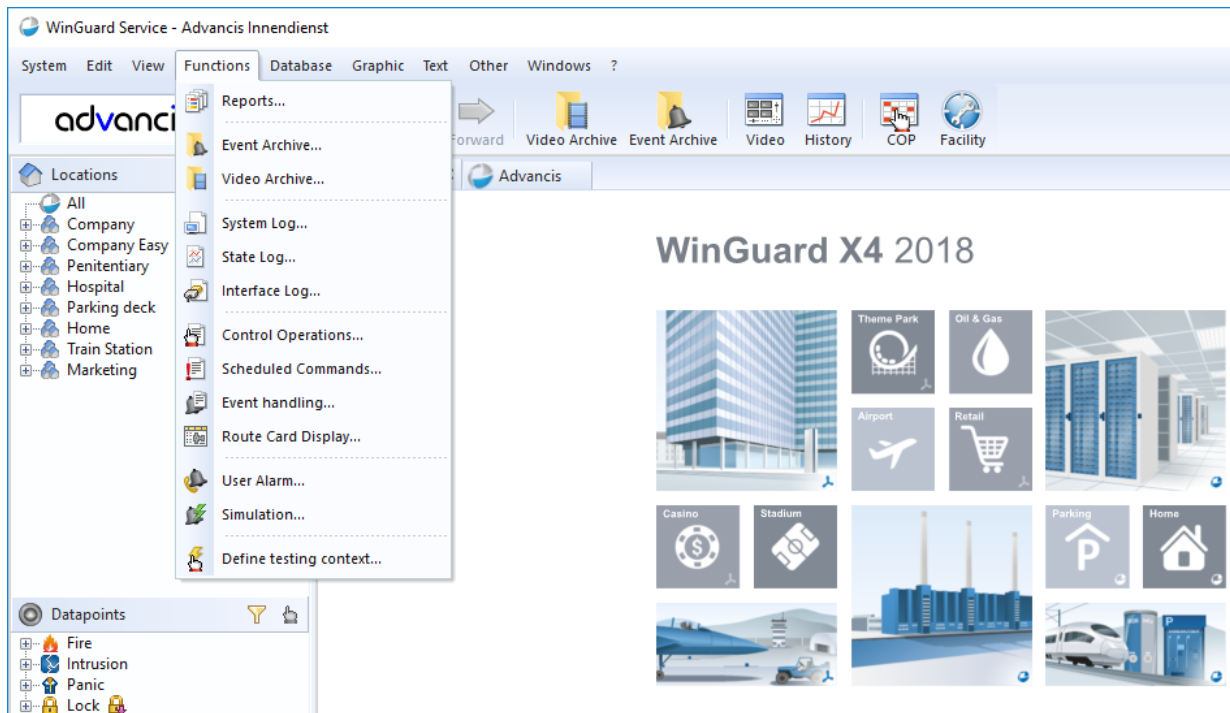


Figure 50: Standard Menu

Menu Items: Standard Menu

- **System**
Here you will find functions for setting up and managing WinGuard (for example: system settings, setup of interfaces, login, etc.).
- **Edit**
In this area, you will find functions that you need in order to edit data in the various editors (for example: cut, copy, etc.).
- **View**
With this function you can blend certain areas of the desktop in or out and open control panels.
- **Functions**
Via the entries in this menu, you have access to various program functions including the display of reports and archives.

- **Database**

With this function you can edit individual areas of the database (for example: datapoints, locations, persons, etc.).
- **Graphic**

Here you will find functions for the creation or opening of graphics as well as editing with the graphic editor.
- **Text**

Here you find functions for the creation or opening of texts as well as editing with the text editor.
- **Other**

Here you will find various entries for the creation and editing of additional system modules and functions (for example: time schedules, menu bars, etc.).
- **Windows**

Here, various functions for organizing WinGuard windows are available. For example, you can determine whether to display windows as a tab or a bar, or adjust windows to fit display areas.
- **?**

In this part of the menu, you will find functions to retrieve online help or the display of system information.

5.4.1 System

If you open the section "System" in the standard menu, it provides access to system functions such as the Inspector, settings, license manager, rights, etc.

▼ Example: Menu item - System

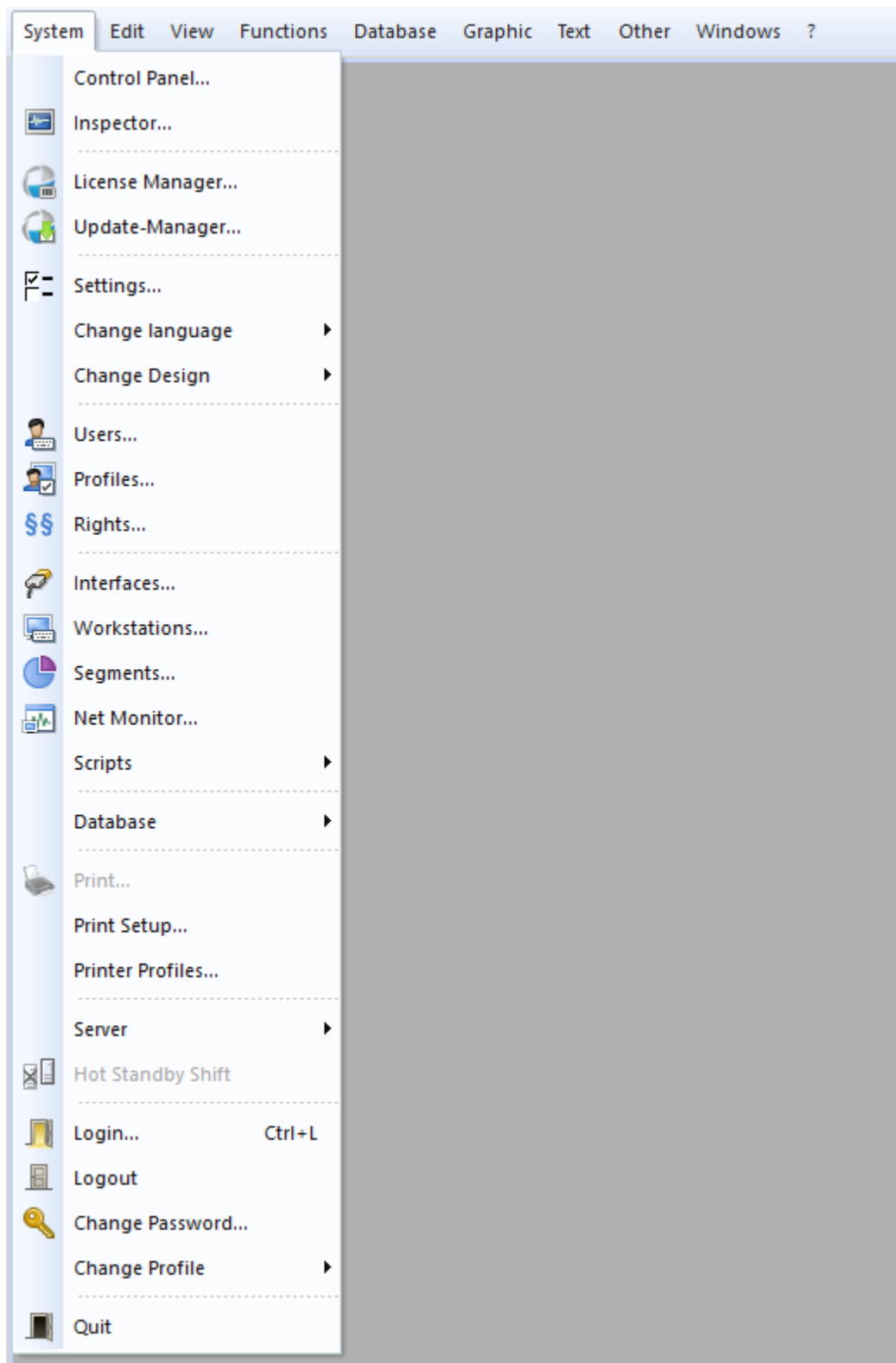


Figure 51: Menu - System

▼ Functions: System

- **Control Panel...**

Retrieves the Windows **Control Panel**, where several WinGuard related settings can be made for the Windows System.



- **Inspector...**

This function starts the application **Inspector**, which, in case of faults, generates log files that can later be used to analyze their reason.



- **License Manager...**

Retrieves the dialog **License Manager** with which you can view / manage your licenses (please see: [License Manager](#)^[110]).



- **Update Manager...**

Retrieves the dialog **Update Manager** with which you can manage your updates (please see: [Update Manager](#)^[74]).



- **Settings...**

Opens the dialog **Settings** via which the basic settings of the system can be defined (please see: [Settings](#)^[404]).

- **Change language** ▶

Opens a sub menu with the languages users may select for their desktop.

- **Change Design** ▶

Opens a sub menu with the available desktop designs.



- **Users...**

Opens the window for the user definitions in table view. Here you can manage your user / system access (please see: [Users](#)^[533]).



- **Profiles...**

Opens the window for profile definitions in table view. Here you can manage the workstation and user profiles (please see: [Profiles](#)^[546]).



- **Rights...**

Retrieves the dialog **Rights** with which user rights and their assignment to user profiles can be determined (please see: [Rights](#)^[554]).



- **Interfaces...**

This function opens the window for the definition of interfaces in list view. Here you can manage your interfaces (please see: [Interfaces](#)^[701]).



- **Workstations...**

This function opens the window for the definition of workstations in list view. Here you can manage your workstations (please see: [Workstations](#)^[541]).

**Segments...**

Opens the window of the segments in list view. Here you can manage your segment definitions (please see: [Segmente](#)^[576]).

**Net Monitor...**

Opens the window of the Network Monitor. In this window, network communication can be followed, displayed, and saved for testing purposes (please see: [Network Monitor](#)^[335]).

- **Scripts** ▶

This function opens a sub menu in which you can select the scripts (text modules) for Event Routing, Event Printing, Event Display, Event Display End and Event Complete for further handling.

- **Database** ▶

This function opens a sub window that provides access to functions such as Backup, Restore, Export, Import, etc. You can find additional information below.

**Print...**

Retrieval of the dialog **Print**, via which the current window or content areas are printed in accordance with selected options.

- **Print Setup...**

This function retrieves the dialog **Print Setup**, in which the currently selected printer (see toolbar) can be set up and configured.

- **Printer Profile...**

Opens the dialog **Printer Profile** which allows you to manage printer profiles. You can access the configuration via **System|Settings** in the folder **Local Installation/Printer Profiles**.

- **Server**

This function opens a context menu via which, in case of Hot Standby operation, the active server can be selected manually and activated upon confirmation.

**Hot Standby Shift**

This function serves the manual shift / switch between normal operation and the start of the Hot Standby server (standby server becomes the active server).

**Login... <Ctrl>+<L>**

This function retrieves the dialog [Login at Workstation](#)^[148] for the login of another user.

**Logout**

With this function users [log out](#)^[149] of the workstation. Depending on the settings under ..- System General this is where the log off or switch to the fallback user occurs.

**Change Password...**

This function opens the dialog **Change Password**. Here, users who are logged in can change their passwords.

- **Change Profile** ▶

This functions opens a sub menu in which a user can select another user or workstation profile if these have been made available to the user.



- **Quit**

With this function, users can end WinGuard (the application at the current workstation. Depending on the settings under **System|Settings** in the folder **../System** in the area of **Confirmations**, the system ends only after appropriate confirmation.

▼ Functions: System - Scripts

- **Event Routing...**

This function opens the script **Event Routing** in a corresponding editing window. Here you can determine how the events shall be distributed to the individual workstations.



The script is executed upon event reception, but only at the workstation with the active interface!

- **Event Printing...**

This function opens the script **Event Printing** in a corresponding editing window. Here you can define print commands for printing events.

- **Event Display...**

This function opens the script **Event Display** in a corresponding editing window. Here you can define special functions for the event display.

- **Event Display End...**

This function opens the script **Event Display End** in a corresponding editing window. Here you can define special functions witch are executed if an event display are ended.

- **Event Completed...**

This function opens the script **Event Completed** in a corresponding editing window. Here you can define special functions witch are executed if an event is completed.

▼ Functions: System - Database



- **Files...**

This function opens the system window **Files** to manage files and folders. Files and folders can then be copied, renamed, deleted exported, etc.



- **Analyse...**

This function opens the system window **Analyse** were you can analyse your project data. So you can find e.g. invalid references of datapoints in graphics, texts, etc. The results are shown in list format.

- **Maintenance...**

This function retrieves the dialog **Maintenance**. Here you can perform workstation-specific functions relating to system maintenance such as delete old archive data or compress individual databases. These functions can also be executed automatically. You can find the definition under **System|Settings** in the folder **System** and there in the area of **Automatic Maintenance** (please see: [Maintenance](#)^[348]).

- **Update Formats...**

Opens the dialog **update formats**.

After an update of WinGuard, this function makes any necessary modifications to the project data (please see: [Update Formats](#)^[352]).

- **CAD Preview...**

This function opens the dialog **CAD Preview** via which for areas such as locations, datapoints, graphics, etc. workstation-specific preview graphics can be created (please see: [CAD Preview](#)^[370]).



- **Data Package...**

This function opens the dialog **Data Packets** via which project data can be exported or imported (see: [Data Package](#)^[361]).



- **Backup...**

Retrieval of the dialog **Backup**, via which you can secure your project and runtime data (please see: [Backup](#)^[353]).



- **Restore...**

This function opens the dialog **Restore**, with which you can load the data files secured via the backup function (only at the server) (please see: [Restore](#)^[357]).

- **CSV Export...**

This function opens the dialog **CSV Export**. Here, various parts of the project data, for example, datapoints, locations, persons, etc. can be exported into external CSV files (please see: [CSV Export](#)^[371]).

- **CSV Import...**

This function opens the dialog **CSV Import**. Here, various data, for example, datapoints, locations, persons, etc. from respective CSV files can be imported / integrated into the project data (please see: [CSV-Import](#)^[386]).

- **SQL Export...**

This function opens the dialog **SQL Export** via which a manual data export into respective ODBC databases can be performed. (please see: [SQL Export](#)^[390]).

5.4.2 Edit

When you open the command **Edit** in the standard menu bar, you will find the basic functions that are available for the editing of graphics and texts.

▼ Example: Menu item - Edit

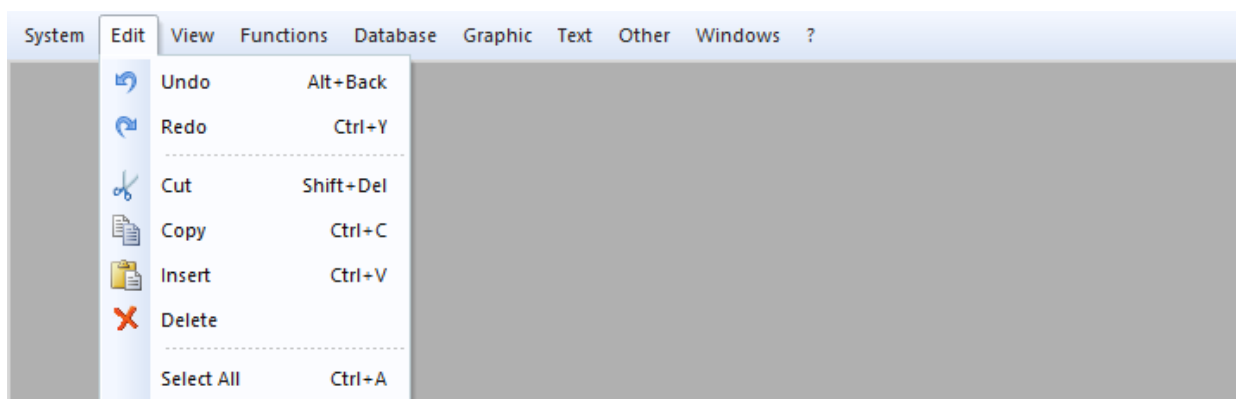








Figure 52: Menu bar - Edit

▼ Functions: Edit

-  **Undo** <Ctrl>+Z, <Alt>+<Backspace>
Reverts the last function.
-  **Redo** <Ctrl>+Y
Repeats the last function.
-  **Cut** <Ctrl>+X, <Shift>+
Removes selected objects and transfers them onto the clipboard.
-  **Copy** <Ctrl>+C, <Ctrl>+<Ins>
Copies selected objects and transfers them onto the clipboard without removing them.
-  **Insert** <Ctrl>+V, <Ctrl>+<Ins>
Inserts content of the clipboard.
-  **Delete**
Deletes selected objects.
- **Select All** <Ctrl>+A
Selects all objects.

5.4.3 View

Via the entries in this menu item, elements of the WinGuard user interface can be displayed or hidden. If the respective elements are visible, the corresponding menu item is shaded in color.

Example: Menu item - View

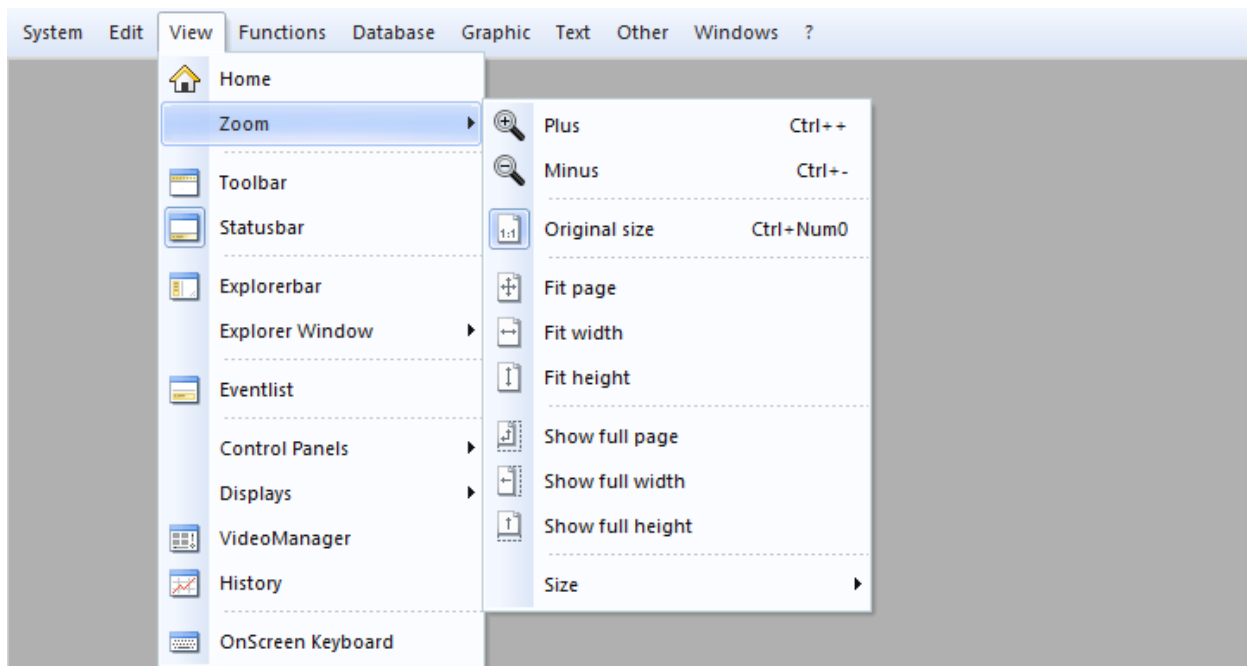


Figure 53: Menu bar - View

Functions: View

Home

This function restores the view / desktop to the way it appears after you log in to your workstation.

• **Zoom** ▶

This function opens a sub menu through which you can execute various zoom functions (incl. plus, minus, original size, etc.).

Toolbar

With this function, you can fade the toolbar of the main window in or out.

Status bar

With this function you can fade the status bar in or out.

Explorerbar

With this function you can fade the Explorerbar in or out.

• **Explorer Window** ▶

This function opens a sub menu in which individual explorer windows can be faded in our out in explorer.

Event List

With this function you can fade the event list in our out.

- **Control Panels** ▶

This function opens a sub menu with which you can open various system control panels.

- **Displays** ▶

This function opens a sub menu with which you can open the individual Displays (1-4) of the system.



VideoManager

This function opens or closes the first **VideoManager** window. Live videos and archived footage from connected video systems can be displayed in the window.



History

This function opens or closes the dialog, **History**. Line diagrams of datapoints can be displayed with this dialog.



OnScreen keyboard

With this function you can open an on-screen keyboard to make alphanumerical entries per mouse or touchscreen.

▼ **Functions: View - Zoom**



Plus <Ctrl>++

This function enlarges the content of a corresponding view in defined steps.



Minus <Ctrl>+-

This function minimizes the content of a corresponding view in defined steps.



Original size <Ctrl>+Num0

This function resets the content of a corresponding view to the original size (100%).



Fit page

This function adapts the display of graphics or texts in such a way that the total content will be displayed in the corresponding view pane.



Fit width

This function adapts the display of graphics or texts in such a way that the content will be displayed with maximum width in the corresponding view pane.



Fit height

This function adapts the display of graphics or texts in such a way that the content will be displayed with maximum height in the corresponding view pane.



Show full page

This function adapts the display of graphics or texts in such a way that at least the total text content will be displayed in the corresponding view pane.



Show full width

This function adapts the display of texts in such a way that at least the total text width will be displayed in the corresponding view pane.

**Show full height**

This function adapts the display of texts in such a way that at least the total text height will be displayed in the corresponding view pane.

Size

This function opens another submenu with the different fixed zoom levels that are available.

Functions: View - Explorer Window**Segments**

This function opens or closes the explorer window for segments in the visible explorer.

**Locations**

This function opens or closes the explorer window for locations in the visible explorer.

**Datapoints**

This function opens or closes the explorer window for datapoints in the visible explorer.

**Persons**

This function opens or closes the explorer window for persons in the visible explorer.

**Graphics**

This function opens or closes the explorer window for graphics in the visible explorer.

**Symbols**

This function opens or closes the explorer window for symbols in the visible explorer.

**Texts**

This function opens or closes the explorer window for texts in the visible explorer.

**Graphic Content**

This function opens or closes the explorer window for graphic structures in the visible explorer.

Functions: View - Control Panel**Datapoint Control Panel**

This function opens or closes the dialog, [Datapoint Control Panel](#)²¹⁹ for the general control and display of datapoints.

**Camera Control Panel**

This function opens or closes the dialog, [Camera Control Panel](#)²²¹ for the control / turning on of cameras.

**Intercom Control Panel**

This function opens or closes the dialog, [Intercom Control Panel](#)²²⁴ for the control of intercom systems.

**Telephone Control Panel**

This function opens or closes the dialog [Telephone Control Panel](#)²²⁶ that can be used for the control of telephone applications such as calling via TAPI.

**Notification Control Panel**

This function opens or closes the dialog, [Notification Control Panel](#)²²⁷, which serves to send and receive messages of other workstations.

**Audio Control Panel**

This function opens or closes the dialog, [Audio Control Panel](#)²²⁹, in which various audio monitoring functions are available.

**Command Monitor**

This function opens or closes the dialog, [Command Monitor](#)²³³, which can be used to oversee delayed commands.

▼ Functions: View - Displays**Display 2**

This function opens or closes the 2nd program window (Display2).

**Display 3**

This functions opens or closes the 3rd program window (Display3).

**Display 4**

This function opens or closes the 4th program window (Display4).

5.4.4 Functions

Entries in this menu item provide access to various program functions, including the display of reports or archives, documentation, the triggering of event simulations, user alarms, etc.

▼ Example: Menu item - Functions

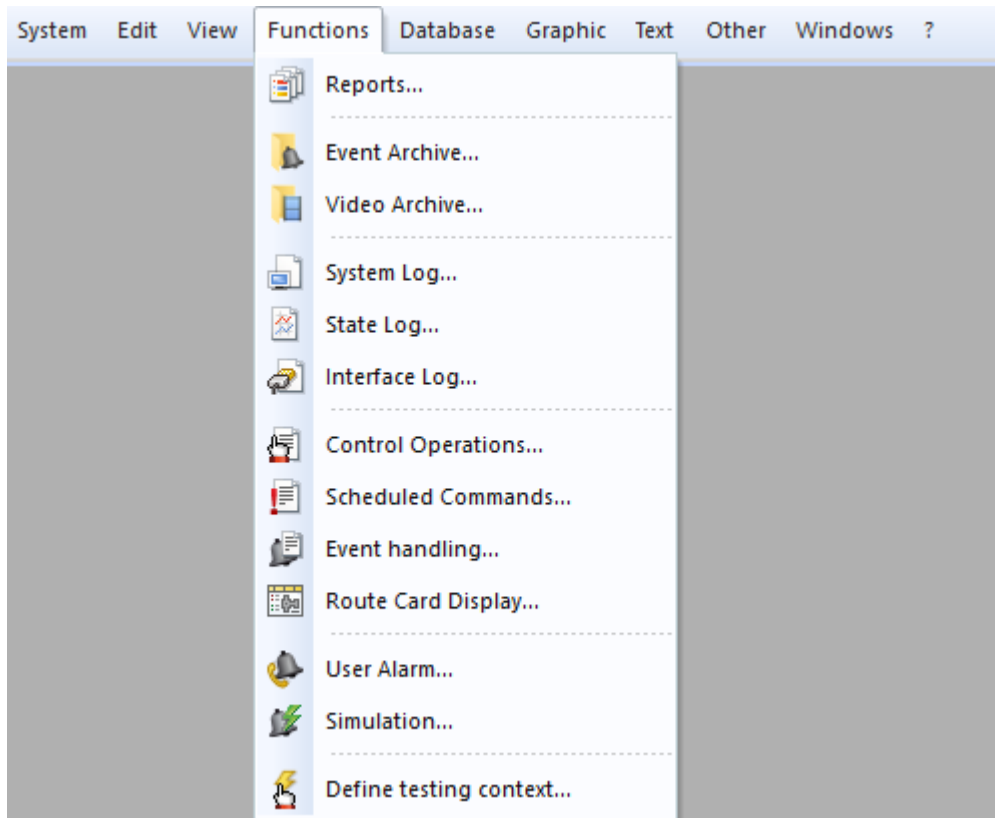


Figure 54: Menu item - Functions

▼ Functions: Functions



Reports...

This function opens the dialog, [Reports](#)^[330], through which reports can be selected and created.



Archive...

This function opens the window, [Archive](#)^[307]. Here you can define selection criteria for searching event entries and activate their display.



Video Archive...

This function opens the window [Video Archive](#)^[291]. It is possible to manage and archive bookmarks, images and clips here. In addition, clips can be played and archive images can be displayed.



System Log...

This function opens the window, [System Log](#)^[316]. Here you can define selection criteria for searching entries in the system log and activate their display.



State Log...

This function opens the window, State Log. Here you can define selection criteria for searching entries in the state log and activate their display.

**Interface Log...**

This function opens the window, [Interface Log](#)^[325]. Here you can define selection criteria for searching entries in the interface logs and activate their display.

**Control Operations...**

This function opens the window containing the list view of the control operations. It displays when which control operations have been defined or are ready to be executed. In addition, the edit window for definition of the control operations can be opened from here.

**Scheduled Commands...**

This function opens the window that shows the list of scheduled commands / automated commands. Here you can see what command is scheduled to be carried out when. The window for editing these commands can also be opened here.

**Event handling...**

This function opens the window that shows the list of event handling definitions. Here you can define commands, time periods and additional parameter for the event handling.

**Route Card Display...**

With this function, the route card display of the system is started. The route cards are then displayed in the display area of the main window.

**User Alarm...**

This function opens the dialog, User Alarm, in which events for further handling can be initiated for selectable datapoints.

**Simulation...**

This function opens the dialog, **Simulate Event**, in which event simulations can be initiated for selectable datapoints.

**Define testing context...**

This function opens or closes the dialog, **Define testing context**. Here you have the option of establishing a general testing context. This global testing context is then uniformly applied in the testing of texts, graphics, and layouts.

5.4.5 Database

The entries below this menu item enable you to access and edit information (locations, datapoints, and persons) that is maintained by WinGuard in the database.

Example: Menu item - Database

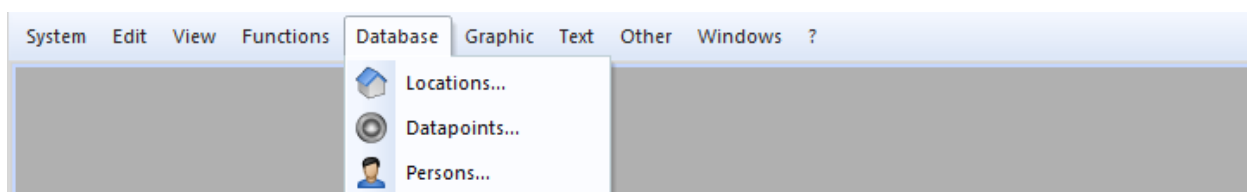


Figure 55: Menu item - Database

▼ Functions: Database



Locations...

This function opens the window for managing [locations](#)⁶⁹⁶. Here you can define or edit locations.



Datapoints...

This function opens the window for managing [datapoints](#)⁷¹⁹ in a table view. From there, you can switch directly to the editing window to edit datapoints.



Persons...

This function opens the window for managing [Persons](#)⁵²⁶ in table view. From here, you can switch directly to the editing window to edit information pertaining to persons.

5.4.6 Graphic

The entries in this menu item can be used to create or open graphics, or may also be used to edit graphics with the graphic editor. For this reason, most functions only become active once a graphic or the graphic editor is opened and displayed in a window. Some of the functions are only active once objects with respective properties are selected in the graphic editor. Most functions are also available directly in the graphic editor.

▼ Example: Menu item - Graphic

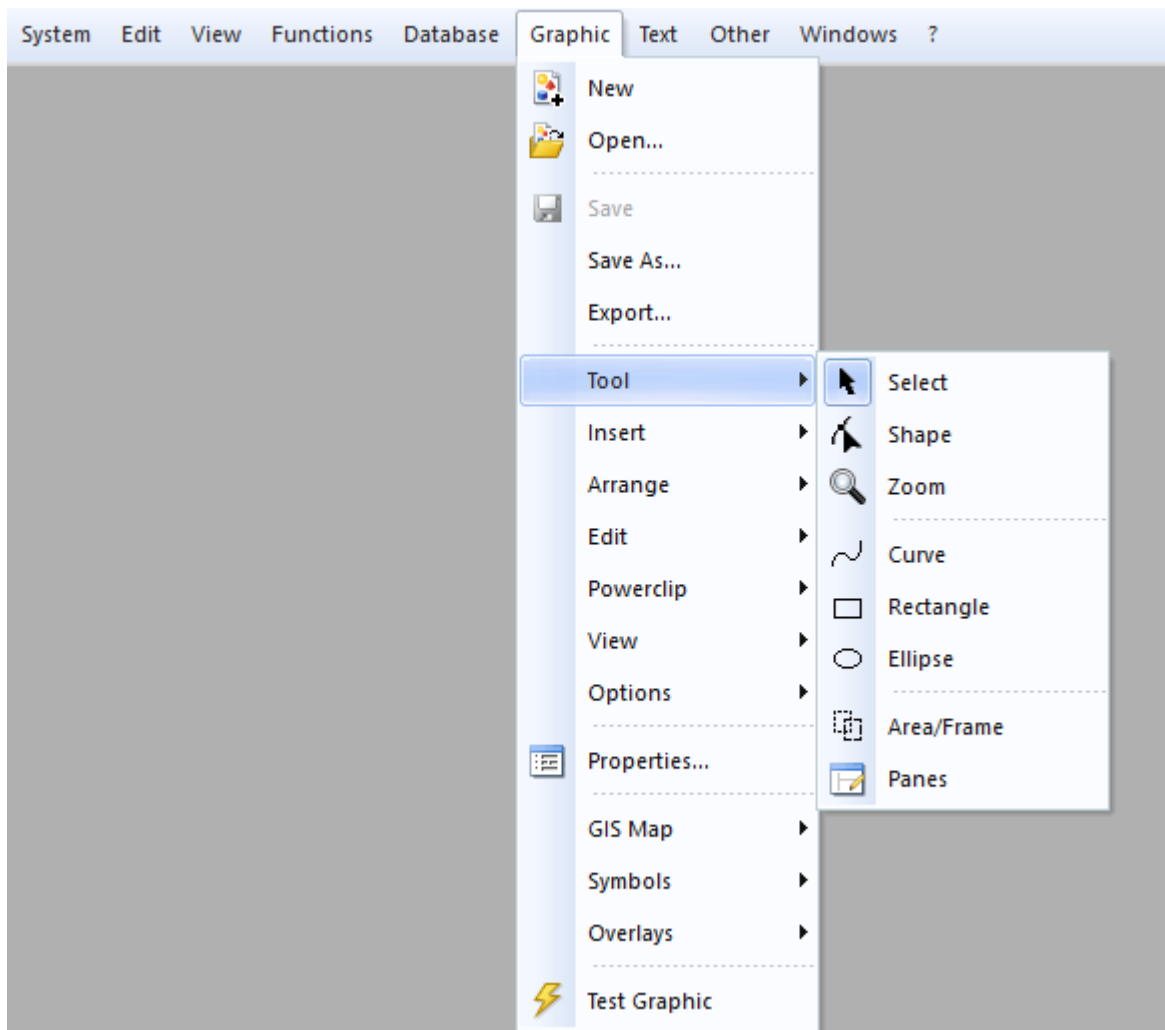


Figure 56: Menu item - Graphic

The descriptions of these functions and additional information can be found in the section [Menu Item - Graphic](#).

5.4.7 Text

The entries in this menu item can be used to create or open texts, or may also be used to edit texts with the text editor. For this reason, most functions become active only once a text or the text editor has been opened and displayed in a window. Some of the functions are only active once an object with the respective properties has been selected in the text editor. Most functions are also directly available in the text editor.

Example: Menu item - Text

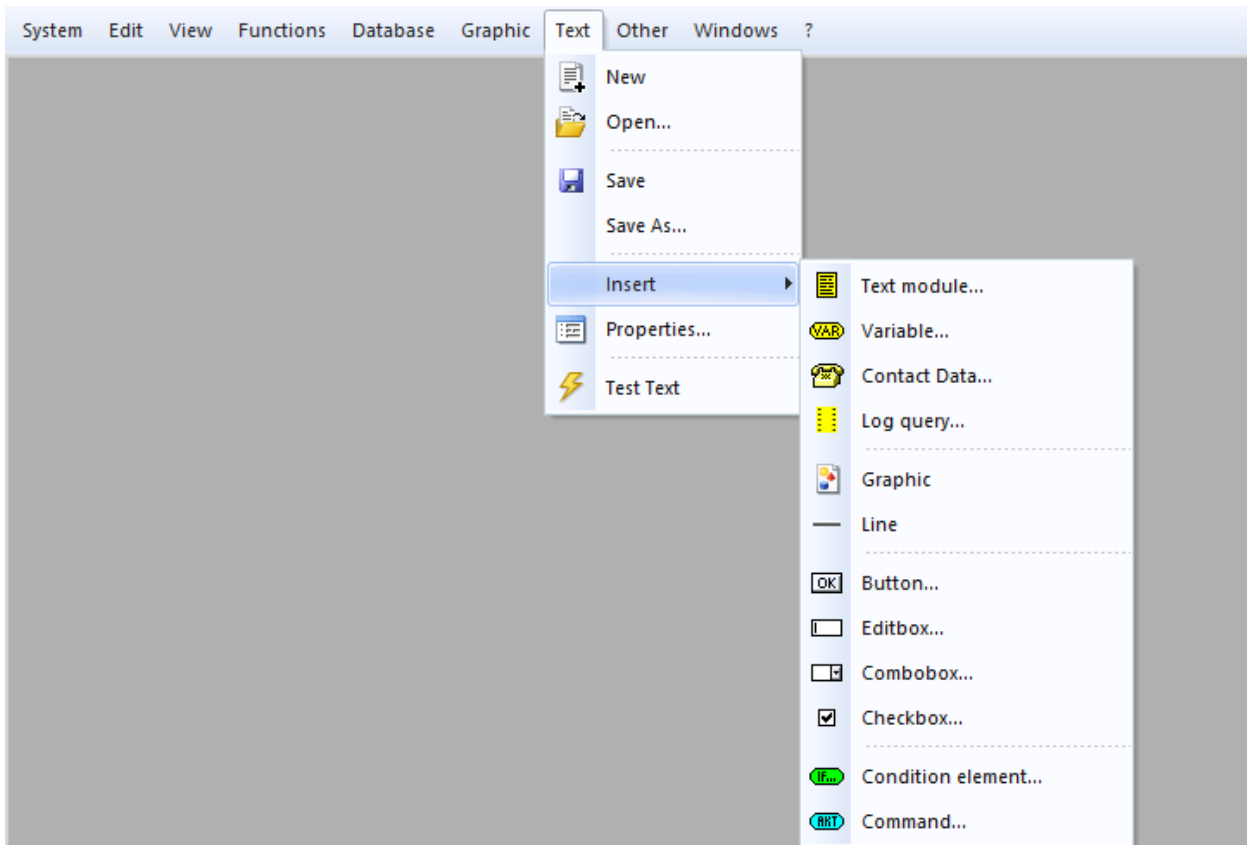


Figure 57: Menu item - Text

The description of these functions or additional information can be found in the section [Menu Item - Text](#).

5.4.8 Other

This menu item contains various entries for the creation and editing of additional system modules and functions. Here you can find the editors for editing time schedules, sensor types, animation schemes, etc.

▼ Example: Menu item - Other

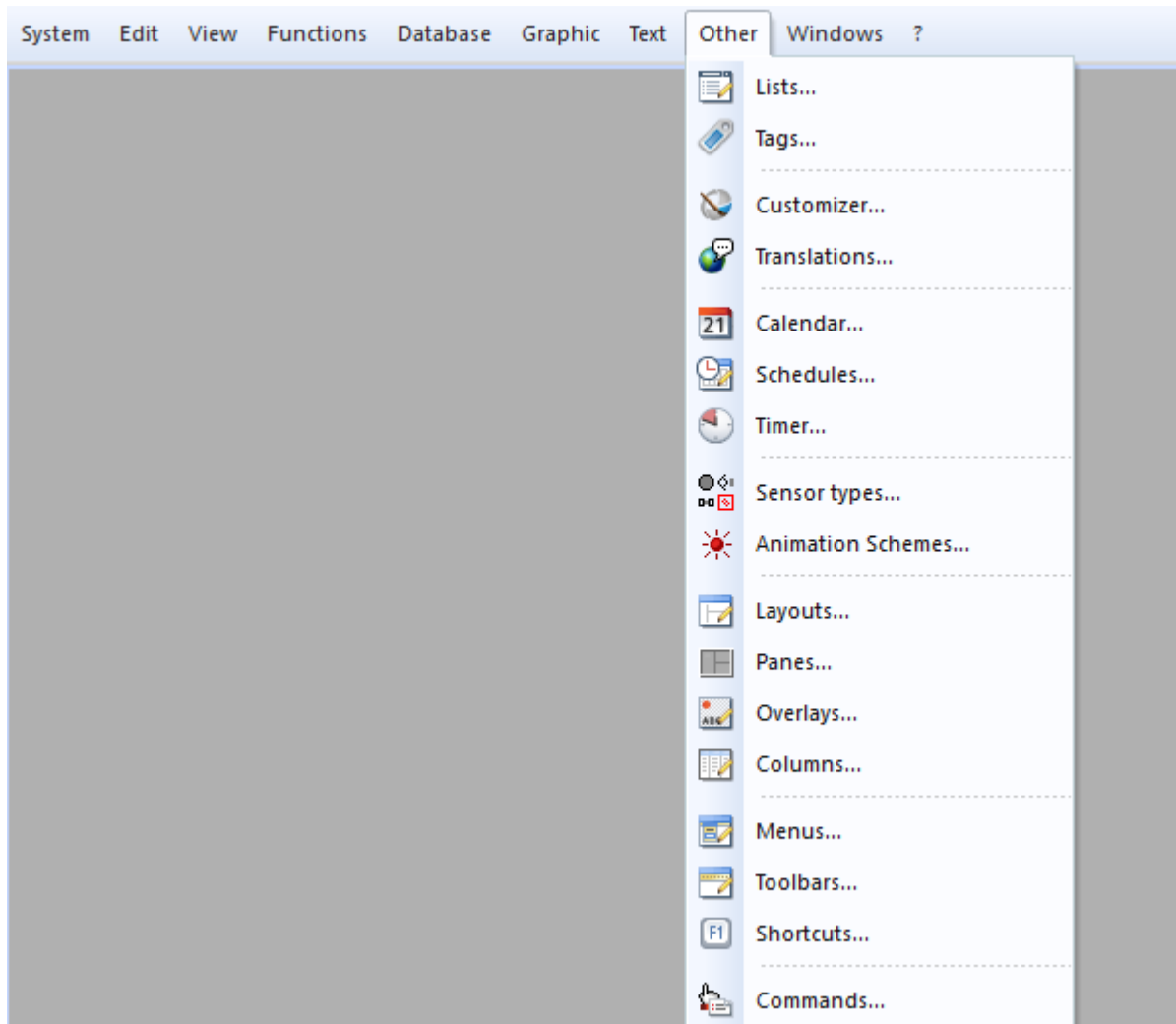


Figure 58: Menu bar - Other

▼ Functions: Other



Lists...

This function opens the dialog, [Edit Lists](#)⁵⁷⁰, in which lists can be defined and maintained. Lists are used to create selection elements for user entries in texts.



Tags...

This function opens the dialog [Edit tags](#)⁵⁷³ in which tags can be defined and edited.



Customizer...

This function opens the program, **Customizer**. This enables the creation and modification of desktop designs in WinGuard.



Translations...

This function opens the program, **Localizer**. This enables the translation of some of the program parts and thus the creation of several language versions of WinGuard.

**Calendar...**

This function opens the dialog, [Calendar](#)^[583], in which you can define holidays and workdays.

**Schedules...**

This function opens the dialog, [Edit Time Schedules](#)^[585] in which time schedules can be defined and managed. Time schedules serve to define time frames that could be employed at different locations in the system (for example in event routing).

**Timer...**

This function opens the window for management and definition of timers in the [Table view](#)^[593]. The timers can then be used within the scope of event handling.

**Sensor types...**

This function opens the dialog, [Sensor types](#)^[597], in which sensor types can be defined and maintained. The sensor types are used to assign symbols to datapoints.

**Animation Schemes...**

This function opens the dialog, [Edit Animation Schemes](#)^[601], in which you can define and manage animation schemes. The schemes are used to define how animations work in datapoint graphics.

**Layouts...**

This function opens the window, [Layouts](#)^[604], in which you can define and manage layouts. Layouts are used to define display areas (for example, event displays).

**Panes...**

This function opens the **Panes Table View**^[633] window. Here you can define and manage panes. The panes are generally named elements of layouts and are used to load content.

**Overlays...**

This function opens the dialog [Define overlays](#)^[636] in which overlays for extended display of e.g. video elements can be defined and edited.

**Columns...**

This function opens the dialog [Edit columns](#)^[642] in which the column definitions for lists, tables etc. can be defined and edited.

**Menus...**

This function opens the dialog, [Edit Menus](#)^[650], in which you can define and manage your menus.

**Toolbars...**

This function opens the dialog, [Edit Toolbars](#)^[654], in which you can define and manage your toolbars. You can then use these definitions in your profile setup.

**Shortcuts...**

This function opens the dialog, [Edit Shortcuts](#)^[658], in which you can edit and manage your shortcut tables. These definitions can then be used in your profile setup.



Commands...

This function opens the dialog, [Edit Commands](#)⁶⁶¹, in which you can define and manager your user-defined commands. These commands allow you to execute commands via the WinGuard user interface and can be integrated into menus and toolbars.

5.4.9 Windows

Entries in this menu contain functions to control the WinGuard display windows and layout areas. You can switch between opened windows or rearrange the windows in the display area.

Example: Menu item - Windows

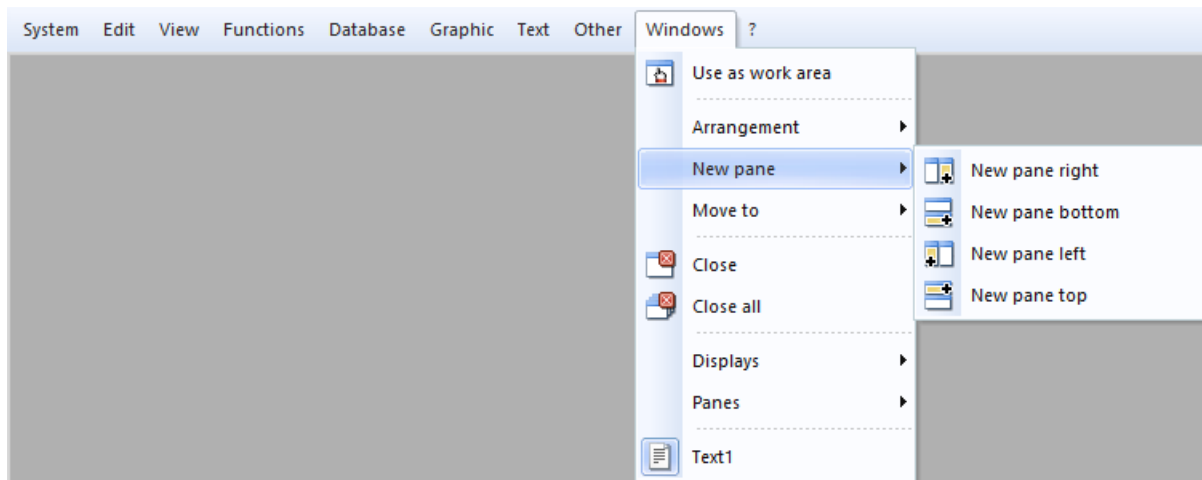


Figure 59: Menu bar - Windows

Functions: Windows



Use as work area

Defines the selected area as work area. All contents retrieved via menu commands are displayed in the work area.

- **Arrangement** ▶

If the selected pane contains only tabs or bars, these can be switched.

- **New pane** ▶

This function opens a sub menu for controlling panes. Here, additional panes can be inserted into a layout. The selected area determines where the pane is inserted. If the content of a tab/bar is selected, a new pane with the content is added. If the entire display area is selected, a new, empty pane is added.

- **Move to** ▶

This function opens a sub menu for controlling panes.

Content can be moved into another layout pane or a new window with the selected content is created.



Close

Closes the content of the selected pane.

**Close all**

Closes the contents of all panes that are displayed.

- **Displays** ▶

In the sub menu, all opened displays are listed. By selecting an entry, the respective display is activated and brought to the forefront, if applicable.

- **Panes** ▶

In the sub menu all named panes are listed. By selecting an entry, the respective pane is activated and brought to the forefront, if applicable. It is thus possible to activate not directly accessible panes or to close their content completely.

- ...

At the end of the menu, all currently opened contents are listed. By selecting an entry the respective pane is directly activated and brought into the forefront, if applicable.

5.4.10 Help (?)

With this menu function you can access online help, help for installed interface modules, and other program information (please also see: [Help](#)^[128]).

▼ Example: Menu item - ?

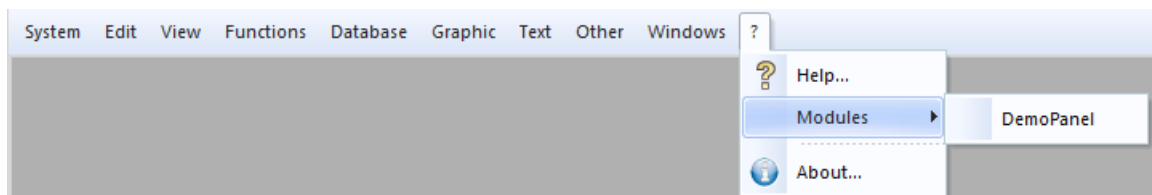


Figure 60: Menu bar - ? / Help

▶ Functions: ?

**Help... <F1>**

This function retrieves the online help. Via the <F1> key, context-relevant help is displayed.

- **Modules** ▶

This function displays a sub menu with the interfaces defined in the system. From there, you can directly access online help for these interfaces.

**Info About...**

This function displays information about the range of functions, licensing, version number, etc. of your WinGuard installation.

5.5 Standard Toolbars

In WinGuard, the toolbar for the main window, the toolbars of the event list, etc. can be used in several instances. In this section, the standard toolbars are explained. During system configuration, separate toolbars can be defined for various requirements. This is why system users generally find very differing toolbars in their environments (profiles).

5.5.1 System

As an alternative, or complementary to the menu, the system toolbar makes frequently-used or important WinGuard functions easily accessible. During the display of an event, the toolbar of the Event Display is added to the right side of the toolbar of the main window. You can find additional information about this toolbar and its function in the section, [Event Display](#) ¹⁷⁶.

▼ Example: Standard toolbar - Main Window

Below you will see two different representations of the standard toolbar of the main window. The first image shows the toolbar during normal operation. The second shows the toolbar with the addition of the toolbar for events while an alarm is displayed.

Standard Toolbar - Main Window:



Figure 61: Standard Toolbar - Main Window

Standard Toolbar of Main Window during Event Display:

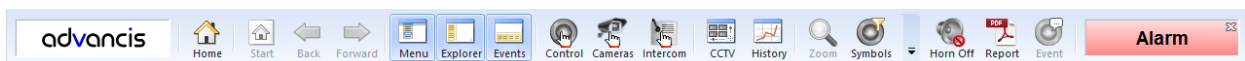


Figure 62: Standard Toolbar - Main Window with Event

▼ Functions: Standard Toolbar - Main Window

Here you can find a description of the functions of the standard toolbar.



Home

This function reverts the view / desktop to its appearance after you logged into your workstation.



Start

This function is automatically activated with the use of navigation functions and returns you to the start of the navigation.



Back

This function is automatically activated with the use of navigation functions and takes you one step back in the navigation.



Forward

This function is automatically activated with the use of navigation functions, but only if you have used the functions Start or Back beforehand. This function then takes you one step ahead in the navigation, and thus negates the back command.

**Menu**

With this function the menu bar can be faded in or out.

**Explorer**

With this function the explorer can be faded in or out.

**Events**

With this function the Event List can be faded in or out.

**Control (Datapoint Control Panel)**

This function opens or closes the dialog, [Datapoint Control Panel](#)^[219], for the general control and display of datapoints.

**Camera (camera control panel)**

This function opens or closes the dialog, [Camera Control Panel](#)^[221], for the control and activation of cameras.

**Intercom (intercom control panel)**

This function opens or closes the dialog, [Intercom Control Panel](#)^[224] for the control of intercom systems.

**CCTV (VideoManager)**

Via this function, the first **VideoManager** window is opened or closed. In the window, live videos and archived images from connected video systems can be displayed.

**History**

This function opens or closes the dialog, **History**. In this dialog, line diagrams of datapoints can be displayed.

**Zoom (Plus/Minus)**

When this function is active, the content of a respective view can be enlarged in fixed increments using the left mouse key, and made smaller in fixed increments with the right mouse key.

**Symbols**

This function opens a sub-menu to switch the visibility (visible / invisible) of symbols depending from the datapoint category.

**Print**

This function opens the dialog, **Print**, via which, after selection of the desired options, the print of the current window or content area is started.

**Additional Functions**

If not all symbols can be displayed in the toolbar simultaneously, this symbol automatically appears in the toolbar. If you click on this symbol, a sub menu with the symbols that have been faded out is opened.

▼ Display: Logo

In the WinGuard settings, under [Desktop](#)^[442], you can (de)activate the display of a logo on the left edge

of the toolbar. If the logo is displayed, the preset logo can be optionally replaced with the customer's logo by inserting a respective graphic file in the program directory. (The width is automatically adjusted to fit).

- **logo.bmp** 36 x n pixel for large symbols
- **logosmall.bmp** 24 x n pixel for small symbols



If the logos should line up with the Explorerbar displayed in standard width, a logo width of 156 pixels is recommended. Also recommended is an inner margin of (at least) 1 pixel in width in the background color of the logo!

5.5.2 VideoDisplay

Using the VideoDisplay the system has an own standard toolbar with most used functions for direct access.

▼ Example: Standard toolbar VideoDisplay



Figure 63: Standard-Symbolleiste VideoDisplay

▼ Functions: Standard toolbar VideoDisplay

Here you find a short function description of the standard VideoDisplay toolbar.



Menu

With this function you can show or hide the menu.



Window 1-4

With this function you can show or hide the different windows of the VideoDisplay.



Info

This function displays information about the range of functions, licensing, version number, etc. of your WinGuard installation.



Help <F1>

This functions retrieves the online help. Via the <F1> key, context-relevant help is displayed.

5.5.3 Event List

The event list has two separate toolbars (left and right). These toolbars are pre-determined by the system for various datapoint categories, but can be replaced by user-defined toolbars during system setup.

▼ Example: Standard toolbars - Event List

Below you will see the two standard toolbars of the event list. The first image shows the standard toolbar on the left, and the second the standard toolbar on the right.



Figure 64: Standard Toolbars - Event List (left /right)

▼ Functions: Standard Toolbar - Event List Left

Here you can find a description of the functions in the left standard toolbar of the event list.

- **Selection of an Event**

By clicking on an event it is selected and the associated information such as graphics, text, etc. automatically displayed.



- **Accept**

New events (blinking) are received or acknowledged. Events without a workstation assignment (WS=0) are assigned to the local workstation and can be processed there.



- **Fetch**

Events that are assigned to another workstation are transferred to the local workstation and can be processed there.



- **Assign**

Events are assigned to another workstation (transferred).

When executing this function, a workstation must first be selected. This can be done in a sub menu that lists all possible workstations. At the workstation to which the event is assigned/transferred, it is displayed like a regular incoming event.



- **Commands**

The datapoint/sensor that pertains to the selected event can be controlled via this function if applicable.



- **Reset All**

This function allows you to send a reset command directly to the installation - as long as the installation supports such a command.



- **Defer**

With this function, events can be sent to the deferred events area or be retrieved from there. This can be helpful if it is known that a disruption will be ongoing for a while.



- **Complete**

The event is removed from the current event list and filed in the archive. The event cannot be processed further.

- ...

Additional interface-specific or user-defined functions.

▼ Functions: Standard Toolbar - Event List Right

Here you can find a description of the functions in the right standard toolbar of the event list.



Filter

Using this function, the dialog for definition of the event filter is selected via which the data in the event list can be filtered interactively. Further information can be found in the section [Event filter](#)^[200].



This function will only be displayed if the filter function is active!



Group

This function is switched between normal and group view.

If the option is active, only the group fathers of the groups will be displayed and the corresponding functions for event groups will be active.



This function will only be displayed if the grouping function is active!



Local

This function limited the event display for local events. So you will see only events directly assigned to or additionally notifying the workstation.



The defined filters are additionally active!



All

This function remove the limitation. All events for all workstations (depending on the active filter) are shown.



The defined filters are additionally active!

5.5.4 Event Display

This toolbar is only available during event display. It provides event-related functions such as closing the event display, turning off the acoustic alarm, etc.

▼ Example: Toolbar - Event Display

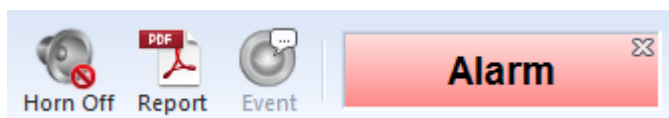


Figure 65: Toolbar - Event Display

▼ Functions: Tool bar - Event Display



Horn Off

This function stops the acoustic alarm at the workstation.



Report

This function starts the generation and display of a current event report in PDF format (please see: [Event Report](#)^[212]).

**Event**

When you activate this function, the selected graphic switches from **Display View** to **State View** and vice versa.

**Event Type (alarm, fault, ...)**

This element shows the current state type of the event (for example, alarm, fault, etc.). Also, the entire event display is closed via this function. The symbol displayed on the left is only faded in if the event is assigned to a different workstation.

• ...

Additional user-defined functions are possible.

5.6 Explorer

Several explorer windows (explorer) can be opened in the Explorerbar, but only one explorer can be active at a time. The only exception is the explorer for locations, as it can always be displayed in conjunction with another explorer.

Which explorer window is displayed in the Explorerbar is determined via the menu **View|Explorer Window** or via the context menu that opens when right-clicking with the mouse on any of the title bars of an explorer. If no explorer window is open, it is also possible to click with the right mouse key on an empty area of the Explorerbar. The context menu then shows the available explorer windows that can also be accessed via the menu. Right-clicking with the mouse on an entry in explorer opens the respective context menu with the available functions.

An explorer window can be closed by clicking on the window symbol on the far left of the title bar. This is first signaled by a red **X** over the symbol when the mouse is moved over it. Via the settings, this function can be deactivated on certain users or profiles.

The width of the explorer can be modified by clicking on the right edge of the explorer and moving it while holding down the mouse key.

Most explorer windows use a tree structure/hierarchical representation of your content. In this case, the symbols **+** for opening and **-** closing of the respective partial trees. If the explorer allow a multiple selection, please press the Ctrl-key during the selection.

5.6.1 Segmente

The segment explorer shows the available segments in a list. Each entry shows the name and the events with type (symbol) and quantity of the segment.

The categorical visibility of segments in the explorer can be limited via the rights. Depending on the user rights, different functions for editing are available via the context menu.

By clicking on a segment, the assigned locations and datapoints can be displayed directly in the corresponding explorer.

i This function is only available provided that there is a corresponding licensing (Enterprise)!

i Please consider that the selection of a segment might influence the filters of the location and datapoint explorer!

Example: Explorer - Segments

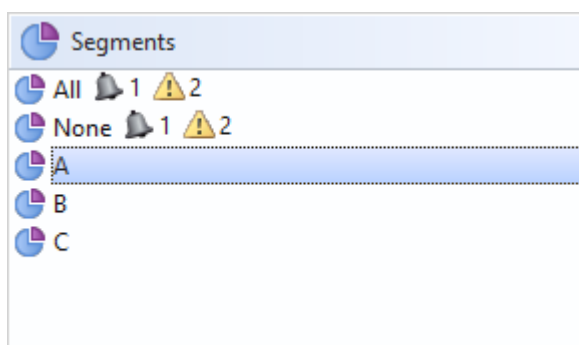


Figure 66: Explorer - Segments

▼ Functions: Explorer - Segment (Title bar)



(Close explorer window)

This function closes the explorer window, provided that the function has been activated for the user.

▼ Functions: Explorer - Segments (general)

- **(Double or single click with left mouse key)**

By clicking on a segment, the assigned locations and datapoints can be displayed directly in the corresponding explorer. In addition, the segment information will be sent to the server defined in the settings under System / Other.

- **(Single click with right mouse key)**

Currently without any function.

5.6.2 Locations

In WinGuard, locations are centrally managed in a hierarchically-structured location register with any number of levels. Starting with the second level, the locations are optional, so that the structure of the location register can be configured to meet customer needs. The general visibility of locations in the explorer can be limited via the rights. In addition, using the filter dialog, filter can be defined for selection of the datapoints to be displayed. Through the context menu, several functions are directly available here. These are mostly for editing and depend on user rights.

In the title bar, there is an additional symbol for display of the filter dialog. Via a double click on a location or the context menu, location graphics and texts can be directly displayed. If a location display is already active, one click on a location is sufficient to change the display accordingly. The kind of display can be defined in System Settings (please see: [Contents](#)⁴⁵⁰ - Destination Areas).



A pre-selection of the visible locations is possible using the rights!



Please note that the location selection may affect the filter of the datapoint explorer!

▼ Example: Explorer - Locations

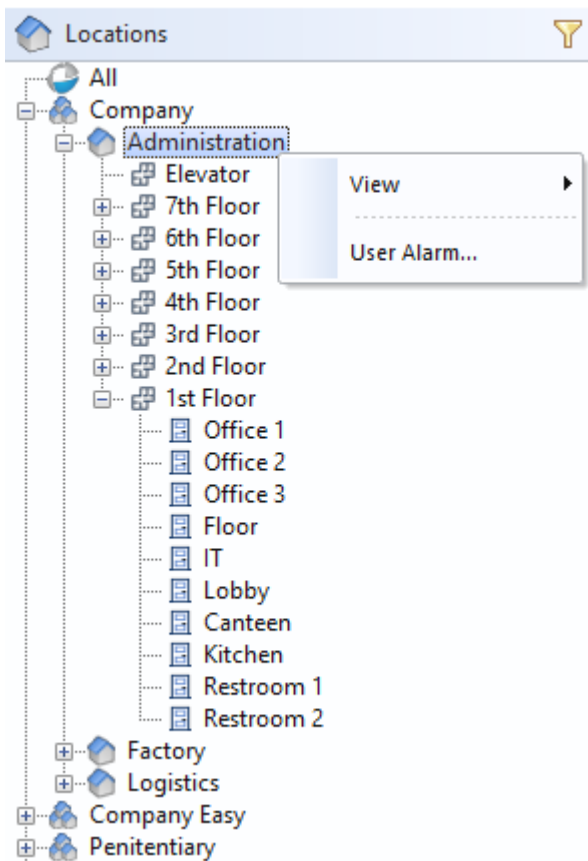









Figure 67: Explorer - Locations

▼ Symbols: Explorer - Locations

-  **Facility**
-  **Building**
-  **Floor**
-  **Room**
-  **Point**

 Additional symbols are displayed for [location](#)  editing!

▼ Functions: Explorer - Locations (title bar)



(Close explorer window)

With this function the explorer window can be closed, provided that it is activated for the user.



(Location filter)

Using this function, the dialog for filtering the locations is opened.

▼ Functions: Explorer - Locations (general)

Here the general functions that are available in the location explorer are described. Some of the functions may depend on the selected location, user rights, or system licenses. Information regarding the expanded explorer functions for editing locations can be found in the section, [Data Supply](#)^[697] under [Locations](#)^[693].

- **(Double or single click with left mouse key)**
By double-clicking on a location, location graphics and text can be directly displayed. If a location display is already active, one mouse click on a location is sufficient to change the display accordingly.
- **(Single click with right mouse key)**
Clicking on an entry in explorer with the right mouse key opens the respective context menu with available functions.
- **View** ▶
This function opens a dialog for the selection and display of a graphic or text corresponding to a location. If no explicit documents (graphic or text) have been defined for that location, the respective definition of a superordinated location is used.
- **User alarm..**
This function opens the dialog [User Alarm](#)^[236].

i This function is only available if the system extension module **User Alarm** is licensed!

5.6.2.1 Location Filter

For the locations explorer, a filter for selection of the locations to be displayed is available. It is possible to define filter for the name and the tags. Only those entries will be displayed that correspond to all criteria, i.e. the criteria is linked with a logic **AND**. One exception is, if you are using several tags with one identically parent tag, this tags are combined with a logical **OR**. In case one of the fields is left blank, the corresponding criteria will not be considered for searching.

The dialog to set the filters can be selected by clicking on the filter symbol [Y] in the title bar.

i It is not possible to re-set the filter automatically, it will remain active as long as it is deactivated again!

▼ Dialog: Filter (Explorer - Locations)

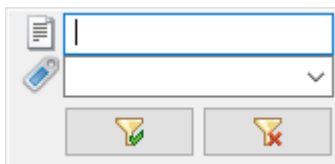


Figure 68: Filter - Explorer - Locations

▼ Functions: Filter (Explorer-Locations)



(Location name)

A text to search in the location names can be defined here. All locations for which the text is contained in the location name will be considered.

Blank (default) - no filter - all locations will be considered.

... - only locations with this text in their name will be considered.



(Tag)

It is possible to select tags (also several tags) as filter here. All defined tags are available for selection.

Blank (default) - the filter is not active.

... - only locations with the selected tags will be considered.



To select several tags please press the Ctrl-key during the selection. The Return-key finishes the selection!



Button

(Apply filter)

By execution of this function, the defined filter elements will be applied and the dialog will be closed.



Button

(Delete filter)

This function deletes all defined filter elements and closes the dialog.

5.6.3 Datapoints

In this explorer window datapoints are displayed with their current states. Normally, datapoints are arranged in hierarchical order here, but this can be changed in the filter settings. The datapoints are assigned to the respective datapoint categories in the highest level of the hierarchy. The datapoint categories are only displayed here if datapoints corresponding to the respective datapoint category have been defined and are assigned. Otherwise, these elements are faded out. The general visibility of datapoints in the explorer can be limited via the rights. In addition, for selection of the datapoints to be displayed, filters can be defined using the filter dialog for selection of the datapoints to be displayed.

The current states of the datapoints are designated by a state symbol after the datapoint. In addition to the symbol, a state text may also be displayed after the symbol. If the symbol contains a small red arrow [↕] pointing down, that means that the datapoint itself is not in this state, but that one or more datapoints subordinated to that datapoint evidence this state.

If the mouse is moved over a datapoint or sensor, additional information about that datapoint is displayed in the form of a small information window (**Tooltip**) near the position of the mouse. Tooltip content can be defined specifically for an interface in the system. By default, the datapoint name (if applicable with sensor number), sensor type, location, and description are displayed, as long as these contents are defined.

If sensors are assigned to a datapoint, they are located below the datapoint to which they are assigned. Datapoints can be edited using the [Form View](#)⁷²¹. Changes in the datapoint category or name are immediately effective in the explorer window after they have been saved.

By double-clicking on a datapoint, the test view for the datapoint in its current state is opened. If a test view is already active, a simple click on a datapoint is sufficient to change the display accordingly. The kind of display depends on system settings.

The title bar contains additional symbols for the display of the filter dialog and datapoint control. Via the context menu, which can be opened by clicking on an entry with the right mouse key, other functions for the datapoints become available. You can find more information about the filters and symbols in the following sections: [Filters Datapoint](#)^[185], [Datapoint Categories](#)^[187], and [Animation Symbols](#)^[188].



A pre-selection of the visible datapoints is possible using the rights!

Example: Explorer - Datapoints

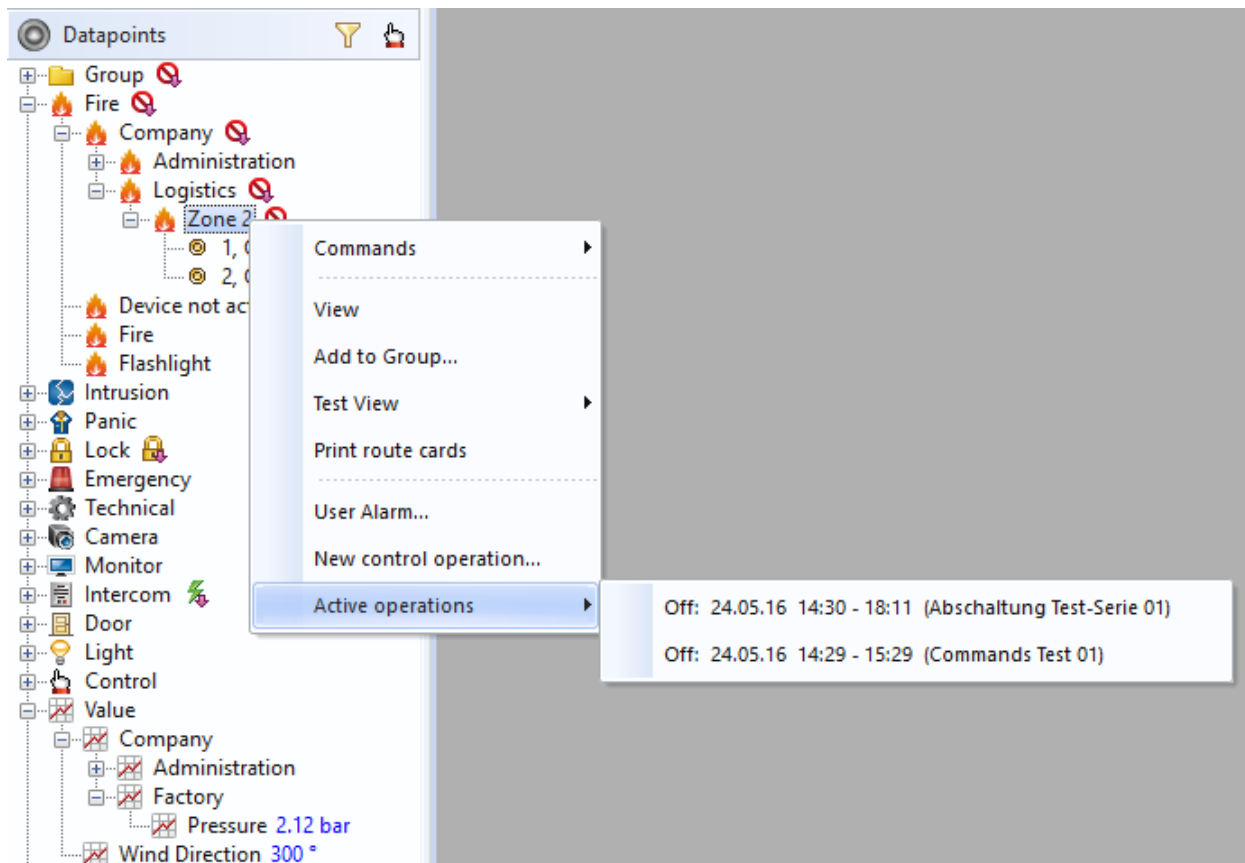


Figure 69: Explorer - Datapoints

Functions: Explorer - Datapoints (Title Bar)



(Close explorer window)

With this function the explorer window can be closed, provided that it is activated for the user.



(Datapoint Filter)

This function opens a dialog for datapoint filter setup.



(Commands)

A selection list with the available commands for the selected datapoints resp. detectors is displayed.



This function is only available if the user has the corresponding rights and if controllable datapoints have been selected!

▼ Functions: Explorer - Datapoints (General)

Here is a description of the general functions available in the explorer for datapoints. Some of these functions may depend on the selected object, user rights, or system licenses. Information regarding expanded explorer functions that are available for datapoint editing are described in the section, [Data Supply](#)^[691] under [Datapoints](#)^[715].

- **(Double or single click with left mouse key)**

By double-clicking on a datapoint, the test view for that datapoint in its current state is opened. If a test view is already active, a single click on the datapoint is sufficient to change the display accordingly.

- **(Single click with right mouse key)**

Clicking on an entry in explorer with the right mouse key opens the respective context menu with available functions.

- **Commands** ▶

A selection list with the available commands for the selected datapoints resp. detectors is displayed.



This function is only available if the user has the corresponding rights and if controllable datapoints have been selected!

- **View**

This function opens the window **DB:Datapoints** with the Form View in read-only mode, no changes can be made here.



This function is only available if the user does not have rights for the editing of datapoints!

- **Add to Group...**

This function opens a dialog for the selection of a datapoint group to which the selected datapoints are to be added.



This function is only available with respective rights!

- **Test View** ▶

This function displays a selection list of states (alarm, fault, etc.) via which a respective test view of the datapoint can be activated for the selected state.

- **Print route cards**

This function opens the dialog for a map print. Here, respective definitions for the execution of the map print for the selected datapoints can be completed. Several datapoints may be selected.



*The function is only available for the datapoint category: **Fire!***

- **User Alarm...**

This function opens the **User Alarm** dialog for the selected datapoint.

i This function is only available if the system extension module is licensed for **User Alarm!**

- **New control operation...**

This function opens the window **Control operations** and adds the selected datapoints to the list of control operations.

i This function is only available if the user has the corresponding rights and if the system has been licensed with the system extension module **Scheduler!**

- **Active control operations**

Upon positioning of the mouse over the function, the active control operations are displayed at the right side. Upon execution, the window with the list of active control operations will be opened.

5.6.3.1 Datapoint Filter

The datapoint explorer features a filter for the selection of displayed datapoints. For example, you can define filters for the name, datapoint category, interface, etc. Only datapoints that meet all of your entered criteria are shown; the criteria fields are thus linked by the logical **AND**. One exception is, if you are using several tags with one identically parent tag, this tags are combined with a logical **OR**. If one of the fields remains blank, the corresponding criterion is not incorporated. Depending on your system settings, the filter resets automatically after a defined period of inactivity.

The dialog for filter set up is opened by clicking on the filter symbol [🔍] in the title bar.

▼ Dialog: Filter (Explorer - Datapoints)

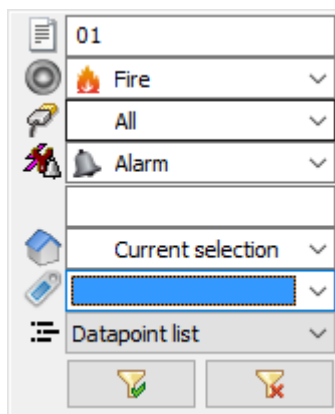


Figure 70: Filter - Explorer - Datapoints

▼ Functions: Filter (Explorer - Datapoints)



(Datapoint Name)

Here you can enter a text to be searched in the datapoint name. All datapoints that contain the specified text in their name will be incorporated.

Blank (default) - no filter - all datapoints are incorporated.

Text - only datapoints that contain this text in their name are incorporated.



(Datapoint Category)

Here you can select the datapoint category as filter. Your selection includes **all datapoint categories** and **All**.

All (default) - no filter - all datapoints are incorporated.

Category - only datapoints corresponding to the selected datapoint category are incorporated.



(Interface)

Here you can select an interface as a filter. Your selection includes **all defined interfaces** and **All**.

All (default) - no filter - all interfaces are incorporated.

Interface # - only the datapoints of this interface are incorporated.



(State)

Here you can select a state (State type) as a filter.

All (default) - no filter - all states are incorporated.

All<>Sleep mode - all states that are **not in sleep mode** are incorporated.

State type - only datapoint currently in this state are incorporated.

(State text)

Here you can define a text for searching the state texts of the datapoints. Only datapoints that contain **exactly** your specified text as state text are incorporated.

Blank (default) - no filter - all datapoints are incorporated.

Text - only datapoints that contain exactly this text in their state text are incorporated.



(Location)

This filter determines whether location should be used as an additional filter.

All - no filter - datapoints at all locations are incorporated.

Current Selection (default) - only datapoints at the selected or a subordinated location are incorporated.



(Tag)

Tags can be selected (also several tags) as filter here. All defined tags are available for selection.

Blank (default) - the filter is not active.

... - only datapoints (and all subordinated datapoints) with the selected tags will be considered.



To select several tags please press the Ctrl-key during the selection. The Return-key finishes the selection!

 **(View)**

Here you can define the display form of the datapoints in explorer.


Hierarchy (default) - the datapoints are displayed hierarchically.

Datapoint list - the datapoints are displayed as a list.

Individual elements list - the datapoints including their sensors are displayed as a list.

 **Button (Delete Filter)**

This function deletes all filter elements and closes the dialog.

 *The selected form of display remains unchanged!*

 **Button (Apply Filter)**

















By executing this function, the defined filter elements are applied and the dialog is closed.



5.6.3.2 Datapoint Categories

In WinGuard, datapoint categories determine specific functions and properties of datapoints. Additional characteristics of datapoints are defined through the interface used.

Every datapoint is assigned to a datapoint category. The combination of datapoint category and datapoint name distinctly define a datapoint.

WinGuard Datapoint Categories and IDs

Symbol	ID	Datapoint Category
	1000	Group
	1	Fire
	2	Intrusion
	3	Technical
	4	(interface - not selectable, only for internal purposes)
	5	Control
	6	Panic
	7	Tamper
	8	Emergency
	9	Other
	10	Camera
	11	Monitor
	12	Intercom
	13	Light
	14	Door
	15	Lock

	16	Value
	17	Audio-In
	18	Audio-Out

















5.6.3.3 Animation Symbols

In WinGuard, symbols are used to represent the various states (state types) of datapoints in the explorer. If a datapoint evidences different states simultaneously, for example **armed** and **alarm**, both symbols are shown in the explorer next to one another after the name. Symbols in graphics that are assigned to a datapoint can only represent one state. Here the symbol for the state with the highest animation priority used.



The animation priority used here does not have any kind of relationship to the priority of events!

WinGuard animation types and symbols for states

Symbol	Priority	Animation Type
.	12	Silent / normal (no symbol)
	11	Unknown
	10	Off
	10	Locked
	9	Revision alarm
	9	Revision fault
	9	Revision event
	8	Revision
	7	Alarm
	6	Pre-alarm
	6	Warning
	5	Fault
	4	Event
	3	Triggered / Active
	2	Disarmed
	1	Armed
	-	No state (subordinated elements)

5.6.4 Persons

Under Persons, you can record information about people and organizations. In the explorer window, **Persons**, people are displayed according to their record entry, Company/Group. For each company/group, a respective organizational entry is made and all employees of that company/group are subordinated under that entry. If no such data is supplied for a person, then that person will be added to the organizational entry, **Other**, which is always located at the very end of the list. The [Form View](#) ⁵²⁷

is used to edit personal information.

Via the telephone icon on the far right of the title bar, all entered call numbers for a person may be displayed. Furthermore, general functions can be accessed via the context menu.

▼ Example: Explorer - Persons

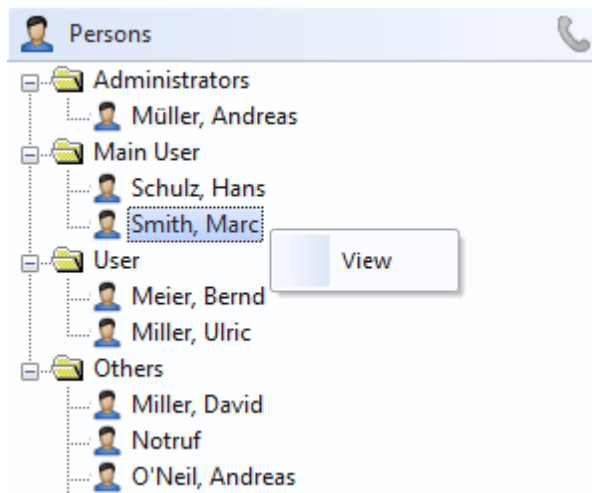


Figure 71: Explorer - Persons

▼ Functions: Explorer - Persons (Title Bar)



(Close explorer window)

With this function the explorer window can be closed, provided that it is activated for the user.



(Display telephone numbers)

This function displays a window, at the mouse position, with the phone numbers of the selected person (if available).

▼ Functions: Explorer - Persons (general)

Here the general functions that are available in explorer for persons are described. Some of the functions depend on the person selected or user rights. Information about the expanded functions of explorer that are available for editing persons can be found in the section [Setup](#)⁵²⁶ under [Persons](#)⁵²⁶.

- **(Double or single click with left mouse key)**

By double-clicking on a person, the window **DB:Persons** with the Form View in read-only mode is opened. No changes can be made here. If the window is already active, then one click on a person is sufficient to change the display accordingly.

- **(Single click with right mouse key)**

Clicking on an entry in explorer with the right mouse key opens the respective context menu with available functions.

- **View**

This function opens the window **DB:Persons** with the Form View in read-only mode. No changes can be made here.



This function is only available if the user does not have any rights for the editing of persons!

5.6.5 Graphics

In WinGuard, graphics are a central instrument for the display and handling of events. Additionally, graphics are often applied in the interactive use of the system by users.

In the explorer window, **Graphics**, all files and folders are displayed that are located in the subdirectory, **Graphics**, of the WinGuard project directory. What is essential for display in explorer is the directory that in the system settings is established as Graphics folder.

In order for files to be displayed at this location, they must be in a graphic format that is supported by WinGuard.

Supported Graphic Formats:

- WGD - WinGuard graphic format
- WMF, EMF, DXF, DWG, DGN - vector graphic formats
- BMP, JPG, PNG, GIF, TIFF - bitmap graphic formats

For every file or directory, a context menu with respective functions can be opened by clicking on it with the right mouse key.

Files in these directories that are not saved in a WinGuard graphic format are not incorporated in the explorer display.

▼ Example: Explorer - Graphics

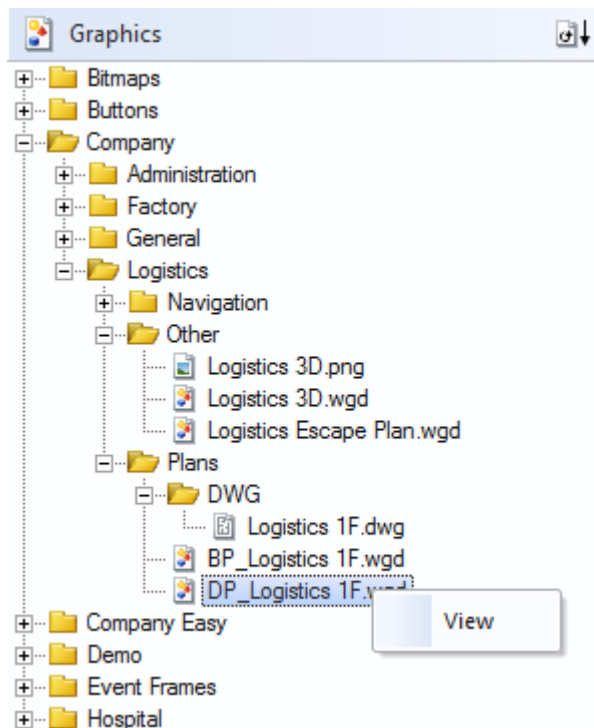


Figure 72: Explorer - Graphics

▼ Functions: Explorer - Graphics (Title Bar)



(Close explorer window)

With this function the explorer window can be closed, provided that it is activated for the user.



(Filter for graphic format)

This function opens a selection with which a filter for graphic formats can be activated. Your choices are:

- All Files
- WinGuard Graphics
- Vector Graphics
- Bitmap Graphics

▼ Functions: Explorer - Graphics (general)

Here the general functions that are available in explorer for graphics are described. Some of the functions depend on the object selected or user rights. Information about the expanded functions of explorer that are available for graphics editing can be found in the section, [Data Supply](#)^[691], under [Graphic](#)^[756] in section [Explorer](#)^[757].

- **(Double or single click with left mouse key)**

By double-clicking on a graphic, a window to display the graphic is opened. If a graphic window is already active, then one mouse click on a graphic is sufficient to change the display accordingly.

- **(Single click with right mouse key)**

Clicking on an entry in explorer with the right mouse key opens the respective context menu with available functions.

- **View**

This function opens a graphic window that displays the graphic in state mode.

5.6.6 Symbols

In WinGuard, symbols are specialized graphics with particular properties. They are used to define graphic elements such as sensors, fire detectors, etc. and can then be used as referenced objects in other graphics.

There is also a separate explorer window for symbols which displays all the symbols and directories that are located in the subdirectory **Graphics/Symbols** of the project directory. Essential for display in explorer is the directory that is established as the Symbol Folder in the system settings. What is special here is that the symbols themselves are represented as icons in front of the symbol name in the explorer window.

Files in these directories that are not saved in WinGuard graphic format are not incorporated in the explorer display.



Symbols are always graphics in WinGuard .WGD format!

Example: Explorer - Symbols



Figure 73: Explorer - Symbols

▼ Functions: Explorer - Symbols (title bar)



(Close explorer window)

With this function the explorer window can be closed, provided that it is activated for the user.

▼ Functions: Explorer - Symbols (general)

The explorer for symbols provide some additional functions. Data structures can simply be displayed with the symbol as an icon. A preview of the symbols in a separate window is not possible. Information regarding the expanded functions of the explorer available for symbol editing can be found in the section, [Data Supply](#)⁶⁹¹ under [Symbols](#)⁷⁹⁰.



(One folder up)

This function navigates into the next upper folder.



(Select subfolder)

This function opens the list of the subfolders for selection and shows the actual path.

5.6.7 Texts / Workflows

In WinGuard, texts are used in a number of ways. Like graphics, they help in the visualization and handling of events and also, for example, provide information about required measures.

In the explorer window, **Texts**, all files and folders are displayed that are contained in the subdirectory, **Texts**, of the WinGuard project directory. Essential for display in explorer is the directory that is established as the Text Folder in the system settings.

Files in these directories that are not saved in WinGuard- text format are not incorporated in the explorer display.



*Texts are always filed in WinGuard **.WGT** format!*

▼ Example: Explorer - Texts

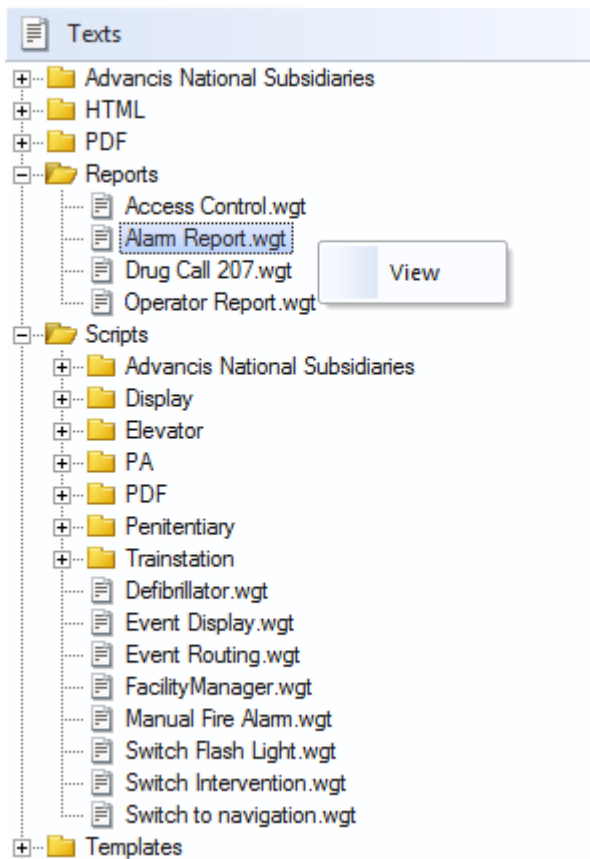


Figure 74: Explorer - Texts

▼ Functions: Explorer - Texts (title bar)



(Close explorer window)

With this function the explorer window can be closed, provided that it is activated for the user.

▼ Functions: Explorer - Texts (general)

Here the general functions available for texts in explorer are described. Some of the functions available may depend on the object selected or user rights. Information regarding the expanded functions of explorer to text editing can be found in the section, [Data Supply](#)^[691] under [Text](#)^[887].

- **(Double or single click with the left mouse key)**

By double-clicking on a text a window for display of the text is opened. If a text window is already active, a single click on a text is sufficient to change the display accordingly.

- **(Single click with right mouse key)**

Clicking on an entry in explorer with the right mouse key opens the respective context menu with available functions.

- **View**

This function opens a text window in which the text is displayed.

5.6.8 Graphic Content

The explorer window **Graphic Content**, which displays the content of a graphic currently open in the graphics editor, is also available to you in the explorer bar. If no graphic has been opened for editing, the content of this explorer is empty and no functions other than "close" are available.

You can find additional information about the expanded explorer functions for graphics editing in the section [Data Supply](#)^[691], under [Graphic](#)^[756].

Example: Explorer - Graphic Content

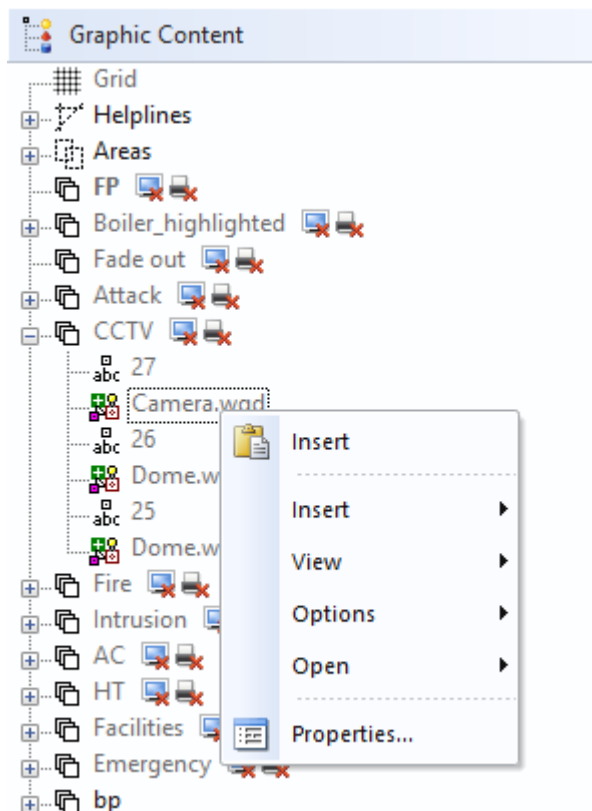


Figure 75: Explorer - Graphic Content

Functions: Explorer - Graphic Content (Title Bar)



(Close explorer window)

With this function the explorer window can be closed, provided that it is activated for the user.

5.6.9 State Counter

Explorer windows with state counters are additionally available for fading in. In the title bar of these windows, a sum of the respective states of the datapoints is displayed that meets the filter settings for the sum counter. In the window itself, all datapoints that are in the respective state are listed.

Since the state counters basically act like a filter (please see [Explorerbar](#)^[455]) these only have one counter for the included elements if the filter selects a state type (not **all**) or a state text.



The error state counter shows the list of the datapoints only when the number is less than 100!

▼ Example: Explorer - State Counter

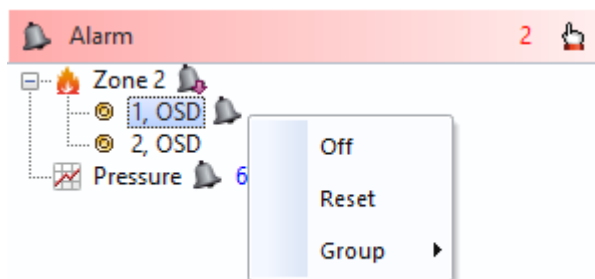


Figure 76: Explorer - State Counter

▼ Functions: Explorer - State Counter (title bar)



(Close explorer window)

With this function the explorer window can be closed, provided that it is activated for the user.



(Commands)

A selection list with the available commands for the selected datapoints resp. detectors is displayed.



This function is only available if the user has the corresponding rights and if controllable datapoints have been selected!

▼ Functions: Explorer - State Counter

Here the general functions that are available for the state counter in explorer are described. Some of the functions available may depend on the selected object or the user rights.

- **(Double or single click with the left mouse key)**

By double-clicking on a datapoint, the test view for that datapoint in its current state is opened. If a test view is already active, then one click on a datapoint is sufficient to change the display accordingly.

- **(Single click with right mouse key)**

Clicking on an entry in explorer with the right mouse key opens the respective context menu with available functions.

- **Commands** ▶

A selection list with the available commands for the selected datapoints resp. detectors is displayed.



This function is only available if the user has the corresponding rights and if controllable datapoints have been selected!

5.7 Events

One key element of working with WinGuard is the handling of events. In General, messages are created through events registered by linked systems. An interface module receives an event, interprets the information, and sends a corresponding event or state information to WinGuard where it is displayed. Events can also be created with the function module [User Alarm](#)^[236] or [Event Simulation](#)^[231] as well as other internal processes.

Events are automatically displayed at the workstation specified to receive them. Additionally, users are alerted of receipt of an event through an acoustic signal.

The [Event List](#)^[199] is the central element for event management. It is here that events are displayed and handled in accordance with established workstation or user settings. The event list also contains many functions for event processing.

As part of the [Event Display](#)^[197], there is the concept of a system-wide [Event Context](#)^[197] that correlates user commands to the currently handled event and in this manner develops an [Event Log](#)^[211] that presents the event handling process chronologically.

You can determine which texts and graphics are to be shown with an event display for each object during its projection (for example for datapoints: [Index Card Documents](#)^[727]).

Another available function is the [Event Report](#)^[212] that compiles all event-relevant information (including event logs) in a uniform PDF document.



How events are processed can be precisely defined with parameters and must be established accordingly in the system settings and data supply (see: [Visibility](#)^[217])!

5.7.1 Event Context

The philosophy of the event context is that all commands that a user executes while processing an event should stay in connection with that event, regardless of which workstation is used to execute a command or how a command is carried out. The info field in the toolbar of the event display shows if such an event context, into which all user command is placed, is active.



If an event context is active, all corresponding user commands are assigned to that event!

5.7.2 Event Display

On a standard basis, when an event is displayed the first graphic and text of the respective datapoint are displayed in the display area of the window side by side.

When using [layouts](#)^[604], the display of the event content (where and in which form) can be freely configured via the Settings and/or scripts - for each event individually. The display can be selected as under **X2**, but this is not required.

By using layouts, the event display is not fixed to a particular window, and for this reason there is no explicit event window with a specific toolbar. During event display, the special toolbar **Event Display in Main Window** <Display1> is faded in. The toolbar is located to the right of the toolbar of the main window.

Example: Event Display

In this example, a main window displaying an alarm event, two graphics, and the event log is shown. All elements associated with the event are marked with a colored frame corresponding to the color of the state of the event (in this case, red for alarm).

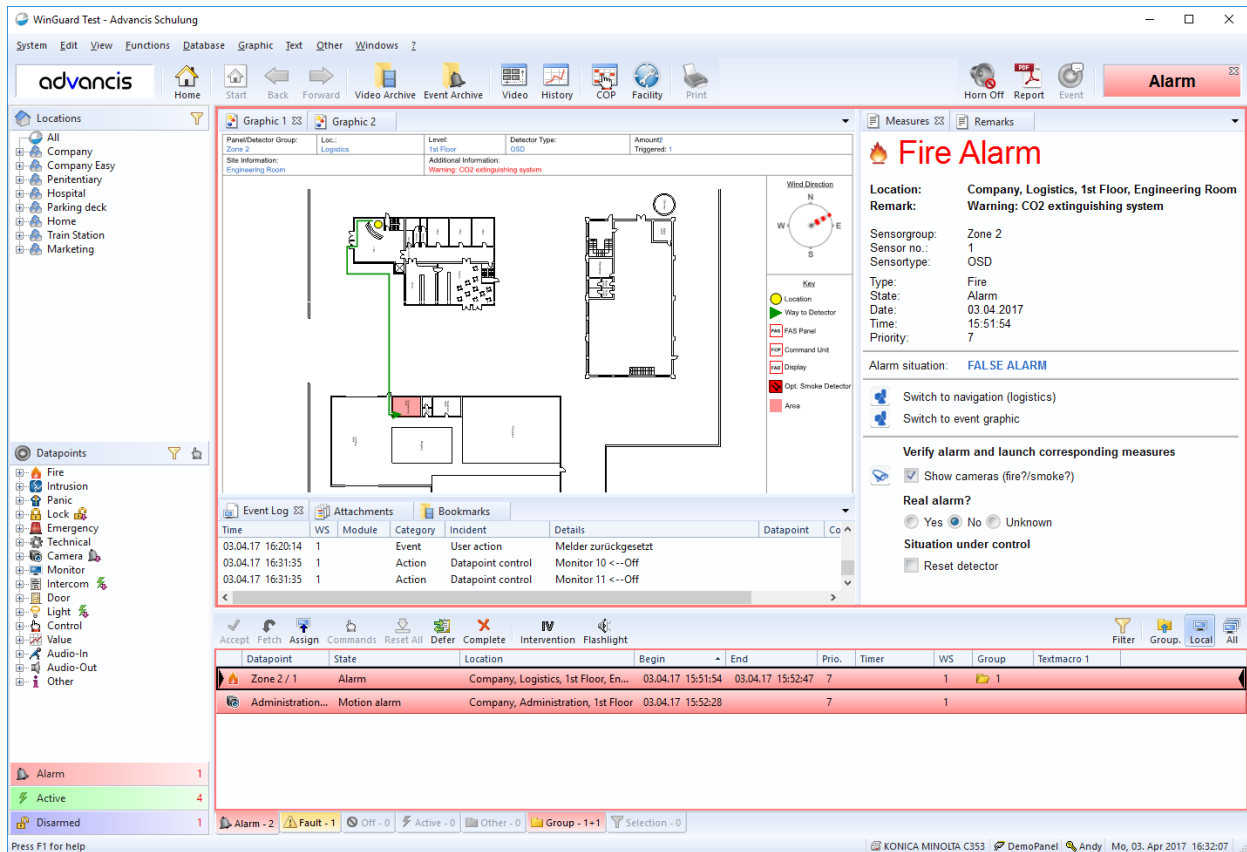


Figure 77: Event Display

The functions of the toolbar that are additionally shown in the event display can be found under [Event Display](#)¹⁷⁶.

5.7.3 Event Handling

For event handling, the system provides an [Event List](#)¹⁹⁹. The event list features a broad array of functions for event handling, but most of the functions are available on the workstation that is designated for the handling of the selected event. Only one workstation can be responsible for the processing of an event at one time. And only on the currently-designated workstation is it possible to fill out forms in the text documentation related to an event. For all other workstations - even if they have the respective rights to view the event - the relevant interactive text elements are write-protected (read-only). The functions for event handling are described in section **Standard Toolbars - Event List**¹⁷⁴.

When an event message is generated, it is normally assigned to a workstation automatically and displayed there directly unless another event with a higher priority is currently being handled there or other system processes have been established. The new event blinks in the event list. Receipt of an event also triggers an acoustic signal at the workstation. Projected commands are executed by the system automatically.







The first step in the handling process after event receipt is normally **Accepting** the event or **Getting / Fetching** it (from another workstation). Once this has been done, the event stops flashing and the

acoustic alarm stops. Depending on the interface, the system also sends a receipt to the unit.

The next step then is the even **handling**. Here you can now carry out the respective commands of your workflow and/or execute the required steps.

After the system has received the **end** of the event from the unit, the time the event was ended is recorded in the event list. If you have completed all the required steps and no further action is necessary, you can close the event.

Once the event has been **closed**, the event is transferred to the event archive. No further changes can be made to the event once it is in the archive. However, you can view the event anytime in the event archive.

Event Handling	
	Accept event (if applicable, get/fetch from other workstation)
	Handle Event
	Process workflow
	Execute required commands
	...
	Close event

5.7.4 Event List

In WinGuard, events are predominantly separated into various criteria and managed in different lists. These lists can be defined specifically for certain users and workstations (per state type, datapoint, interface, etc.) in the dialog, **Settings**, so that events can be assigned to specific workstations and user groups. Which information or columns are displayed in the event list can be defined in the [Columns](#)⁶⁴² definition and the settings. Determining the relevant workstation can be accomplished in the definitions of the event routing.

By selecting a tab in the event list, you have direct access to the respective event. By clicking on an event, the event and corresponding information can be immediately displayed. What kind of information is displayed and where it is displayed on your workstation is dependent upon the settings of your user profile and workstation profile. The toolbar that is part of the event list shows the event-specific functions that are available in the form of icons.

At the workstation responsible for handling the event, as well as at all other alerted workstations, the event display occurs automatically, if applicable, unless an event with a higher priority is currently being handled there or the event should not be displayed. Furthermore, users at these workstations are alerted of the event receipt with an acoustic signal.

After an event has been received, it must first be accepted before it can be processed. This can be done by clicking on the **Accept** button or pressing **<F5>**.

As a standard, when an event is displayed you will see the first graphic and/or text of the respective datapoint displayed in the display area of the window side by side. You can configure the display to your requirements by using [layouts](#)⁶⁰⁴.



Events are displayed in the event list only if they meet the respective filters or settings for display (see: [Visibility](#)²¹⁷)!

Example: Event List with Context Menu

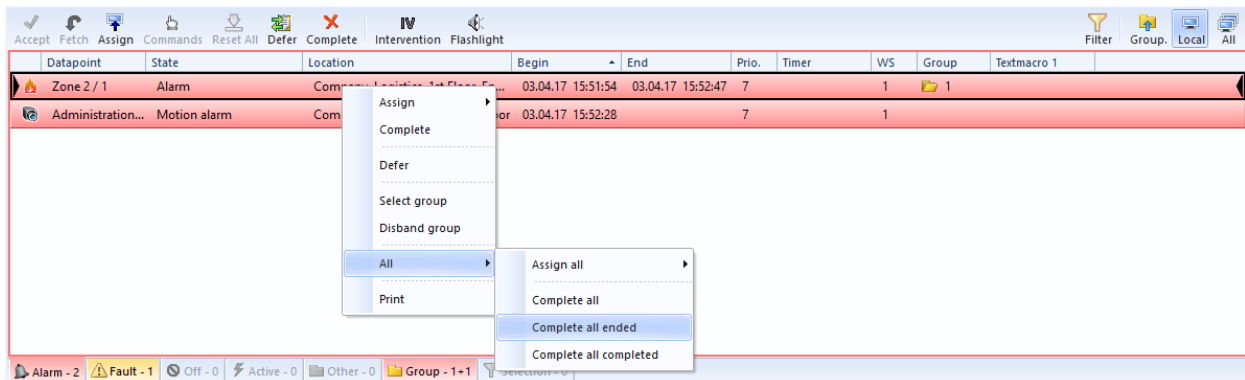


Figure 78: Event List with Context Menu

Several functions such as **Accept**, **Park**, **Complete**, etc. for event handling are available in the event list. Accepting an event should always be done first. If event processing is completed later, the event can be removed from the event list by closing it and transferred to the event archive.

Workstations on which it is possible to view events on other workstations (can be switched by the function **Local** or **All**), events can be fetched and brought to the local workstation for further processing (if requisite rights are defined). In these instances, the button, **Fetch**, is available in place of the button, **Accept** in the event list. Through this function, the event is manually assigned to the local workstation (change in workstation number) and can be further processed there.

Some standard functions are available across several events (dependent upon rights and settings). In this manner, several events can be accepted or grouped with one command. You can find the functions of the standard event list under [Event List](#)^[174] and the grouping function under [Event Groups](#)^[204].

In case of events from not projected datapoints the command **Create datapoint...** (see: [Create Datapoint from Event](#)^[747]) should be available

5.7.5 Event Filter

At different sections in the system where events are accessed, event filters are available for selection of the corresponding events. For example, filters can be defined for the name, datapoint category, interface, etc. Only the currently active entries will be considered that correspond to all given specifications, thus the criteria will be linked with a logic **AND**. Only exception is if several tags with the same, superordinated tag (parent tag) are used, then these will be treated in a special way and linked with a logic **OR**. If you leave one of the fields blank, the corresponding criteria will not be considered during the search.

Although the filter dialog is partly different for the single sections and offers different filter options depending on the application purpose, the event filter is always based on the same principle. Thus, all possible filter options with related information are described here.

The event filter is applied in the following sections:

- Definition of event list
- Free search in event list
- Free search in archive
- Archive query in text
- CSV export of archive

- Event handling

The dialog for setting the event filter can be selected e.g. in the settings or by clicking on the filter symbol [🔍] in the toolbar of the event list.

▼ Dialog: Event filter

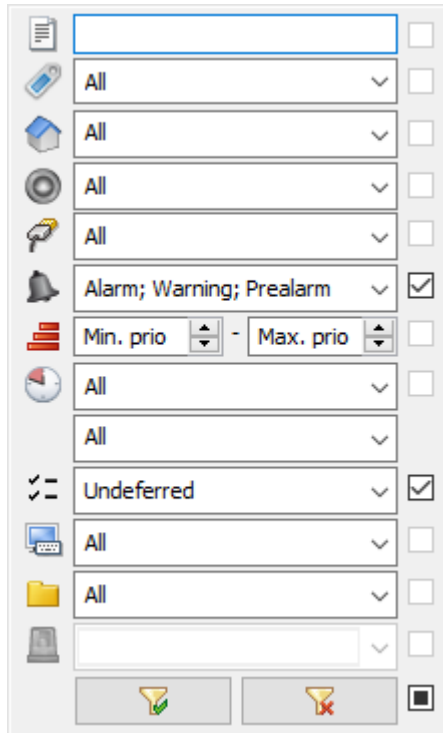


Figure 79: Event filter

▼ Functions: Dialog - Event filter



For activation of the filter elements, the checkboxes on the right side of the filter dialog have to be activated!



Free text

This is the most flexible filter option. It can be searched for any text or text fragment in a definable amount of text attributes. Upon entry of the text fragment, wildcards are supported. If no wildcard is used, the text has to correspond exactly to an attribute. It will only be searched in those text attributes that are available in the column in the event list. For the free search in the event list, the column definition indicated for list 12 is decisive here, whereas for definition of the event list, the column definition in the settings that belongs to this list will define the search fields.

Blank (default) - the filter is not active

... - if required, indicate a text.



In case of a text macro, it will be searched in all text macros, and in case of user, it will also be searched in all user fields, i.e. both in the accepting user as well as in the terminating user!

i As **Wildcards**, (*) can be used for any number of any characters and (?) for exactly one character!
 If it shall be searched for the special characters (*) or (?), these will have to be provided with the prefix (\)!
 Upper and lower case spelling will not be considered!



Tag

It can be filtered for event tags here. An event possesses the tags of the triggering datapoint that have been effective at the time of event. For the filter, any number of tags can be selected via a tree selection field. An event also possesses tags even if it has a tag which is further below in the hierarchy. All defined tags are available for selection.

- If several tags have been selected in the same hierarchy branch, the event only has to possess at least one of these tags (logic or) in order to correspond to the filter.
- If tags have been selected in different hierarchy branches, the event has to possess all of these tags (logic and). This also applies for combination.

Blank (default) - the filter is not active.

... - if required, select the corresponding tags.

i To select several tags, please hold the STRG key pressed during selection. The selection is completed using the entry key (return)!



Location

It can be filtered for a location here. An event corresponds to the filter if it either possesses exactly the searched location or a location that is subordinated to this location. If **Current selection** has been selected, the filter will be re-applied automatically upon each change of selection.

All - the filter is not active.

without - only events of datapoints that are not assigned to any location will be considered.

Current selection (default) - only events of datapoints that are assigned to or subordinated to the selected location will be considered.



Datapoint categories

Here, it is possible to select one or several datapoint categories or the current selection of one of the state counters of the explorer as filter.

All (default) - the filter is not active.

current selection - filter includes events of the datapoint of the currently selected state counter of the explorer.

... - if required, select the corresponding categories.



(Interfaces)

Here, one or several interfaces can be defined as filter. The event corresponds to the filter if it belongs to one of the selected interfaces. The following can be selected: **all defined interfaces** and **without**.

All (default) - the filter is not active.

without - Events of datapoints without interface.

... - if required, select one or several interfaces.

**(Event types)**

Here, it is possible to filter according to event types (alarm, fault, etc.). An event corresponds to the filter if it possesses one of the indicated types.

All (default) - the filter is not active.

... - if required, select one or several event types.

**(Priority)**

Here, it is possible to filter according to a priority section (from -999 up to +999). An event corresponds to the filter if its priority is within this range. Without indication of the **from** to **to** values, the check of the lower or upper range limit is not active.

Min. Prio / Max. Prio (default) - the filter is not active.

... - if required, indicate the priority range or select it.

**(Timer)**

Here, it is possible to filter according to active timers of events. An event corresponds to the filter if it possesses one of the indicated timers as active timer and if it has an expiry level that is the same or more advanced than the indicated expiry level, i.e. an event with expiry level **Warning** also corresponds to a filter with expiry level **Note**, as **Warning** is more advanced than **Note**.

All (default) - the filter is not active.

Any - only events for which at least one timer is active.

... - if required, select the timers.



It is only possible to search for timers in case of events that are in the event list, as all timers will be removed upon completion of the event!

**(Timer Extension)**

Here, it is possible to filter according to timer expiry levels - also in combination.

All (default) - the filter is not active.

Note - only events for which the note time has been exceeded will be considered.

Warning - only events for which the warning time has been exceeded will be considered.

Expired - only events for which the timer has been expired will be considered.

... - if required, select the timer expiry level.



This selection depends on the previous timer definition!

**(Event state)**

Here, it is possible to filter according to the processing state of events. An event corresponds to the filter if the indicated status applies completely. The selection possibilities are grouped in such a way that for each group, only one selection can be made. Cross-group, several selections are possible.

All (default) - the filter is not active.

Accepted / not accepted - corresponding events will be considered.

Parked / Not parked - corresponding events will be considered.

Ended / Not ended - corresponding events will be considered.

Blocked / Not blocked - corresponding events will be considered.

Suppressed / Not suppressed - corresponding events will be considered.

... - if required, select the corresponding elements.

**(Workstation)**

It is possible to filter for the workstation of events here. An event corresponds to the filter if its workstation is one of the indicated workstations. In addition to the workstations defined in the system, the special workstations **Web**, **Mobile**, **SMS** as well as a special entry **Local** for the local workstation are also available. This entry will be replaced by the local workstation number upon filtering.

All (default) - the filter is not active.

... - if required, select one or several workstations.

**(Group)**

It is filtered according to group Ids here. Both the group father as well as the group children correspond to the filter. All groups that are currently available in the event list are available for selection. By indicating **Any**, all events are selected that (as group father or group child) are part of a group. If at least one specific group has been selected, the group children will be displayed automatically. Exception: **Any** has been selected as group.

All (default) - the filter is not active.

Any - only events that have been assigned to a group.

... - if required, select one or several groups.



Upon application of the option in the event list, the group father will always be included in the result - independent of the other filter options. In addition, this option will also have an impact to the sorting. Using this option, group fathers will always be displayed at the very top of the list - independent of the other sorting!

**Operation**

It is filtered according to operations here. In connection with an operational command system, an event can be assigned to an operation which will be marked by a string Id. All operations that are stored at an event in the event list are available. By indicating **Any**, all events that have been assigned to an operation will be selected.

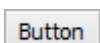
All (default) - the filter is not active.

Any - only events that have been assigned to an operation.

... - if required, select one or several operations.



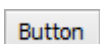
If there is no operational command system available, this filter element will not be active!

**(Delete filter)**

This function deletes all defined filter elements and closes the dialog.



The selected display type remains unchanged!

**(Apply filter)**

By execution of this function, the defined filter elements will be applied and the dialog will be closed.

5.7.6 Event Groups

Optional events can be grouped and processed together. Grouping can be executed manually by the operator, as well as automatically via scripted commands. Each group is represented by one parent event. By default, child events are not shown in the event list. List 11 of the event list has a special

meaning when working with groups. This list contains all events of the selected group. Child events can be selected individually in the list.

By processing the parent event of a group (accept, complete, etc.) the total group will be processed accordingly. Workflows of child events can be processed as an option. Required fields of child events are not evaluated. Child events cannot be completed individually. Groups can be ungrouped again anytime. Manual control of the group can be realized via the context menu. Single events can be added and removed. An event can only be a child of one group at the same time. Grouping of groups is not possible.

Group parent

Each group is represented by a parent event. The group parent can be an event or a special container created for this purpose.

The following operations of the parent are processed for all child events too:

- Accept
- Fetch / Assign
- Defer / Release defer
- Show / Hide
- Complete

Evaluation of the required input fields is only realized for the workflow of the parent event. The group parent indicates whether the group contains an unaccepted event. Displaying the parent event of a group automatically selects the corresponding group.

Group children

Events grouped under a group parent are called group children. Group children are not shown in the event list by default, but can be displayed via the button **Grouped Events**. The complete group, including the group children, can be displayed in the the group list via the operation **Select group**. Group children are never completed without their group parent. Even corresponding automatic operations are not processed. Group children can be displayed just like normal events and even their workflow can be processed as an option.

The following operations are not available for the children, but can be processed for the parent and therefore implicitly for all child events as well:

- Fetch / Assign
- Defer / Release defer
- Complete

Group list

Event list 11 (second tab from the right) has a special function and is thus called group list. If the **grouping** setting is enabled, the pre-defined filter for list 11 will be ignored and the list will be used instead of displaying the total contents of a particular group. The group parent is always located at the top of that list, regardless of the current sorting. The sorting only affects the children. The group list is the only place where you can select the option "Set as group parent" from the context menu in order to promote a group member to parent, effectively swapping their positions in the group hierarchy. The context menu entry **Select group** is not available in the group list as the corresponding list is already selected.

Limitations

Events in the event archive are always sorted by time, thus group members do not necessarily appear beneath their respective group parent. Upon event completion, the amount of group members displayed next to each group parent is saved in the parent and becomes unchangeable.



The filter can be used to search for a specific group ID in order to exclusively display a specific group including all its members!

▼ Functions: Grouping

The following describes the functions that can be available for group editing in the event list.

- **Create group**

This operation is only available for not yet grouped events in the context menu of the event list, both for single and multiple selection. If group fathers or group children are part of the selection, the function cannot be executed.

If only one event has been selected, this event is turned into the group father. Initially, the group only receives the father. Events can be added later via **Add group**.

If several events have been selected, the event with the earliest start time is turned into the group father, the other events are added as group children to the group. Here it is also possible to add further events at a later time by Add to group.

If required, all grouped events are put to the client of the group father and take over its defer characteristics so that both is consistent within the group. The grouping does not have influence to any other event characteristics.

Creation of a group is only possible if all concerned events may be edited by the operator. The status **Accepted** only has influence into the evaluation of editability if this has been defined via the corresponding setting.



Upon successful creation of a group, this group will be immediately selected in list 11 (however, it is not automatically switched to list 11)!

- **Create group as**

In principle, the function corresponds to the operation Create group. Before, it is possible to select a grouping in a dialog, on the basis of which a container event is created.

- **Define group father**

This operation is only available for individually selected group children within the group list.

The respective group child is thus turned into the group father, the previous group father to a group child. The group Id is adapted for all events as this Id has to correspond to the event Id of the group father.



If the previous group father is a container event, this event will be automatically deleted without confirmation and all progress in the workflow will be lost!

- **Select group**

Upon selection of a group, a filter is set for the group list so that all events contained in the selected group (group father and group children) are displayed.

This operation is available in the context menu of the event list, both for group father as well as for group children, and can also be directly executed by clicking into the column **Grouping**.

This operation is also executed automatically in case of event display of the group father. In this case, the group list will however not be activated.



Only by clicking into the column, the group list is directly selected as active list upon selection. If the group list has already been selected, this operation is not available in the context menu!

- **Add group**

This operation is only available for normal events and group children, however not for group fathers. All selected events are added to the group selected in the group list.

For the child, the **Client** of the father and the deferring or hide characteristics of the father are taken over. If the father is a container event, the **Start** and **End time** will be updated (if required).

Other event characteristics (such as e.g. Accepted) will not be influenced.

- **Disband group**

This operation is available in the context menu of the event list, but only for group fathers.

The group is completely disbanded, all events are turned into normal events again and can be edited separately. If the group father is a container event that has been created especially for grouping, this will be deleted without further confirmation and all progress in the workflow will be lost.



Automatisms such as e.g. automatic completion of terminated events will not be applied to the events "becoming free" upon disbanding!

- **Remove group**

This operation is only available for group children.

The respective group child will be removed from the group and can be edited separately as a normal event again. If the group child has been the last element of the group and if the remaining group father is a container event, this will be deleted without further confirmation and all progress in the workflow will be lost.

If the father is a container event, the **Start** and **End time** will be updated (if required).



Automatisms such as e.g. automatic completion of terminated events will not be applied to the event upon disbanding!

5.7.7 Event Graphics

Graphics are generally used as part of the event display. You can define up to five graphics for this purpose for a datapoint. Where and how the graphic is displayed depends not only on the graphic itself, but also on the respective event, the parameter settings of the datapoint, and the kind of display (for example [layouts](#)¹³⁸).

The symbols in the graphic provide information about the event state of the datapoint and optionally enable the retrieval of a corresponding control panel. The size of a graphic is adapted so that it can be

fully displayed and the available surface can be optimally used.

As a standard, graphics are displayed in **Event View** in events. Alternatively, graphics can also be displayed in **State View**, or users can switch between the two views.

The Event View is a special kind of display form for events in which the system can automatically render specific graphic objects invisible (dependent upon their definition). Additionally, the datapoint state can be "frozen" so that the original triggering state is always displayed.

Special Properties of the Event View:

- The event state of the triggering datapoint or sensor will be frozen.
- The objects linked to datapoints, sensors, locations or groups corresponding to the event criteria will be animated according to the event state and will always blink (colour or symbol change between event state and silence).
- Objects linked to datapoints, sensors, locations or groups but that do **not** correspond to the event criteria will be displayed in the state **Silence** or will be automatically faded out by the system, depending on the defined visibility.

Special Properties of the State View:

- The current datapoint states of all objects linked to datapoints or sensors are displayed and animated according to the animation scheme.
- Objects with a location link will, if this link corresponds to the event criteria, be animated according to the event state. All other objects with a location link will be displayed as they are drawn.
- Objects with a group link will in general **not** be animated and displayed as they are drawn.
- **No** objects that are linked with datapoints, sensors, locations or groups will be faded out automatically.

▼ **Example: Event View**

In this example, a graphic is displayed in its own window in Event View. As it is part of an event display of an alarm, the window is marked in a frame the same color as the state (in this case, red).

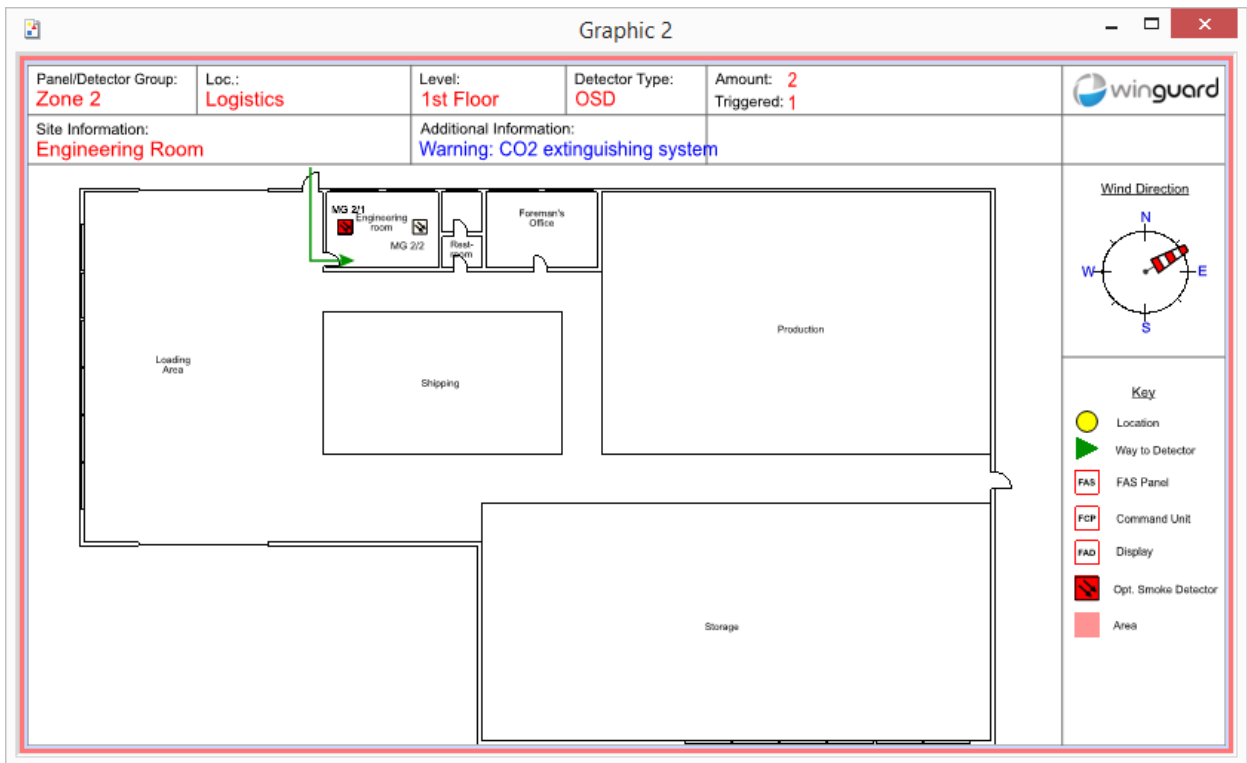


Figure 80: Event View

▼ Example: State View

In this example, the same graphic is displayed after switching from Event View to State View. As it is still part of the event display of an alarm, the window is again marked with a colored frame corresponding to the state (in this case, red).

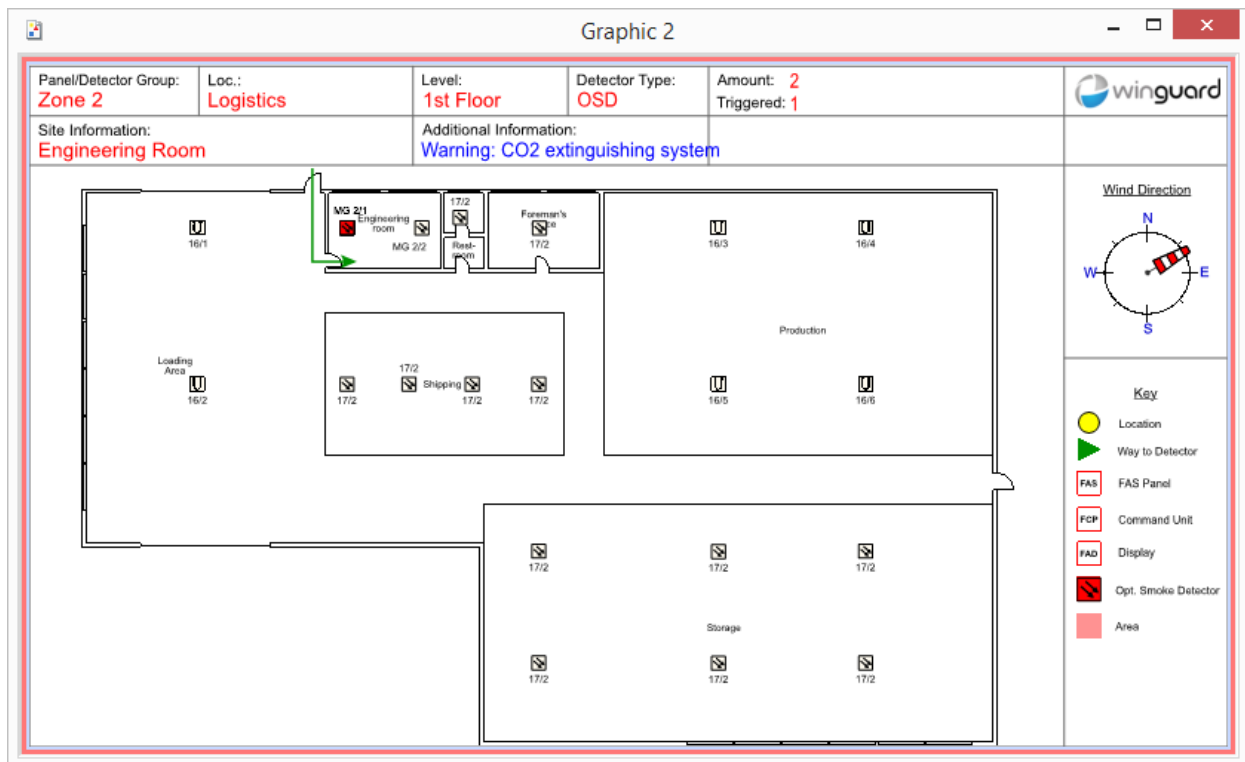


Figure 81: State View

5.7.8 Workflow

As part of the event display, a text module or **workflow** is also used. You can define the workflow at the datapoint for this purpose. Where or how the workflow is displayed is not only dependent on the text itself, but also on the respective event, workstation, user, and the type of display (for example, [layouts](#)¹³⁸), etc.

In the interactive fields of the workflow, users can enter information. Through the interactive buttons in the workflow, it is possible to switch to other workflows or retrieve additional functions. Workflows can and should be processed. They serve as a log and are automatically saved when the event is closed and transferred to the archive.

Entry fields can also be defined as required fields. That means that a user must enter certain information before the respective event can be closed.

Through respective input elements (for example, check boxes), individual text sections can be faded in or out. This allows for the creation and use of dynamic workflows for events. With a dynamic workflow, users can make the necessary decisions for the specific event and, depending on those decisions, see a display of the process going forward. Additionally, input elements, when activated, can enter preset or user-defined information into the system log. This information is also visible in the [event log](#)²¹¹ assigned to an event.

▼ Example: Workflow

This example shows a workflow displayed in a separate window. Because this is part of the event display of an alarm, the frame of the window is marked in the color corresponding to the state (in this case, red).

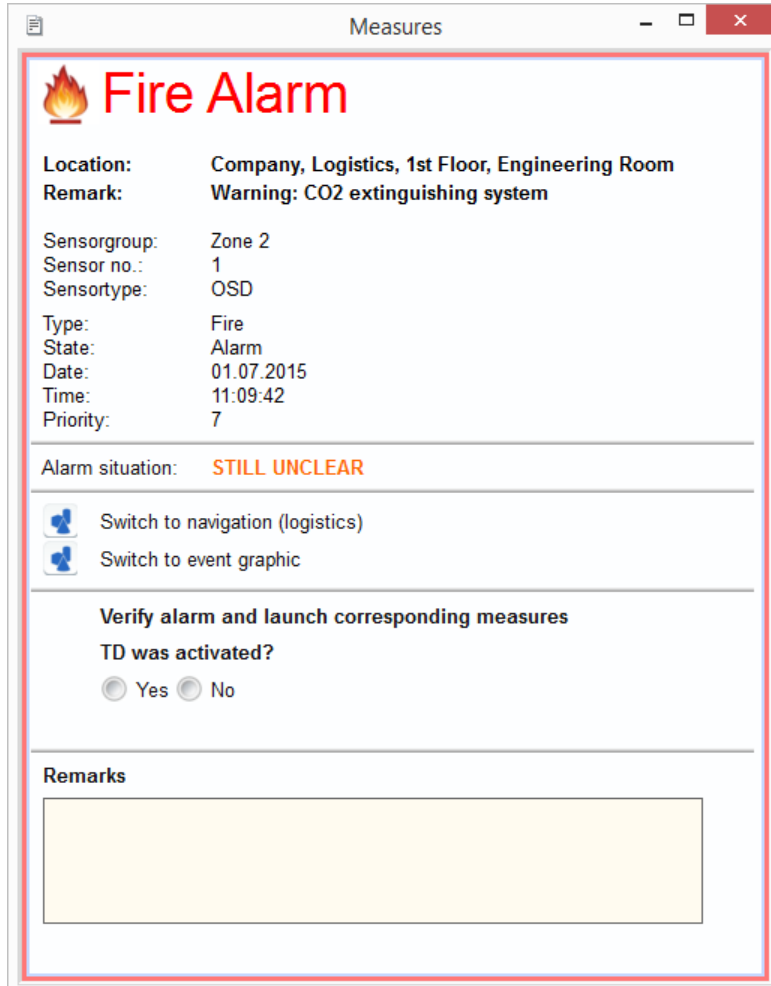


Figure 82: Workflow

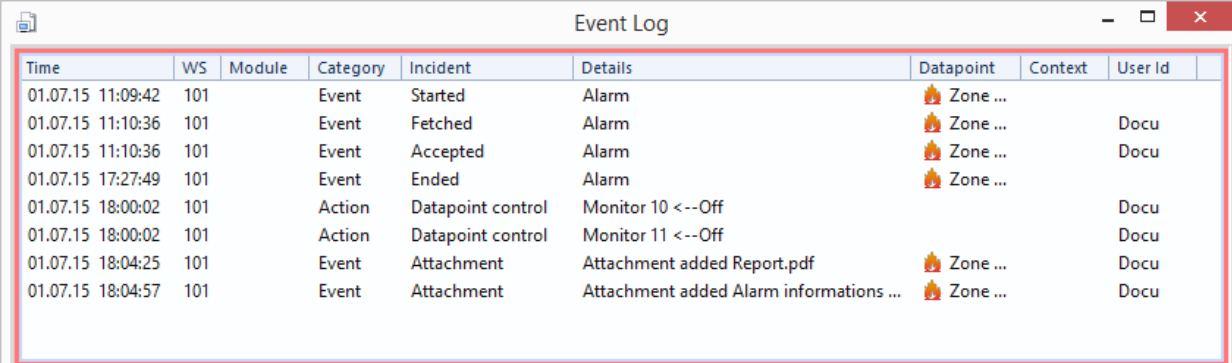
5.7.9 Event Log

The event log is created via the system log in connection with the previously-mentioned event context philosophy. All entries in the system log are automatically given a respective reference if an event context was active at the time. As part of workflow processing, explicit event log entries can be entered in the system log.

The content of the system log can then be filtered event-specifically within the framework of an event display so that only the entries that correspond to the event are shown - the event log.

▼ Example: Event Log

This example shows an event log in a separate window. Because it displays an alarm, the window is framed in the color corresponding to the state of the event (in this case, red).



Time	WS	Module	Category	Incident	Details	Datapoint	Context	User Id
01.07.15 11:09:42	101		Event	Started	Alarm	🔥 Zone ...		
01.07.15 11:10:36	101		Event	Fetched	Alarm	🔥 Zone ...		Docu
01.07.15 11:10:36	101		Event	Accepted	Alarm	🔥 Zone ...		Docu
01.07.15 17:27:49	101		Event	Ended	Alarm	🔥 Zone ...		
01.07.15 18:00:02	101		Action	Datapoint control	Monitor 10 <--Off			Docu
01.07.15 18:00:02	101		Action	Datapoint control	Monitor 11 <--Off			Docu
01.07.15 18:04:25	101		Event	Attachment	Attachment added Report.pdf	🔥 Zone ...		Docu
01.07.15 18:04:57	101		Event	Attachment	Attachment added Alarm informations ...	🔥 Zone ...		Docu

Figure 83: Event Log

5.7.10 Event Report

The event report compiles almost all relevant information regarding an event into a uniform PDF document. The report can be generated anytime by a user, or automatically. The format of the report has been largely preconfigured. You can make modifications in the system settings in the area of **Event Handling** in the section **Reports**.

Currently, an event report contains the following information:

- Header
- Details
- Log
- User commands
- Graphics



The structure and content of an event report is at this time largely pre-determined and can only be configured on a limited basis!

▼ **Example: Event Report**

This example presents an event report. This kind of report can be generated via the respective function in the toolbar of the event display.

**Report - X4 Demo
Event 1-42**



Details

Type	Camera
Datapoint	Administration-002
Sensor type	Fix camera
Location	Company, Administration, 1st Floor
State	Alarm (Motion alarm)
Priority	7
Begin	23.04.2018 11:38:04
End	
Accepted	23.04.2018 11:38:08 by Andy
Completed	
Report created	23.04.2018 11:38:16 by Andy

Log

Time	Incident	Details	User
23.04.2018 11:38:04	Event - Started	Alarm: 'Motion alarm'	
23.04.2018 11:38:08	Event - Accepted	Alarm: 'Motion alarm'	Andy
23.04.2018 11:38:13	Event - User action	False alarm	Andy

User actions

Datatype	Value
WF_CCTV	Real_alarm_no

Graphics

Graphic 1

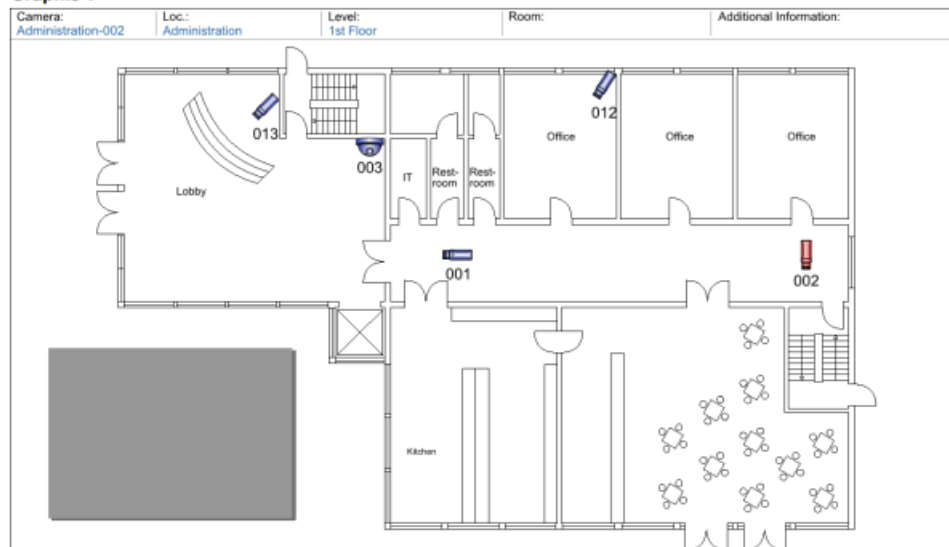


Figure 84: Event Report

▼ **Structure: Event Report**

Header	
Event Number	Ongoing ID that distinctly identifies the event.

Details	
Category	Category of datapoint (for example, fire, break-in, etc.)
Datapoint	Name of the datapoint
Sensor Type	Type of sensor (for example: camera, etc.)
Location	Full location name (all elements)
State	State (for example: alarm, fault, etc.)
Priority	Priority number (1-999)
Begin	Time stamp
End	Time stamp
Accepted	Time stamp
Completed	Time stamp
Report created	Time stamp

Log			
All entries of the system log assigned to the event such as:			
Time	Event	Details	ID
Time stamp	Event - Started	Alarm	Andy
...	Event - Accepted
...	Action - datapoint control	Turn on camera, cam 2	...
...

User actions	
All user actions assigned to the event, for example, workflow actions.	
Data Type	Value
Alarm	Error
...	...

Graphics
All graphics assigned to the event.

5.7.11 Event Attachments

Event attachments - also referred to simply as **attachments** - are files or notes that can be added to an event in WinGuard as an attachment. In addition to notes, snapshots of graphics, reports, state pictures, and video sequences, external files may also be added and provided with notes. For viewing, the attachments are, depending on file type, opened either internally in a defined display area (for directly supported standard file types such as bitmap and PDF), or externally via the linked Windows® application (in all other cases). Some attachments such as snapshots of graphics and video, can be optionally transferred in reports.

In order to use attachments, you must have the requisite system license and have arranged for a display area configured for the content type, **Attachments**, in the layout for your event display.

Additionally, in the system settings in the area of **Event Handling**, the use of attachments must be activated in the section, **Attachments**.

▼ Example: Event Attachments

In this example, two attachments have been added to an event - a note and a report. Additionally, a function-dependent context menu is visible.

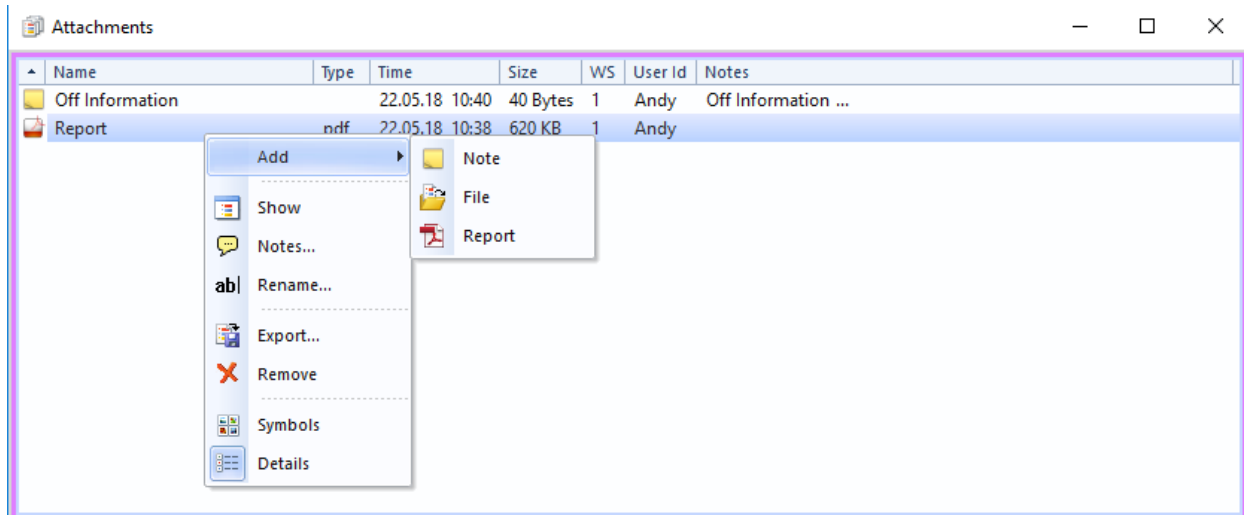


Figure 85: Event Attachments

The functions available for the definition or editing of the attachments depends largely on the type of attachment. The context menu can also be opened by right-clicking the mouse.

▼ Functions: Context

The listed commands of the context menu may only be partially available depending on the type of attachment.

- **Add** ▶

Here you can open the sub menu with the respective functions.



- **Display**

With this function, the respective attachment can be brought to the display (for example, reports).



- **Edit...**

With this function, respective attachments can be opened for editing (for example, info).



- **Notes...**

This function allows you to add comments to several types of attachments (for example, reports).



- **Rename...**

With this function you can rename individual attachments.

**Include in report**

If this function is available, the selected element is checked (✓) resp. unchecked. Checked elements will be included while generating the report (e.g. pictures).

**Export...**

Using this function, you can export individual attachments.

**Remove**

Using this function, you can delete individual attachments.

**Symbols**

This function switches the display of attachments from the **Details** View into the Symbols View.

**Details**

This function switches the display of attachments from the **Symbols** View to the Details View.

▼ Functions: Add

Here you will find the functions of the sub menu **Add**.

**Note**

This function allows you to add another element of the type, Note, into your event attachments.

**File**

With this function you can add an additional file to your event attachments.

**Report**

This function creates a new report and adds it to the attachments of the event.

5.7.12 Prioritization

Through prioritization, you determine which event is displayed first if more than one event is received at the same time. The higher the indicated value, the higher the priority of the event. If an event is received that has a higher priority than the one that is currently being handled, then the program immediately opens the event with the higher priority.

When setting up the interfaces or the definition of datapoints, you can determine the priority of the various state types of events. When defining priorities you have a range of **-1** through **999**. During setup of the interface, the presets for all states of the interface datapoints are completed. When defining the individual datapoints you have the option of overwriting these presets.

Common interface presets for priorities:

- 7** Alarm
- 6** Pre-alarm
- 5** Warning
- 4** Fault

- 3 Event, Active
- 2 Shut-down
- 1 Maintenance

Priorities **-1** and **0** have special meaning. Priority **-1** means that an event with the corresponding state type is not generated for this datapoint. A priority of **0** indicates that the respective event is not automatically opened.

5.7.13 Visibility

The display of events and their visibility can be mostly influenced by different settings and definitions in the system. For example, the visibility of locations or datapoints can be limited by rights, which is having a direct influence on the visibility of the corresponding events too.

Visibility of events:

- **Script: Event distribution / Event display**

In the scripts for event distribution and event display, it is possible to set definitions for influencing of events (e.g. tags, timers, visibility, grouping, etc.).

- **Definition: Event handling**

In event handling, it is possible to set definitions for influencing of events (e.g. fade out and group events).

- **Settings: Local/All**

With this setting in the event list, the display can be limited to events that have been assigned to this workstation.

- **Settings: Filter**

In the settings, numerous filters for event display can be defined. Depending on these filters, only the corresponding events will be displayed.

- **Settings: Segments**

Basically, only events from datapoints for which the segmentation corresponds to the respective workstation can be displayed.

- **Rights: Visibility - Locations and datapoints**

With the help of rights, the visibility for datapoints and locations can be limited directly.

- If the visibility for locations is limited, the visibility of the assigned datapoints and also of their events will be changed too.
- If the visibility for datapoints will be limited directly, the visibility of their events will be changed too.



If the visibility of locations has been deactivated, their datapoints and events are not visible too!

- **Rights: Visibility - Tags**

With the help of rights, the visibility for objects can be limited directly using tags.

- If the visibility for tags is limited, the visibility of the corresponding locations, their datapoints and also their events will be changed too.



Datapoints always inherit all tags from their location, provided that no separate tag has been defined!

5.8 Control Panels

WinGuard provides you with control panels for queries about the states of datapoints, sensor groups, detectors, and other objects, as well as the operation of coupled systems. These are dialogs that do not interfere with the operation of the system and therefore can be used at any time to control linked equipment.

The basic operation of the control panels is always the same. You can open or close the control panel via the respective entry in the menu or toolbar. If the control panel is displayed, this menu item is shaded in color. You can also open the corresponding control panel by clicking on a linked symbol in the graphic. If an interface control panel is available for a datapoint, it is opened in this manner, otherwise, the pertinent integrated control panel opens. When opening a control panel, it is always displayed where it was located last on the screen.

5.8.1 Datapoint Control Panel

In the datapoint control panel, you can get information about the states of various datapoints defined in the system and define possible control commands for each of these objects.

The datapoint control panel is opened and closed via the menu command **View|Control Panels|Datapoint Control Panel**. Whenever the control panel is visible, the menu item is shaded in color. The size of the datapoint control panel can be adjusted by dragging one of its edges or corners with the mouse.

You can enter selection criteria via the selection fields in the upper edge of the window. The list of displayed datapoint objects is selected based on this criteria. The entry fields are connected with the logical **And** and thus only objects that meet all of the criteria are displayed. The selection, **All**, is also available in every selection field. If you select All, the selection is not limited by the corresponding criterion. If you change a selection criterion, the list of objects is updated immediately.

The table shows all objects that meet the selection criteria and consists of three columns. The type of object is indicated through a symbol. Next to it is the name of the object. The state of the object is displayed via one or more symbols. If individual sensors were defined for a datapoint (sensor group), this is indicated by a different symbol for the object type. If you open this structure, the entries for the corresponding sensors are faded in. When you close the structure, the entries for the corresponding sensors are hidden again.

▼ **Dialog: Datapoint Control Panel**

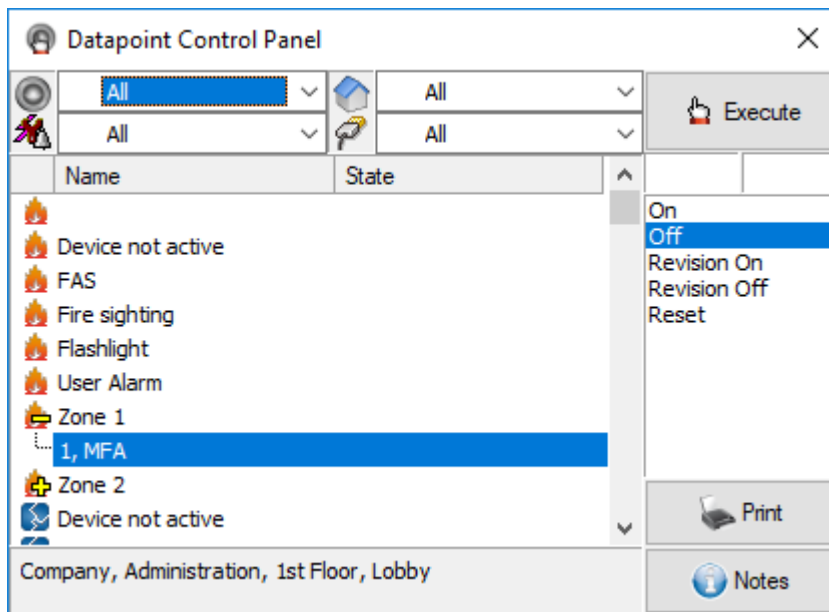


Figure 86: datapoint Control Panel

▼ **Functions: Datapoint Control Panel - General**

(Datapoint Category)

Using this selection field, you can choose which datapoint categories should be displayed in the table. The drop-down menu contains all datapoints available in the system, for example: fire, intrusion, etc. Each category is identified with a symbol.

All (default) - select datapoint category.

(Location)

With this drop-down menu you can select the objects by location. All locations are included in the form of a structured list. By opening or closing individual elements you can select the desired location (please see: [Locations](#)^[693]).

All (default) - select location.

(State)

This field allows you to select objects by their state. In addition to the individual states, you also have the option of selecting **All** or **All <> Sleep mode**. If you select the entry **All <> Sleep mode**, all objects that are not in **sleep mode** are selected.

All (default) - select state.

(Interface)

This selection field allows you to select objects that are linked via a specific interface. All defined interfaces are available for selection in the drop-down field. Alternatively, you may also select all interfaces (**All**) or an object that is not assigned to an interface (without).

All (default) - select interface.

(Table)

If you select an entry in the list of objects and sensors, the complete location information and notes regarding the datapoint are shown.

(Location Information)

Displays the location, in case the datapoint marked in the **table** is linked to a location, and its notes text (not for sensors).

(Notes Text)

You can enter notes regarding the datapoint in this field. This text can then be displayed via the [Variable](#)⁹³⁹ **Notes Text** in graphics or texts.

Blank (default) - optional



*This field is only visible if you have opened it beforehand via the button **Notes!***

▼ Functions: Datapoint Control Panel - Commands

Execute

The command selected from the command list, along with the parameters entered in the fields Parameter 1 and 2 for the datapoint selected in the table, is executed.

(Parameter 1)

Optional field, dependent on interface and datapoint category.

You can find examples under the commands in the section, [Control Datapoint](#)⁹⁷⁰.

Blank (default) - optional

(Parameter 2)

Optional field, dependent on interface and datapoint category.

You can find examples under commands in the section, [Control Datapoint](#)⁹⁷⁰.

Blank (default) - optional

(Command List)

Automatic listing of commands available for the selected datapoint. By marking and clicking the button "Execute" the command is sent to the interface.

Command - select a command.

Print

Initiates the printing of the form "State Overview" which contains the date and time, current filter settings of the datapoint control panel, and the resulting table of datapoints and their states.

Notes

If you click on this button, an additional field appears in the lower edge of the datapoint control panel in which you can enter notes/text regarding the selected object. This text can be displayed via the [Variable](#)⁹³⁹ **Notes Text** in graphics and texts.

5.8.2 Camera Control Panel

The camera control panels allows you to control cameras indicated as active (turned on) and the display of digital video sequences. With analog systems (for example analog video crossbar), only the control function is available. The cameras and monitors that are to be operated by the control panel have to be defined as datapoints of the category, camera or monitor (please see: [Datapoints](#)⁷¹⁵).

You can display or hide the dialog, **Camera Control Panel** with the menu command **View|Control**

Panels | Camera Control Panel. When the control panel is visible, the menu item is highlighted. The appearance of the camera control panel depends on system settings.

Using the selection fields in the upper edge of the control panel (if active) you can define a filter for the selection of cameras. You can also select the desired monitor for output.

In the selection field in the second row (if active) all respective cameras are listed with identifier and location. You can select one of these cameras or enter a camera number in the entry field. As soon as you select a camera, its images are loaded on the currently selected monitor. Additionally, you can operate the camera via the buttons in the lower part of the control panel as long as this is possible with the equipment that is installed.

You can also select a camera by clicking on the camera symbol of a graphic.

You can control the selected camera with the buttons in the control panel. Please note that not all functions such as motion speed, aperture adjustment, focusing, zoom, etc. are available for all camera models or video cross bars.

▼ Dialog: Camera Control Panel

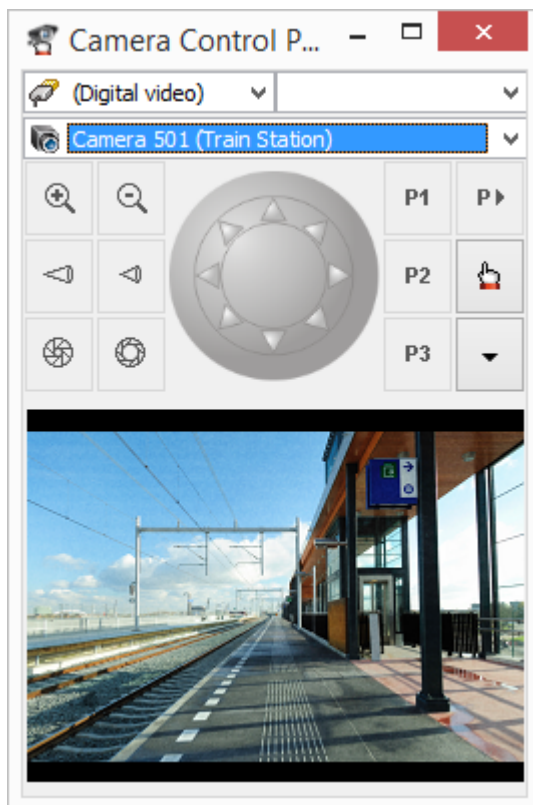


Figure 87: Camera Control Panel

▼ Functions: Camera Control Panel - Selection

▼ (Interface / Video Type)


Here is where you select the interface (filter) whose camera datapoints are then available in the list of cameras.

Digital video (default) - select interface.

 **(Monitor)**

Here you can select the monitor onto which the camera should be loaded. If a camera is already active on this monitor, this camera is directly entered into the selection field of the cameras.


Monitor - select monitor.

 **(Camera)**

By selecting a camera, the video images are loaded onto the selected or active monitor.

Camera - select camera.

▼ Functions: Camera Control Panel - Commands

 **(Zoom + / -)**

These buttons enable you to operate the zoom function as long as the camera / interface supports this function.

 **(Focus + / -)**

These buttons enable you to operate the focus function of the camera, as long as the camera/interface supports this function.

 **(Aperture + / -)**

With these two buttons you can operate the aperture function of the camera, provided that the camera/interface supports this function.


(Guiding)


Using this control field, you can move guidable cameras with different motion speeds into varying directions.

P1 (P1 ... P3)
P2
P3

Using the buttons P1, P2, and P3, you can select and control defined camera presets (positions), provided that the presets are defined and supported by the camera/interface.

P▶ (Select/Define Preset)

This function opens a context menu that either allows you to select from the already defined presets or to open the dialog, **Define Presets**.

 **(Loading)**

This button opens a context menu that enables you to select a monitor for output.

 **(Control Panel - Monitor in/out)**

This function fades the monitor of the control panel in or out.



In order for the camera control panel to work flawlessly, it is necessary that you have completed the respective definitions in the system settings in the area for [Video](#) 500!

▼ Dialog: Define Presets

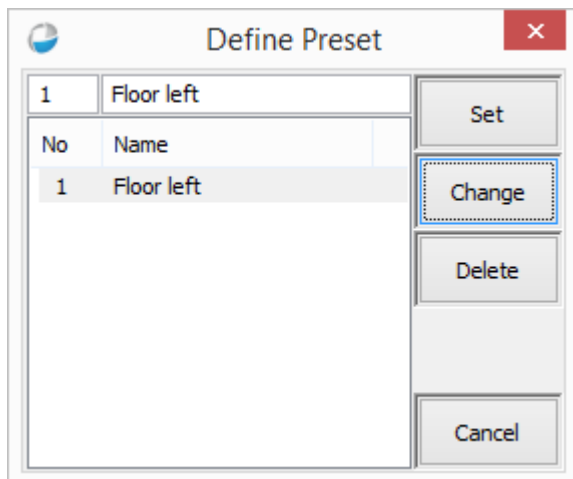


Figure 88: Define Presets

▼ Functions: Camera Presets

(Preset Number)

Entry / display of preset number.

(Preset Name)

Entry / display of preset name.

(Table of defined presets)

List of all presets of the camera with preset number and name.

Set

This function inserts the preset by preset number and name into the list and closes the dialog.

i *All previous changes are accepted without confirmation!*

Change

This function changes the definition of the selected preset.

Delete

This function deletes the selected preset without confirmation.

Cancel

Closes the dialog.

i *All previous changes are accepted without confirmation!*

5.8.3 Intercom Control Panel

You can control a coupled two-way intercom via the intercom control panel. This requires the setup of a respective interface and individual, linked datapoints of the category, intercom.

You can retrieve this control panel via the menu **System|Control Panels|Intercom Control Panel**. Depending on system settings with respect to [Intercom](#),^[513] you can also have the control panel open automatically as soon as a call is received or sent from an intercom datapoint.

▼ Dialog: Intercom Control Panel

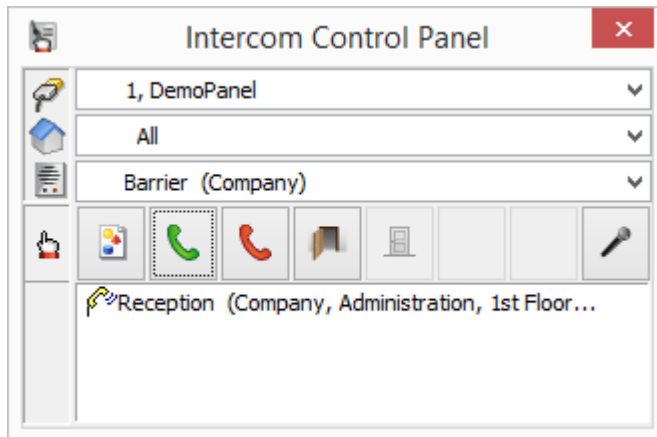










Figure 89: Intercom Control Panel

▼ Functions: Intercom Control Panel

- ▼  **(Interface)**
 Selection / filter for the intercom datapoints according to interface.
Interface -select interface.
- ▼  **(Location)**
 Selection / filter for the intercom datapoints according to location.
All (default) - optional - select location.
- ▼  **(Intercom)**
 Selection of the intercom datapoint.
Intercom - select an intercom.
-  **(Graphic Display)**
 Display of Graphic 1 of the intercom datapoint in the work area.
-  **(Connect)**
 Establishment of an intercom connection with the intercom datapoint that is defined as "control station" (please see [Tab Intercom](#)^[740]).
-  **(Disconnect)**
 Disconnection of an existing intercom connection.
-  **(Open)**
 Execution of the command defined as **Open** at the intercom datapoint (please see [Tab Intercom](#)^[740]).
-  **(Close)**
 Execution of the command that is defined as **close** for the intercom datapoint (please see [Tab Intercom](#)^[740]).

**(Hands-free mode)**

Switches to the function "hands-free mode" on the control station, as long as this is supported by the interface.

**(Info)**

Shows connection status of the active intercoms (incoming or outgoing call, busy, existing connection, emergency).

5.8.4 Telephone Control Panel

You can use the telephone control panel to make calls or, if you have established telephone subscribers as datapoints in WinGuard, to display incoming calls.

In order to carry out these functions, the TAPI module must be installed and connected to the workstation (computer) with a TAPI device. Please also ensure that the module is entered in the system settings under [Modules](#)⁵¹⁴.

▼ Dialog: Telephone Control Panel

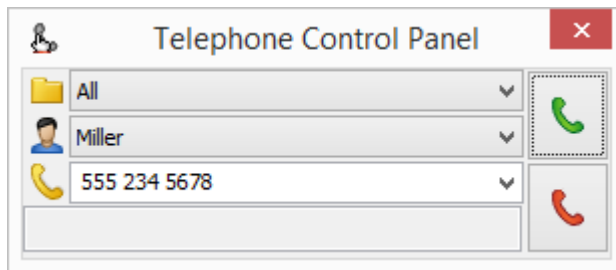


Figure 90: Telephone Control Panel

▼ Functions: Telephone Control Panel

**(Company / Group)**

Selection of one of the groups or companies under which a person is filed.

All (default) - select group.

**(Person)**

Selection of the desired [Person](#)⁵²⁶ from the selected group, whereby the first person found in that group is automatically displayed.

Last Name - select person.

**(Telephone Number - Selection / Entry)**

Selection of one of the telephone numbers listed for the selected person or manual entry of a phone number. The first telephone number found for that person is automatically displayed.

Telephone Number - Selection /entry of the phone number.

**(Info)**

Display of the connection status and the destination telephone number.

**Connect**

Command to establish a connection to the telephone number.

**Disconnect**

Command to disconnect the existing connection.

5.8.5 Notification Control Panel

Via the notification function, the system enables you to exchange messages between workstations in the network. This allows users who are working on spatially separated workstations to communicate with one another anytime. The function is similar to the mechanism used to send and receive e-mails, with which you are probably familiar through other applications.

If a new notification arrives at a workstation, an acoustic signal is emitted. You can turn off this signal in the same manner you turn off the signal that is emitted at receipt of an event, via the command **Horn off**. As long as there is an unread notification on a workstation, you will see a flashing yellow envelope in the status bar.

You can open or close the notification control panel by clicking on this symbol or any other workstation symbol in the status bar, or via the command **View | Control Panels | Notification Control Panel**. Here you can read received notifications or compose your own and send it. As long as the control panel remains open, the respective button or menu item is highlighted.

The table lists all notifications stored at the workstation in chronological order. Notifications that were sent to all workstations, so called broadcasts, are always marked as **delivered** immediately following send out, because no reviews of any states are required.

The entry selected in the table is displayed in detail in the lower part of the control panel. For newly composed notifications, you can make the respective entries in the fields.

▼ Dialog: Notification Control Panel

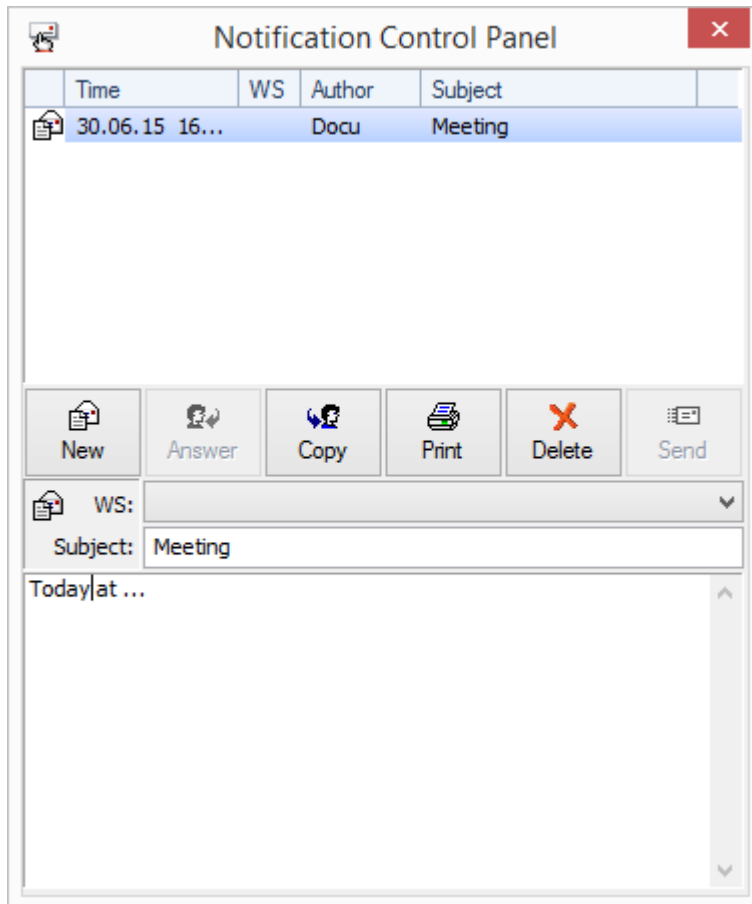


Figure 91: Notification Control Panel

▼ Functions: Notification Control Panel

(List of Notifications)

List of notifications that were sent, received, or are still being edited.

Each row contains a symbol depicting send status, a timestamp of send out or begin of editing, the receiving or sending workstation, the user logged in at the sender workstation, and the subject of the notification.

By selecting a notification, this information is displayed in the editing area.



New

The editing fields switch from display mode (gray) to entry mode (white) and the button, **Send**, is activated.



Answer

The function copies the **WS** and **Subject** (preceded by **AW:**) from the selected notification into the editing area. The editing fields change from display mode (gray) to entry mode (white) and the **Send** button is activated.

**Copy**

This function copies the **WS**, **Subject**, and **Notification Text** into the editing area. The editing fields change from display mode (gray) to entry mode (white) and the button, **Send**, is activated.

**Print**

Prints the marked notification without further confirmation using the printer presets.

**Delete**

Deletes the marked notification.

**Send**

Sends the defined notification from the editing area.

WS:

Display mode (gray): display of the workstation (recipient or sender of the displayed notification).

Entry mode (white): Recipient selection from the list of workstations available in the system (and all).

All workstations (default) - send out to all workstations.

workstation - select workstation.

Subject:

Display mode (gray): display of the subject of the marked notification.

Entry mode (white): enter the subject of the notification.

Text (optional) - enter text for the subject.

(Notification)

Display mode (gray): display of the text of the marked notification.

Entry mode (white): entry of the notification text.

Text (optional) - enter notification text.

5.8.6 Audio Control Panel

Despite its name, the audio control panels is more of a monitor, specifically for commands relating to [Switch Audio](#)⁹⁶⁷.

It contains two tables. The upper table shows the currently running audio commands and the lower the already completed audio commands. The tables cannot be formatted other than with respect to column width.

There is only one button, **Stop**, that becomes active whenever you have marked a command in the upper table. If a currently running command is ended, whether through the button in the control panel, automatically, or via a manual command entry at another location in the system, the row of the affected action is automatically switched from the upper to the lower table.

▼ **Dialog: Audio Control Panel**

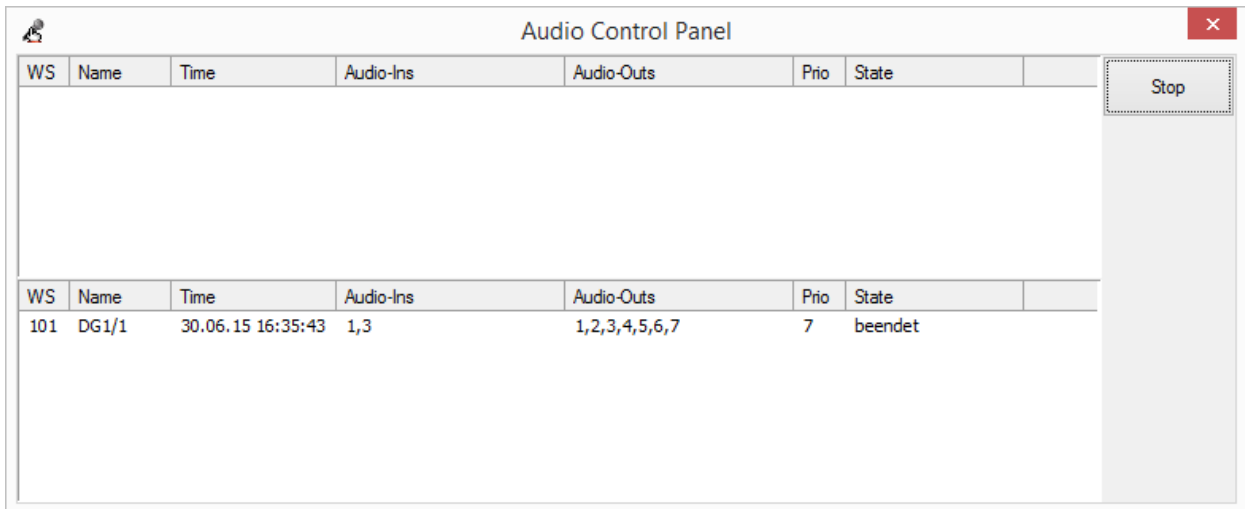


Figure 92: Audio Control Panel

▼ **Functions: Audio Control Panel Selection**

Stop

This function ends the audio output of the selected output.

▼ **Columns: Audio Commands in the tables**

- **WS**
Workstation number from which the command **Switch Audio** was triggered.
- **Name**
Parameters entered during the definition of the command **Switch Audio** in the **ID** field.
- **Time**
Time at which the command was started.
- **Audio-Ins**
Address of the datapoint, category Audio In, via which the announcement is loaded.
- **Audio-Outs**
Address of the datapoint, category Audio Out, though which the announcement is put out.
- **Prio**
Parameters that were entered during the definition of the command **Switch Audio** in the **Prio** field (priority).
- **State**
Display of the switch state:
Complete Switch - the action is fully executed.
Partial - the command is only active on part of the selected outlets because some of the outlets are still processing other audio switches with higher priorities.
Paused - the command is in the interface waitlist because an audio switch with higher priority occupies all outlets.
Completed- the audio output is ended.

5.8.7 Interface Control Panels

Several WinGuard interfaces have their own control panels. These control panels generally provide additional information regarding the installation, which is often displayed graphically. Some of these control panels also represent the user interface / desktop or part of the respective installation.

You can find additional information regarding these control panels in the help sections of the respective interfaces.

5.8.8 Event Simulation

Another important function of the system is the simulation of events. This allows you to test reactions to certain events anytime. Event simulations are an effective tool within the framework of system setup and operation, and also serve as an important training tool for users.

The menu command **Functions|Simulation...** opens the dialog, **Event Simulation**, that allows you to initiate the event simulation.

You can select the datapoints in advance through filter settings. The individual selection criteria (category, location, and interface) are joined by the logical **AND** and thus only datapoints that meet all of your criteria are displayed.

In the selection field, Sensor, the projected sensors of the datapoint selected from the table are listed, if applicable. If you would like to simulate an event for an individual sensor, you can select it here.

Via the selection area, Event, (alarm, fault, etc.) you can select which kind of event you would like to simulate.

Clicking on the **OK** button initiates the event simulation with the selected parameters for the respective datapoint. This can also be achieved by double-clicking on a datapoint displayed in the table.

By clicking on the Cancel button, the dialog is ended without an event simulation being executed.

▼ **Dialog: Event Simulation**

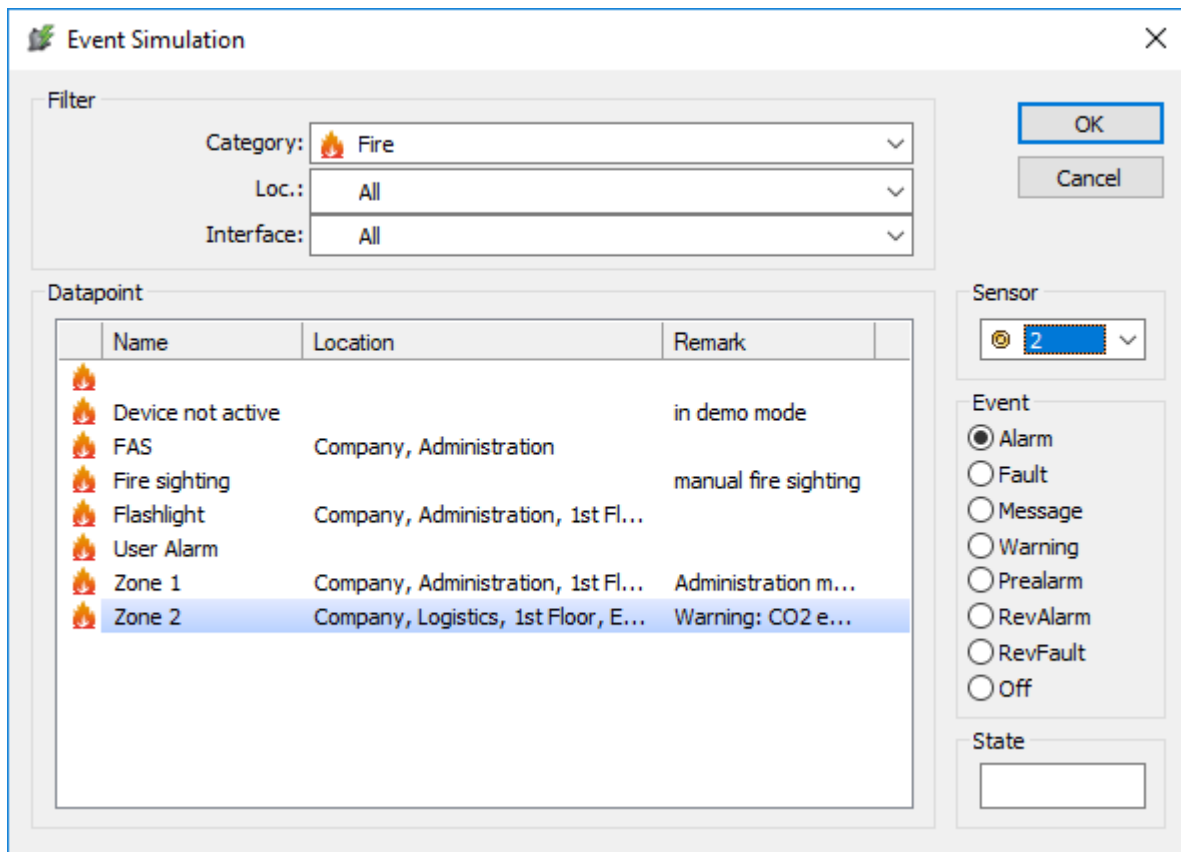


Figure 93: Event Simulation

▼ **Functions: Event Simulation**

Button **OK**

This function initiates an event simulation for the selected datapoint.

Button **Cancel**

This function closes the dialog without initiating an event simulation.

▼ **Data section: Filter**

▼ **Category**

Selection / filter of the datapoint list by category (datapoint category).
All (default) - optional - select datapoint category.

▼ **Interface**

Selection / filter of the datapoint list by interface.
All (default) - optional - select interface.

▼ **Loc. (Location)**

Selection / filter of the datapoint list by location.
All (default) - optional - select location.

▼ Data section: Datapoint

(Datapoint list)

List of all datapoints that correspond to the established filters. By selecting a datapoint and then clicking on the **OK** button, the event simulation is initiated.

The list contains the following columns:

- Symbol of the datapoint category
- Name of the datapoint
- Location of the datapoint
- Descriptions about the datapoint

▼ Data section: Sensor / Event / State

▼ Sensor

If you would like to initiate the simulation for an individual sensor of a sensor group, you must select the appropriate sensor here.

Blank (default) - optional - select sensor.

Event

This is where you determine the type of event for the simulation.

Alarm (default) - optional - select the type of event.

State

This is where you can define the text for the representation of the state (event type). If the field remains blank, the state text of the event type itself is applied.

All (default) - optional - enter a state text.

5.8.9 Command Monitor

All [commands](#)⁹⁴⁶ of a local workstation that were assigned a delay when they were defined are listed in the Command Monitor as soon as that command was triggered and the set delay time starts running. Once the command has been executed, the respective entry is removed automatically from the list. Commands that were assigned an **ID** at the start are displayed with this ID.

The advantage of assigning an ID is that these actions can be removed via a command or via the Command Monitor by clicking on the button **Remove ID** and their execution prevented.

The Command Monitor thus gives you the possibility of manually stepping in and preventing the execution of these commands. You must select the relevant commands prior to their set delay expiring.

Example: Command Monitor

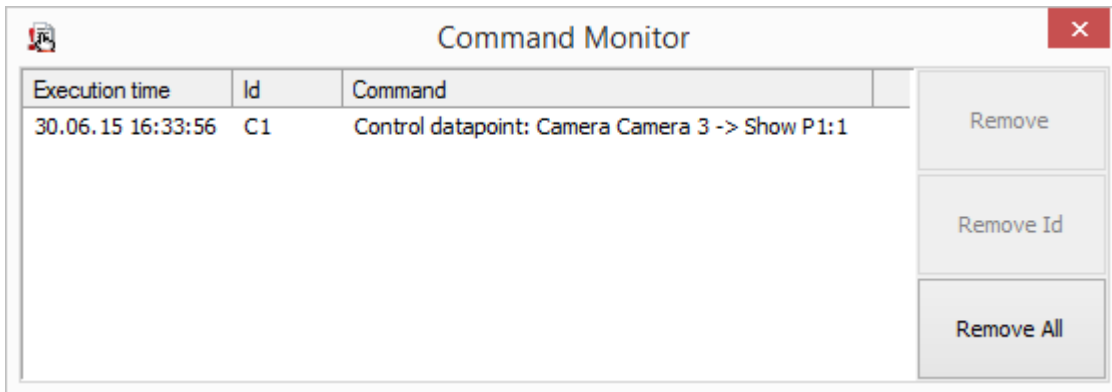


Figure 94:Command Monitor

Functions: Command Monitor



(List of commands)

Lists of commands waiting to be executed.

The list contains the following columns:

- Execution time of the command
- Id of the command
- Id of the command with parameters, if applicable.



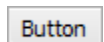
Remove

The selected command is removed and thereby not executed.



Remove Id

All commands that have the same ID as the selected command are removed and thereby not executed.



Remove All

All commands in the table are removed and not executed.



The ID is any alphanumerical character sequence with which a command can be identified!

5.8.10 Set Value

In contrast to the other control panels, it is not possible to open this one directly via the menu or toolbar. It is only available as an additional command in the context menu of corresponding measured values. Via this control panel, analog values can be sent to the specific system using the interface.

Using the interface (INI file), this functionality has to be activated for the datapoint by adding the global command **Set value**. The control panel only allows to set the values of single datapoints.

▼ Dialog: Set value

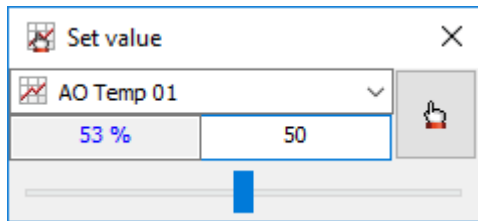


Figure 95: Set value

▼ Functions: Set value



 (Datapoint name)

It is possible to select the name of a measured value datapoint. Only datapoints supporting **Set value** are contained in the selection. Upon selection of a datapoint via a graphic or the explorer, the datapoint selection will be adapted in the control panel, i.e. the datapoint will be directly selected.

... - if required, select a measure value datapoint.



(Current value)

Here, the current value of the datapoint is displayed, whereas display of the value will be updated upon any change.



(New value)

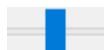
The value can be entered directly or defined using the slider. The corresponding limit values from the datapoint definition are used as limits. If another datapoint is selected, the field will be cleared.

... - enter the value directly or use the slider.



(Set value)

Using this function, the command for setting the value will be executed without further confirmation.



(Slider)

Using the slider, the value can be adjusted between the limit values of the datapoint. If the entry field for the value to be set is blank, the slider will display the position of the current value. The slider can be operated using mouse or keypad.

... - if required, adjust the value using the slider.

5.9 User Alarm

The user alarm allows you to manually initiate an alarm for a datapoint. By this means, also special events such as an alarm notice via telephone can be integrated into the normal event handling processes so that all system resources can be utilized. You can set up datapoints with the required texts and graphic documents for this purpose.

Alternatively, a user alarm can be created for every datapoint via the explorer context menu. In this case, additional information/definitions must be entered such as event and state regarding the user alarm. You can also select the datapoint that is to be used here.

5.9.1 User Alarm (pre-defined)

The menu command **Functions|User Alarm** opens the dialog **User Alarm** that allows you to directly initiate a user alarm for the respectively defined datapoints. In addition to the selected event, you can also add a location and select how the event is displayed.

▼ Dialog: User Alarm (pre-defined)

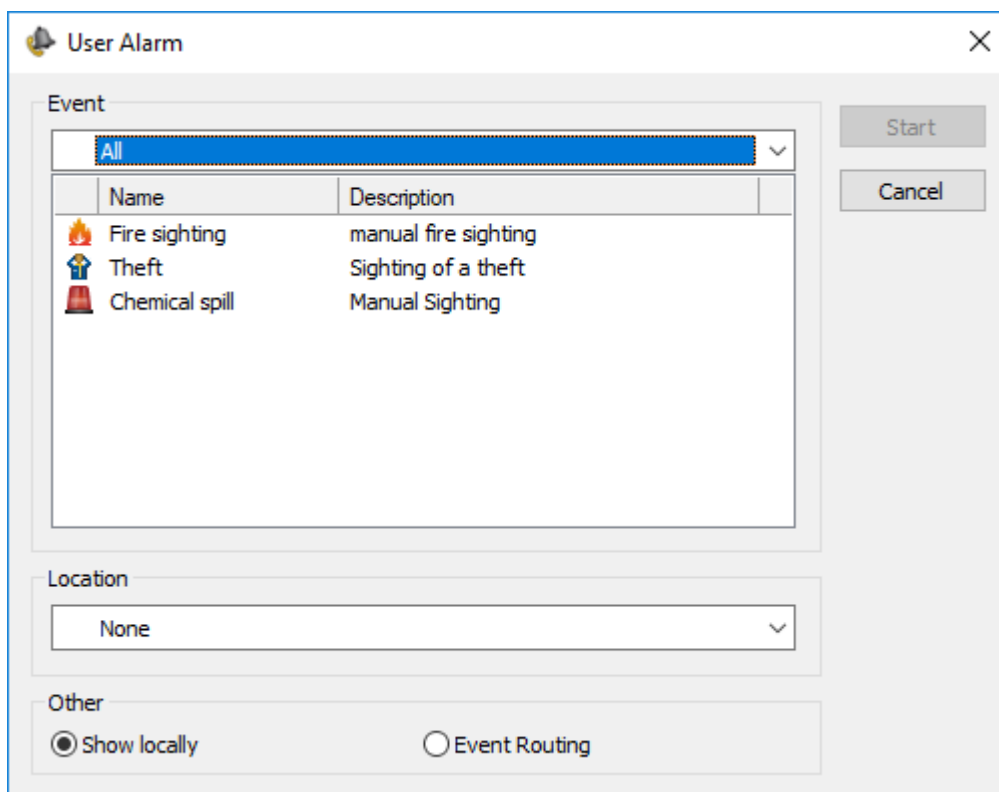


Figure 96: User Alarm (pre-defined)

▼ Functions: User Alarm (general)

Button **Start**

With this function a user alarm is executed for the selected datapoint and the dialog is closed.

Button **Cancel**

With this function the dialog is closed without a user alarm being executed.

▼ Data section: Event

▼ (Datapoint Category)

Selection of a datapoint category as filter for the datapoint list.

... - select a datapoint category.

(Datapoint List)

List of all datapoints that match the defined filter. By selecting a datapoint and then clicking on the **Start** button, the user alarm is initiated and the dialog closed.

The list contains the following columns:

- Symbols of the datapoints category
- Identifier (names) of the datapoints
- Descriptions about the datapoint
- ... - select a datapoint.

▼ Data section: Location

▼ Location

Display/selection of the location for the event that is to be created.

Blank (default) - the location of the the selected datapoint is used.

... - select a location.

▼ Data section: Other

With these options you can determine how the event is displayed.

Show locally

Active (default) - the event alarm occurs locally on the workstation on which the user alarm was initiated.

Event Routing

Active - the event alarm is sent to the workstation(s) defined for such an alarm through event routing.

5.9.2 User Alarm (via Explorer)

Activating the function **User Alarm** using the context menu of the datapoint explorer the dialog **User Alarm** is displayed that allows you to directly initiate a user alarm for the selected datapoint with the chosen conditions.

▼ Dialog: User Alarm (via explorer)

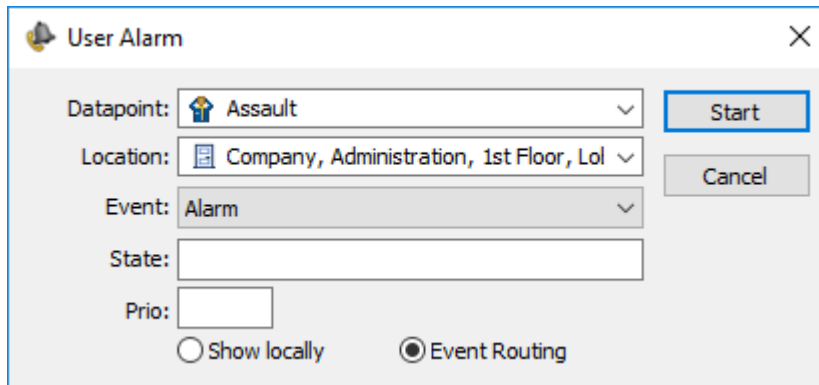


Figure 97: User Alarm (via explorer)

▼ Functions: User Alarm (general)

Button Start

With this function a user alarm is executed for the selected datapoint and the dialog is closed.

Button Cancel

With this function the dialog is closed without a user alarm being executed.

▼ Data section: User Alarm

▼ Datapoint

Display/selection of a datapoint for which a user alarm is to be generated.
... - select a datapoint.

▼ Location

Display/selection of the location for the event that is to be generated. After selecting a datapoint, its located is displayed. The location can subsequently be changed by the user if necessary.

Location of the datapoint (default) - location of the selected datapoint.

... - select a location.

▼ Event

Selection of the type of event that is to be generated (alarm, warning, etc.).

Blank (default) - alarm is applied.

Type - optional - select type.

State

Here you can define a state text for the event. This text is then displayed in the event list under State.

Blank (default) - the event type is used as state text.

... - enter the desired state text.

Prio

Here you can determine the priority rating of the event.

Blank (default) - the priority of the event is 0.

... - optional - enter the priority rating for the event.

With these options you can determine how the event is displayed.

**Show locally**

Active (default) - the event alarm occurs on the workstation on which the user alarm was initiated.

**Event routing**

Active - the event alarm occurs on the workstation(s) defined for such an alarm through event routing.

5.10 System Operation

Even independent of event processing, WinGuard offers the possibility to gather information with regard to the status of particular objects and areas as well as to operate the connected devices.

For control of datapoints, there are several possibilities. As a principle, provided that the user has the corresponding rights, all controllable datapoints can be managed via the datapoint explorer and using the datapoint control panel. For some datapoints, interface- or task-specific system control panels are available such as e.g. the camera control panel. Further information concerning the control panels can be found in the section [Control Panels](#)^[219].



In addition, datapoints can also be controlled via functions in [Graphics](#)^[756] and [Texts](#)^[887] or via [Control operations](#)^[244], [Scheduled commands](#)^[1057] and user-defined [Commands](#)^[661] (buttons).



Normally, control of datapoints in WinGuard is subject to the corresponding user rights. However, exceptions are the user-defined elements such as e.g. buttons or panels with assigned control commands. These actions will always be executed, independently of the rights of the specific user!

5.10.1 Control via Explorer

Controlling datapoints with datapoint explorer can be achieved by selecting the respective datapoint(s) (one or more), opening the context menu, and choosing the desired **command**. The list shows all available commands for that/those particular datapoint(s). By clicking on the command, the respective order is sent to the target system via the interface. The response of the system is displayed as a state or event in WinGuard.

Alternatively, the context menu for datapoint control can be accessed following the appropriate selection and clicking on the control symbol  in the title bar of the explorer. Using the filter symbol  the dialog for datapoint filtering can be opened. Via the filter elements, the selection and display of datapoints can be set up in the explorer (please also see: [Filter Datapoints](#)^[185]).

Example: Controlling a datapoint using explorer

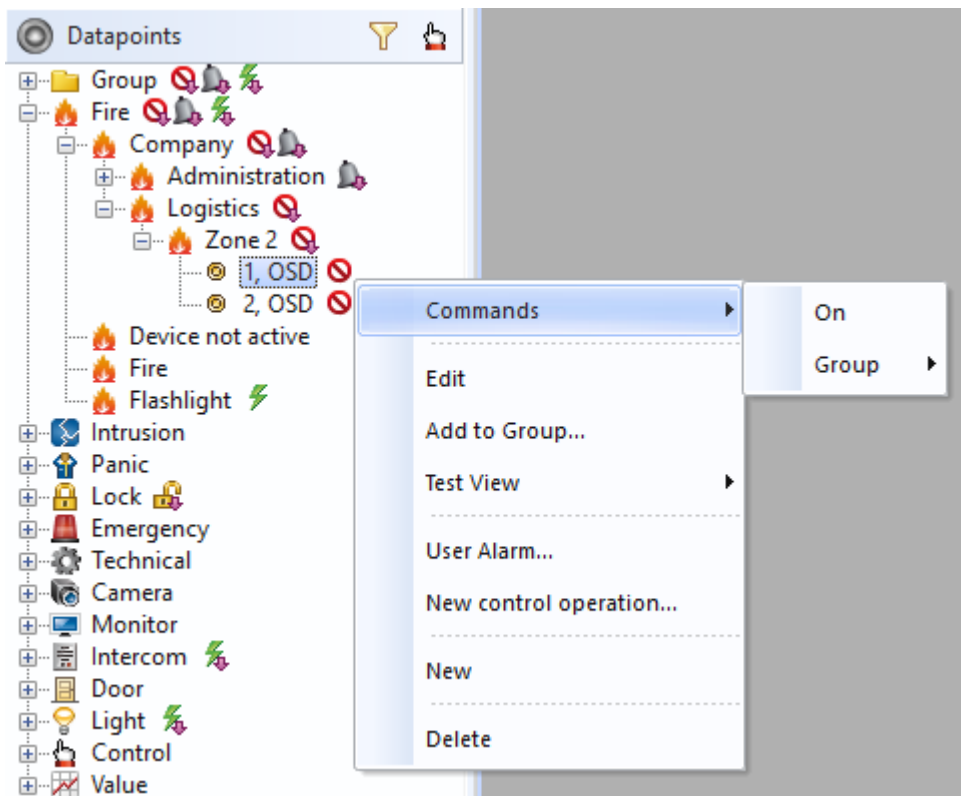


Figure 98: Controlling a datapoint using explorer

In the datapoint explorer, you also have the option of controlling several datapoints simultaneously (with one action). Simply select the respective datapoints (multi-selection), and proceed in the same manner as described for a single datapoint (call up the context menu by right clicking the mouse). Datapoints must be of the same data type and thus have identical commands in order for this approach to work correctly.

Some interfaces also support so-called global commands. When datapoints are grouped into datapoint groups in explorer by these interfaces, these can then be controlled with a respective group switch command. For example, the command **Off** can direct a detector to turn off; however, in the area of lighting control, this command turns off the light.

The development of group switch commands and whether these are utilized depends on the respective implementation in the interface.

▼ Example: Controlling datapoint group with explorer

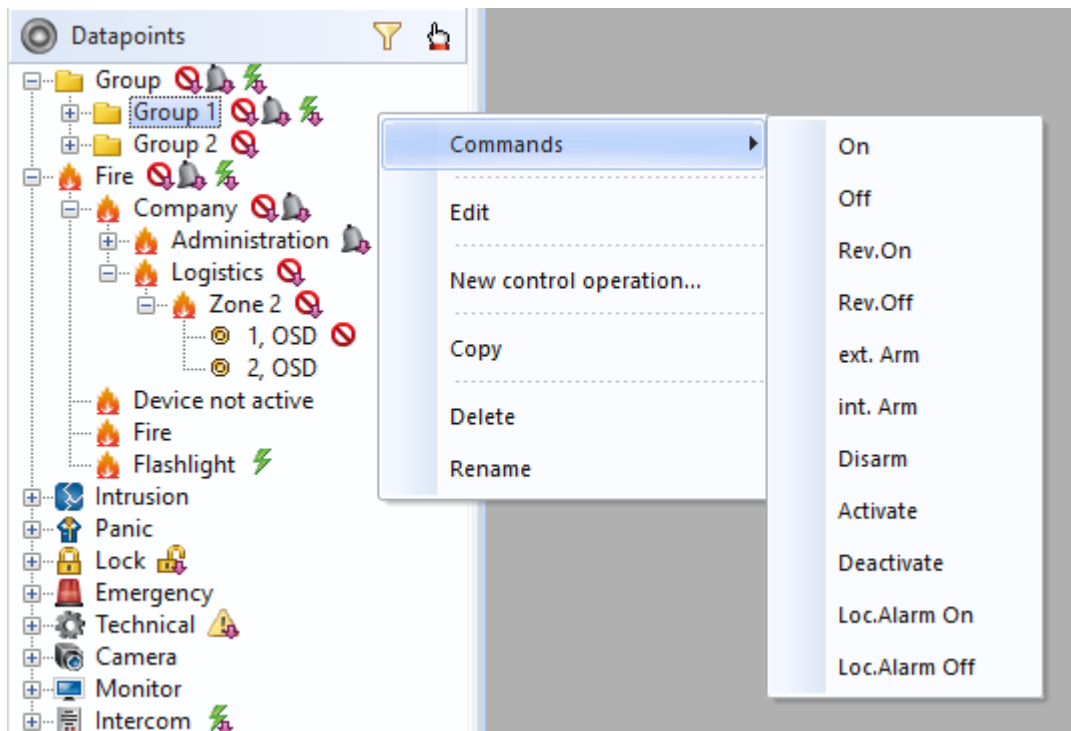


Figure 99: Controlling datapoint group with explorer

5.10.2 Controlling via Control Panels

As an alternative to controlling datapoints via the explorer, all controllable datapoints can also be directed using the datapoint control panel. Additionally, some datapoint categories also have specialized control panels, for example the camera control panel or intercom control panel.

You can find additional information in the individual sections under [Control Panels](#)²¹⁹.

5.10.3 Graphics and Text Commands

Datapoints can be directly controlled using graphics and texts from WinGuard. Graphics allow users to directly control datapoints via their linked symbols. Additionally, buttons or other graphic objects can be projected with commands so that datapoints can be controlled in this manner as well.

The context menu to control datapoints with graphic objects that are linked with symbols can be accessed by selection or positioning of the mouse and then right clicking. Which context menu is displayed depends on the definitions that were entered in the system settings. Available commands depend on the specified user rights.

Controlling datapoints with buttons can also be achieved using texts.

Example: Controlling a datapoint from graphics

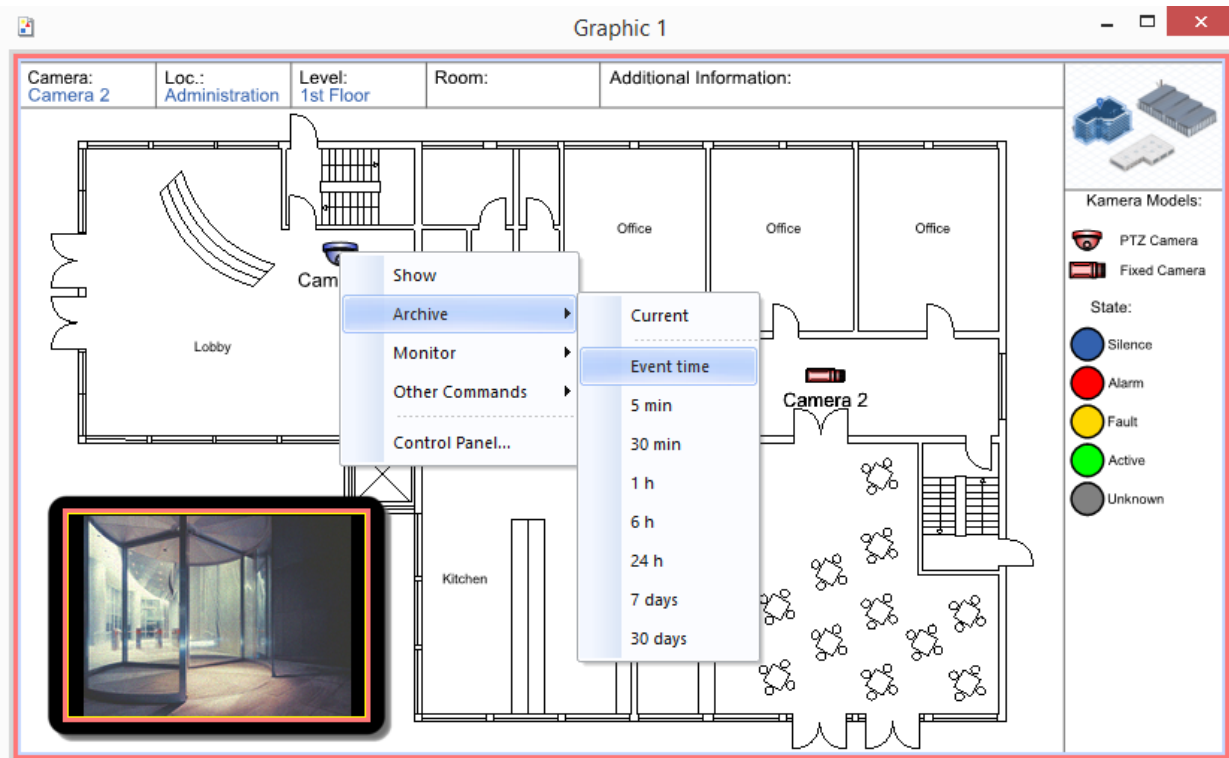


Figure 100: Controlling a datapoint from graphics

⚠ User-defined elements such as buttons or function keys with assigned commands for datapoint control are always executed regardless of the individual user rights!

5.10.4 Control Operations

As an alternative for direct control of datapoints via the explorer, control panels, etc., most controllable datapoints can also be controlled via defined control operations. Display in the application window can be realized optionally via a calendar or a list.

The application window can be opened as follows:

- Upon selection of the menu item Control operations.
- Upon notification for a monitored control operation.
- Upon setup of a new control operation via the context menu in the explorer.
- If the application window is displayed as layout content.

Further information can be found in the sections under [Control Operations](#) ²⁴⁴.

5.11 Control Operations

Using Control Operations, it is possible to define time periods (single or cyclical) during which particular datapoints or sensors will be placed into a defined target status. At the beginning or end of such a defined period, control commands will be sent to the particular datapoints, either fully automatic or after confirmation. The states of the datapoints will be monitored then. If, after a defined tolerance time, there are deviating states remaining, e.g. due to failed control commands, this will be signaled to the user.

In addition to planning and automation of control times, the control operations module also takes over their administration and documentation. Setup of control times can be organized in such a way that control operations can only be requested and monitored by a defined user group but only really activated after confirmation by an authorized person. Request of control operations is also possible via a special web interface. Furthermore, **spontaneous** disablements and re-enablements can be managed via a control operation, e.g. in order to ensure the re-enablement.

For each control operation, additional data such as subject and information can be stored. This information can be viewed at the controlled datapoint and displayed also for events that are triggered directly due to a control command (e.g. disablement). Apart from that, there is no connection between control operations and events. Reaction requirement as well as fault states during control operations are not signaled via events but there is an independent monitoring mechanism defined via the corresponding rights. The characteristic **Owner** enables to restrict monitoring to own control operations or the control operations of the own user group only. Executed control operations will be archived together with the stored information and actual execution times.

Single control operations are managed decentralized, definable in the system. Setup, modification and execution of control operations in the particular system parts is thus also possible independently from the server connection. This function is also available via the [Webclient](#) ¹⁰⁹⁶ (Exceptions: serial processing and calendar view).

Wherever control operations are displayed (lists, calendar, ...), display follows a homogeneous concept. There are several view options for display:

Views / Lists of the application window:

- Series (not available in Webclient)
- Operation required
- Active control operations
- Lists
- Calendar (Month / Week / Work week / Day) (not available in Webclient)



The module Control Operations is licensed via the Scheduler function, apart from that, it is not available. In this case, control operations can neither be set up nor edited or executed!



If you are using the operation control module, please assure that the used interfaces supports the global command from WinGuard!

5.11.1 Terms and Definitions

This section explains important terms and definitions such as Single Process, Series, User, etc. that are important to know or whose functionality is of utmost importance for operation and definition of control operations.

In the rights configuration, the object type **Control operation** is available for definition of activities. A description of the activities definition for control operations can be found in the description of the rights dialog (see [Rights](#)⁵⁵⁴).

5.11.1.1 Executor

Executor means the client at which the control operation is managed. Either a particular client can be indicated as executor or standard behaviour can be selected. In network systems, the **Active Server** is the executor, whereas in standalone systems, the executor will be the sole client. For new control operations, standard behaviour will be set automatically. To be able to change the administrator, the special right **Execute.Control operations** is required.

In principle, a control operation can be set, edited and operated at every client. However, all operations are finally only really executed at the executor.

The executor (the executor only):

- monitors execution times
- executes action at start and end
- monitors the target states
- determines and sets the status
- writes the data set

Operation or editing of a control operation is only possible if the executor is really available. In case the executor is not available, it is only possible to change the executor or to delete the control operation. For both of these operations, the right **Execute.Control operations** is required.



Changing of the executors in case the executor is not available should only be performed in absolutely exceptional cases, as this is a critical option due to the fact that both executors are performing changes at the same data set at the same time. This can result in unexpected and incorrect behaviour such as double actions, withdrawal of changes, loss of archived control operations, etc.

5.11.1.2 User

The identification of a user and/or a user group will be entered as Owner. If a user is registered, his currently valid user group at the time of entry will automatically be registered too. User registration is automatically executed upon setup of a control operation. Explicit setting of an owner is also possible, requiring the special right **Execute.Control operations**.

For series elements, the owner cannot be set individually. Series elements always receive this characteristic implicitly from the corresponding series definition. The characteristic **Owner** does not have any impact on the execution of a control operation, but it serves to restrict the definition of particular rights to own control operations resp. to the control operations of the own user group, such as e.g. **Monitor**.

5.11.1.3 Type

The type of a control operation implicitly defines the actions to be executed upon start and end as well as the target status to be monitored, if required. Only global control commands (i.e. no interface-specific commands) are used. As a consequence, an interface has to support global commands so that its datapoints can be controlled. The following table lists the types with the corresponding control commands and the monitored target status.

Type-dependent control actions:

Type	Actions		Target status
	Start	End	
Disablement	Off	On	Disablement set
Revision	RevOn	RevOff	Revision set
Armed	Armed	Disarmed	Armed set and Disarmed not set
Disarmed	Disarmed	Armed	Disarmed set and Armed not set
Active	Activate	Deactivate	Active set
Inactive	Deactivate	Activate	Active not set
Info	Set information text	Delete information text	No monitoring

i *Info is a special type that does not depend on the interface. It only allows to set the info text of a datapoint and does not execute any other control commands. As detectors do not have their own info text, the info text of the datapoint is also set for the detector!*

5.11.1.4 Subject and info

Subject and info are two definitions in text form and are available if you are defining a control operation.

Subject

The Subject is a free text field up to a text length of 100 characters and must be defined for each control operation. Reasons for the control operation can be predefined per type via a list (see: [Lists](#)⁵⁷⁰). The corresponding lists have to be created with special names (see table below).

Type-dependent names of lists for predefinition of subject selection:

Typ	Name der Liste
Default	cop_subjects
Disablement	cop_subjects_off
Revision	cop_subjects_rev
Armed	cop_subjects_arm
Disarmed	cop_subjects_disarm
Active	cop_subjects_activate
Inactive	cop_subjects_deactivate
Info	cop_subjects_note

If one of the lists has not been defined, the default list (cop_subjects) will be used in case it is existing.

Info

Info is a free multi-line text field with a length of up to 255 characters. It can be displayed upon corresponding events via the context variable **cop_info**. There is the option to set the text as info text at the contained datapoint during the control operation.

5.11.1.5 Single process and series

On the one hand, single operations can be explicitly defined, on the other hand, they are implicitly created from series definitions. Such single control operations that are automatically triggered are also called series elements. In principle, a series element corresponds to a single control operation but additionally remains linked with the series definition.

Whether a data set defines a single operation or a series is decided one-time upon creation of the data set, it is not possible to switch between the two options at a later stage. A single control operation and a series definition are treated differently. Although series definitions take over different states and can also be scheduled, active or terminated, but these states do relate to the series automatic and not to the operation.

Series definitions are not executed directly, but with the serial scheme, they implicitly define lots of single processes that are automatically set up and executed and pass through different states. Only upon start or changing of single serial elements, these are set up as independent data sets (based on the indications in the serial definition) and then behave in the same way as explicitly defined single control operations, however they continue to remain linked with the serial definition. As soon as the execution of a serial element has started, it is possible to change the [Executor](#)^[245] individually.



It has to be considered that the duration resp. start or end time can differ from the entered values in case they are in the range of a time shift (e.g. [Time shift summer/winter time](#)^[253] in Europe)!



Future series elements of a time schedule series cannot be changed. These are only managed by the time schedule, out of the normal definition!

5.11.1.6 Status

The status cannot be set directly by the user, it can only be influenced indirectly (via commands). The system dynamically perpetuates the status within the course of time and within the scope of user actions. The possible states differ for single control operations and series definitions.

Single operation:

- **Confirm?**
The action is waiting for confirmation by an authorized user, is then switching into **Planned** and, if required, directly continues to switch in another status (triggered by user confirmation).
- **Planned**
The action is waiting for reaching the start time.
- **Start?**
The action is waiting for confirmation of start by the user. This status is signaled.

- **Starts...**
The control commands have been issued and status monitoring is running. As soon as all target states have been reached, the status switches to **Started**. After a configurable time, the status might switch into **Started (Error)**.
- **Started (Error) <=> Started**
During the action phase, the states are continuously monitored, a switch between both states is possible several times. The status **Started (Error)** might be signaled.
- **End (Fault) <=> End?**
The action is waiting for confirmation to be ended by the user. Even during waiting for the confirmation to be ended, the status check will be continued to be performed such as for **Started** and corresponding errors will be displayed.
- **Ends...**
The control commands have been issued and status monitoring is running. As soon as all target states have been reached, the status switches after a configurable time to **Ended**, otherwise to **Ended (Error)**.
- **Ended (Error) => Ended**
In the status **Ended (Error)**, there will be status monitoring for some time and, if required, the switch to **Ended** will be executed automatically. A manual switch to **Ended** is also possible. The status **Ended (Error)** will be signaled. If the status **Ended** has been set or reached, there will be no status monitoring anymore.
- **Deactivated**
A requested control operation that has been explicitly deactivated.
- **Rejected**
A requested control operation that has been rejected.

Series:

- **Planned**
Start date has not been reached yet.
- **Started**
Start date has been reached, end date not exceeded yet.
- **Ended**
End date has been exceeded. Single control operations will not be set up anymore, the last process - in case it has already left the scheduling phase - will still be executed until the end.

5.11.1.7 Display

There is a homogeneous concept for display of control operations (lists, calendar, etc.).

Icon

The icon represents the type of the control operation. Thus, the known status icons are used that fit to the corresponding types. Further information is displayed by additional small **Overlay Icons**.

**Series element**

Series symbol (bottom right side) with the two arrows arranged in a circle.

**Changed series element**

Corresponding to series element (bottom right side) with an additional green point.

**In change**

Hour glass (top right side) - command sent to executor, waiting for reply.

**Executor not available**

Yellow question mark (top right side) - no operation possible. Only deleting and executor change is possible with the corresponding rights.

Colour control operation

Active control operations are displayed on a coloured background. In the list, only the type is coloured. For events, the colour of the corresponding type is used.

Colour Status

There are four status groups that are displayed in the colours **Normal**, **Greyed Out**, **Blue** and **Red**. All colours can be configured via CST, Blue and Red represent the particular status category.

- Normal - Planned, Starts..., Started, Is ending...
- Greyed Out - Ended, Deactivated, Rejected
- Question (Blue) - Approve?, Start?, End?
- Error (Red) - Everything with the addition „(Error)“

Greyed out display

The total control operation with icon and text (except start date) is displayed greyed out in the following cases:

- Status - Deactivated
- Status - Rejected
- Status - Ended
- Other states (except Starts... + Started + Is ending...) - provided that the end time is in the past.

5.11.2 Behaviour


The following subsections describe the general behaviour of the system with regard to control operations.


5.11.2.1 Data replication

Just as any other data set in WinGuard, control operations are stored distributedly in the network. If two stations establish a connection with each other, they first have to replicate their data set in order to come to a joint status. Otherwise than for other data sets, for control operations, it will not be automatically the case that the data set coming from the server will prevail, but the replication will be executed based on time stamps and control information in the data set.

The Executor concept ensures that no conflicts will occur as the data sets will only be written at one central location. Each time stamp comes from the executor and is thus continuous and can be reliably used as decision criteria for replication. In principle, during replication, the data set with the most recent time stamp will prevail. In order to attain a consistent behaviour also for the special case of changing the executor offline, the executor characteristic itself has a separate time stamp that prevails in case of deviations, i.e. if an executor has been changed offline, the data set can be changed as often as required in the separated system. These changes are overwritten by the new executor.

Some special control information as well as the principle of the data sets marked as deleted ensure that every data set will reach the server, even if it has been set up e.g. in a separated system and immediately been deleted again. Only the server will actually delete data sets.

 *Data replication is based on the time stamps of control operations and is not initiated by the server!*

 *Although these measures ensure that even offline executor changes are processed deterministically, this operation is not trouble-free as in case of simultaneous changes, some changes will be lost during replication!*

5.11.2.2 Execution

Control operations are only performed and monitored at their executor. In case the executor is not active, no changes will be made at its control operations.

Procedures upon program start

After start of the program, the executor will be started after termination of data replication. The executor will first check all control operations managed by it and will perform the following operations, depending on the status.

- If the status is **Planned** and the **End time** has been exceeded, series elements will be deleted and single processes will be stored as **Planned** with the note **Past**.
- If the status is **Starts...** or **Started** and the **End time** has been exceeded or if the status **Ends...**, the status will be set to **Ends... (Error)** and monitoring of the status will be started. Control operations with other states will not be changed.

Procedures during normal operation

During normal operation, the executor monitors the times of the control operations, the states of the datapoints and reacts to corresponding user confirmations.

The control commands for **Start** are sent to all datapoints that are not yet in the required target status. The status is set to **Starts...** and the tolerance time for status monitoring is started.

The control commands for **End** are also sent to all datapoints that are not yet in the required target status. The status is set to **Ends...** and the tolerance time for status monitoring is started.

- If the **Start time** has been attained and the option **Start requires confirmation** has been set, the control operation will be set to **Start?** and will wait for confirmation, otherwise the control operation will be started.
- If confirmation is received for **Start?**, the control operation will be started.
- If the **End time** has been attained and the option **End requires confirmation** has been set, the control operation will be set to **End?** and will wait for confirmation, otherwise the control operation will be ended.
- If confirmation is received for **End?**, the control operation will be ended.
- In case of a status change of a datapoint, all active control operations containing this datapoint will be checked with regard to their total status and it will be further proceeded according to **Target status OK** or **Target status Error** (see below).
- In case of a confirmation for **Ended (Error)**, the status will be set to **Ended**.

If the **Tolerance time** has been expired, it will be checked whether all datapoints are in the required target status.

If **Target status OK**, the addition (**Error**) in the status will be deleted, furthermore there will be a direct transition from **Starts...** to **Started** or from **Ends...** to **Ended**. Control operations that have once attained the status **Ended** without error are finally terminated.

If there is the **Target status Error** and a tolerance time is active, nothing more will happen. However, if there is no active tolerance time, the addition (**Error**) will be set for the particular status, furthermore, if required, there will be a transition from **Starts...** to **Started (Error)** resp. **Ends...** to **Ended (Error)**.



Control operations will be only executed and observed at the executor!

5.11.2.3 Events

Control operations work according to an event-independent concept. In particular, events are not used to point out execution errors of a control operation. For control operations, there is an independent notification concept. However, depending on the actual implementation and configuration of a system interface, actual events might be triggered due to control operations, e.g. in case of disablements.

Upon receipt of an event, it is thus always checked whether a control operation is active that caused the corresponding status. In this case, the following characteristics of the control operation are provided as context variables in the event message in order to be able to display them in graphics and text.

Event-dependending context variables:

Element	Context variable
Id	cop_id
Subject	cop_subject
Info	cop_info

5.11.2.4 Observe

For control operations in WinGuard, the concept **Observe** has been introduced. Via the right **Object.Observe** (see: [Rights](#)⁵⁵⁴), a number of control operations to be observed is generically defined.

For example, this process can be limited to control operations of a certain type, to own control operations or the ones of the own user group.

In contrast to events that are actively distributed, a user is defined as observer in order to receive control operations. In case the observation is defined in a function profile, this profile can be activated and deactivated dynamically by the user. Observing can also be considered as responsibility that is dynamically taken over and handed over in this way.

Observed control operations are always visible for a user. In the application window, the display can be switched between **Observed control operations** and **All control operations**, whereas **Observed control operations** is always possible. In case of status errors during an observed control operation or if operation steps are required, the user will be notified accordingly (see: [Notification](#)^[252]).

5.11.2.5 Notification

For notification of execution errors from an operation control no events are generated, but the table view [Table view](#)^[255] is shown with relevant information. The window with the notification bar will be shown at login if there are some observed control operations with user intervention are active. The notification bar is closed if there are no more observed control operations with user intervention.

For observed control operations, a notification will always be issued in case the control operation switches or an user intervention is necessary to one of the following states with error.

- Started (Error)
- End? (Error)
- End (Error)

Or if an operation step is required for the control operation, i.e. in case of one of the following states.

- Approve?
- Start?
- End?

With regard to notification, it can be differentiated between the basic situations with the activated or not activated application window (table- or form view).

1. The application window is not open:

- the application window is opened via the target area defined via the settings
- the list Active control operations is set as View
- the sound stored in the settings is issued as continuous tone
- the control operation (for which the notification is issued) is selected and placed into the field of view
- the info bar with the notification note is additionally displayed.
- Upon confirmation of notification (green checkmark), the sound is terminated and the info bar is closed.

1. The application window is open:

- the first found application window will be placed in front.
- the current view in the window will not be changed.

- the sound stored in the settings will be issued as continuous tone.
- the info bar with the notification note is displayed.



Upon confirmation of notification (green checkmark), the sound is terminated and the info bar is closed.

5.11.2.6 Time shift

For switching between summer and winter time, the following characteristics have to be considered. Series elements are treated in the same way as single processes, i.e. their start and end time will be calculated first and, if necessary, there will be an adaptation afterwards.

Winter time -> Summer time

Here, the clock will be put forward from 2:00 to 3:00 in the night, i.e. the times between 2:00 and 2:59 will not occur on that day. Each time indication in this range will be shifted forward by one hour, i.e. from a start time 2:15, the start time 1:15 will result. The same applies to the end time. ?

In case only the start time is in this range, the duration of the control operation will be extended by 1 hour, in case only the end time is in this range, the duration of the control operation will be reduced by 1 hour, which might cause that the control operation will not be executed at all as the end time is even before or at the same time as the start time.

Summer time -> Winter time

Here, the clock will be put back in the night from 3:00 to 2:00, i.e. the times between 2:00 and 2:59 will occur twice on that day. Each time indication relates to the first attainment of the indicated time. In case the start time is before or within the respective time range, but if the end time is after the respective time range, a control operation will be extended by 1 hour.

The second occurrence of this time at that day will be completely ignored with regard to control operations, i.e. if, for example, a series of control operations is created at 2:45 which shall be executed daily from 2:15 until 2:30, these will be executed as of the next day and not directly upon second attainment of this time.

5.11.2.7 Special Feature

With regard to functionality and, in particular, with regard to monitoring, it has to be ensured that in the list of all datapoints/detectors of a control operation

1. no element has been considered twice.

This means e.g. that, additionally to a detector, there shall not be contained the assigned datapoint (detector group) in the same control operation. The same applies - at least for some systems - also to datapoints with regard to their superordinated sections.

2. no partial amount of these elements shall be covered by one single element.

This particularly means that, in case a total detector group shall be controlled, the detector group shall not simply be represented by the list of its single elements. In such a case, the group has to be used instead of the detectors.

Reason is that, in case all single detectors of a group have been switched off, some systems interpret this as a switch-off of the group and as an activation of the detectors. This might lead to the fact that the expected target states will not be attained. The same applies for similar hierarchies, e.g. detector groups in connection to sections. Thus it might be required (depending on the system) to set one section to revision instead of setting all single groups of this section.



The behaviour of systems might sometimes lead to the fact that a control operation is executed but that the result does not correspond to the expectation so that monitoring might fail!

Example: The switch-off of the last detector of a fire detector group might lead to switch-off of the total detector group and, at the same time, to activation of the single detectors so that monitoring of the detector fails in this case!

5.11.3 Table view

The table view lists all control operations defined in the system. Here it is possible to newly create, copy and delete control operations. By double-clicking on one of the entries or by selection of an entry and clicking on the button [Form view](#),²⁶⁵ the edit window can be opened. Via corresponding functions of the toolbar, the general table view can also be changed to another view.

Upon viewing the list without time filter, the display will be in the so called **Endless mode**. Here, the list will be sorted according to **Start**, as the list might consist of infinite elements (in the future). Only by limitation via a time filter, the list can also be sorted according to other columns.

If sorting is available, upon clicking on a column headline, it will be sorted according to this column. Upon clicking once again, sorting will be executed in a vice versa sequence. The fact that and how it will be sorted according to a column will be displayed by a small symbol in the headline. In case two entries should be the same, it will always be sorted additionally according to the start time, if the start time is the same too, it will be sorted according to the Id.

Between the toolbar and the table view, there is the info bar containing information in text form resp. additional functions for an active notification (marking) or filtering. In case no notifications or filters are active, the info bar will be faded out.

▼ Window: Control Operations - Table view / List

Start	End	Type	Status	Datapoints	Location	Subject	Id	Owner	Executor
Mo 23.05.16 16:49	17:07	Off	Completed		Company, Logistics, 1st Floor, En...	Abschaltung Test 01	101-1	Docu	SERVER
	17:12 18:11	Off	Completed		Company, Logistics, 1st Floor, En...	Abschaltung Test-Serie 01	101-2-1	Docu	[Server]
Tu 24.05.16 14:29	15:29	Off	Completed		Company, Logistics, 1st Floor, En...	Commands Test 01	101-3-1	Docu	SERVER
	14:30 18:11	Off	Completed		Company, Logistics, 1st Floor, En...	Abschaltung Test-Serie 01	101-2-2	Docu	[Server]
We 25.05.16 14:29	15:29	Off	Completed		Company, Logistics, 1st Floor, En...	Commands Test 01	101-3-2	Docu	SERVER
	17:01 17:35	Off	Started (Error)		Company	Cmd control test 01	101-4-1	Docu	SERVER
	17:11 18:11	Off	Planned		Company, Logistics, 1st Floor, En...	Abschaltung Test-Serie 01	101-2-3	Docu	[Server]
Th 26.05.16 14:29	15:29	Off	Planned		Company, Logistics, 1st Floor, En...	Commands Test 01	101-3-3	Docu	SERVER
	16:35 17:35	Off	Planned		Company	Cmd control test 01	101-4-1	Docu	SERVER
Fr 27.05.16 16:35	17:35	Off	Planned		Company	Cmd control test 01	101-4-2	Docu	SERVER

Figure 101: Control Operations - Table view / List

▼ Functions: Toolbar Table view left side



Form view

This function switches the window to form view.



New

This function creates a new control operation.



Copy

This function creates a copy of the selected control operation.

**Delete**

This function deletes the selected control operation upon confirmation request. Here you can decide whether only this element or the total series shall be deleted.

**Commands**

This function opens a popup with the command menu.

**Series**

This function enables switching to list view for series.

**Operation required**

This function enables switching to the list view of control operations that require operation.

**Active control operations**

This function enables switching to the list view of active control operations.

**List**

This function enables switching to the general list view.

**Month / Week / Work week / Day**

Via the function at the left side, it is normally switched into the monthly calendar view. In addition, the selection field (↕) opens a menu via which the calendar view for **Day**, **Week**, **Work week** and **Month** can be selected. The selection will then be displayed by a corresponding symbol.

**Today**

Via this function, it can be switched to the current date resp. to the first COP with a start time \geq today 0:00.



*Will only be active if the list is in **Endless** mode (no time filter active)!*

**Current time period (Date)**

...

If the calendar view is active, the current time period will displayed here that can also be changed via the arrow functions (◀ ▶).

▼ Functions: Toolbar table view right side

**Filter**

This function opens the dialog with the filter settings. The button shows a green checkmark (✓) in case a filter has been activated.



*The filter is not available for the list view **Operation required!***

**Observed control operations**

Via this function, the filter for **Observed control operations** is activated.

**All control operations**

Via this function, the filter for **Observed control operations** is deactivated.

▼ Functions: Info bar

- **(In case of pending notification)**

Here, the info bar shows a text note referring to the notification. Behind that, there might be two buttons, one for confirmation (button with green checkmark) and one for Switch off sound (button with switched off horn). Switch off sound only switches off the sound, Confirm will also switch off the sound, close the info bar and switch to the operation list, whereas the corresponding control operation will be selected and displayed.


- **(In case of active filter)**

Here, the info bar displays the active filter settings including icon and text next to each other.

▼ Example: Columns of table view / List

- **Start**

Here, the start time is displayed including weekday, date and time. Date will be omitted upon the next control operation at the same day, except for the top list entry where the date will be displayed anytime.

 *Weekday and date are displayed in **red** if it is a day defined as **free day** in WinGuard!*

 *No times will be displayed in the series list here!*

- **End**

Here, time and, if required, date (only for processes with date change) will be displayed.

 *No times will be displayed in the series list here!*

- **Type**

In this column, the type of control operation is displayed including icon, whereas active operations are highlighted in colour.

 *Possible types are: **Disablement, Revision, Arm, Disarm, Active, Inactive and Note.***

- **Status**

Here, the execution status is displayed as text, coloured depending on the status.

- **Datapoints**

Here, the icons for all contained datapoint categories are displayed. The names of the datapoints can be viewed as tooltip over each icon.

- **Location**

In this column, the overall location for the contained datapoints is displayed.

- **Subject**

This column contains the subject defined for the control operation.

- **Id**

Here, the unique Id of the control operation that is generated by the system is displayed.



*The **Id** consists of the client number, a control operation number and, if required, a consecutive number of the series element!*

- **Owner**

This column displays the owner name with icon.

- **Executor**

This column displays the executor name with icon.

▼ Functions: Context menu Table view

- **Redo operation**

For single operations with status errors, this function will send the corresponding commands (according to status Started or Ended) once again to all datapoints that do not yet have the target status.

- **Confirm end**

For single operations with **Ended (Error)**, this function removes the (Error) in order to complete the control operation manually. .

- **Approve**

For requested single operations with status **Approve?**, this function takes the control operation over into planning, further steps will follow automatically.

- **Decline**

For requested single operations with status **Approve?**, this function sets the status to **Declined**.

- **Start now**

With this function, the selected control operation (future single operations) can be executed directly.

- **End now**

With this function, the selected control operation (active single operations) can be ended directly.

- **Defer**

With this function, a dialog for deferring the start of the selected control operation is opened (see: [Defer Control Operations](#)²⁶²).

- **Defer end**

With this function, a dialog for deferring the end of the selected control operation is opened (see: [Defer Control Operations](#)²⁶²).

- **Activate**

With this function, a deactivated control operation (single operation) can be re-activated.

- **Deactivate**
With this function, the selected control operation (active single operations) can be deactivated directly.
- **New**
With this function, a new control operation is set up.
- **Copy**
This function creates a copy of the selected control operation.
- **Delete**
With this function, the selected control operation is deleted after confirmation.
- **Edit**
This function switches the window to form view.

5.11.3.1 Filter

For selection of data in the table view, the selection elements are provided via the filter dialog.

▼ Dialog: Control Operations - Filter

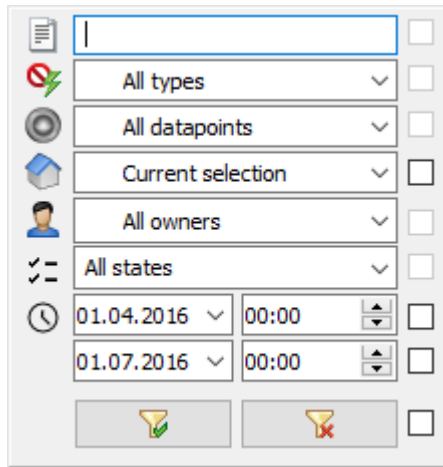


Figure 102: Control Operations - Filter

▼ Functions: Control Operations - Filter



To activate the filter elements, the checkboxes at the right side of the filter dialog have to be activated!



(Free text)

Here it is possible to define a text for searching in Subject or Id. The search will be executed case-insensitively.

Blank (default) - no filter - all elements will be considered.

... - only points containing this text in its name will be considered.



(Operation type)

It is possible to select an operation type as filter. The following selection is available: All Types, Disablement, Revision, Arm, Disarm, Active, Inactive and Note.

Alle Types (default) - no filter - all operation types will be considered.

... - only datapoints of the selected operation type will be considered.



(Datapoint category)

It is possible to select a datapoint category as filter. The following selection is available: Current selection and the single datapoint categories incl. datapoint groups.

All (default) - no filter - all datapoint categories will be considered.

... - only datapoints of the selected category will be considered.

**(Location)**

It is possible to select a location as filter, whereas the location will be applied in relation to the datapoints. The following selection is available:

All Locations or Current Selection

Alle Locations (default) - no filter - all locations will be considered.

Current selection - only locations that are assigned or subordinated to location selected in the location explorer will be considered.



The selection relates to the location currently selected in the location explorer!

**(Owner)**

An Owner (User) can be selected as filter. **All Owners** and **Current Selection** is available.

All Owners (default) - no filter - all owners will be considered.

Current selection - only control operations that are linked to the selected owners will be considered.

**(State)**

A combination of control operation states can be defined as filter.

All States (default) - no filter - all states will be considered.

Deactivated - all deactivated states will be considered.

Not deactivated - all active states will be considered.

Ended - all ended control operations will be considered.

Not ended - all control operations not ended yet will be considered.

Edited - all edited control operations will be considered.

**(Schedule section)**

It is possible to define a schedule section of the format dd.mm.yyyy HH:MM as filter here. Only those control operations that are ready for execution within the defined schedule section will be considered.

... - enter date and time directly or select them.

**(Delete filter)**

This function deactivates all active filter elements and closes the dialog.



The selected view form remains unchanged!

**(Apply filter)**

By executing this function, the defined filter elements will be applied and the dialog will be closed.

**(Activate / deactivate filter element)**

Right to the filter elements resp. to the button of the dialog, there are checkboxes via which the corresponding filter elements can be activated.

inactive (default) - the element will not be considered for filtering.

active - the element will be considered for filtering.

5.11.3.2 Defer control operation

Using the dialog **Defer control operation**, the start times of control operations still waiting for execution or the end times of already active control operations can be deferred or changed. The dialog is opened via the corresponding functions of the definition windows for control operations.

▼ Dialog: Defer control operation

Figure 103: Defer control operation

▼ Data section: Control operation

🚫 (Operation type and Id)

The Operation type and Id are displayed here for checking purposes.

For control operations to be executed, this line at the upper right side will always display the state (e.g. **Planned**, **Deactivated**, etc.), however, no command is available there.

🕒 (Date and time)

Date, Schedule section resp. duration are displayed here for checking purposes.

💬 (Subject)

The subject is displayed for checking purposes.

🏠 (Location)

The location structure all datapoints have in common is displayed here.

🎯 (Datapoints)

A list of all datapoints incl. datapoint category (symbol) that are assigned to the control operation is displayed here.

▼ **Data section: Defer by**

(Deferral time)

Alternatively to entering the **Time**, it is also possible to directly indicate a period for deferral or end of the control operation. By this indication, the setting of start and end is adapted accordingly.

Blank (default) - if required, indicate the deferral alternatively to **Start / End**.

▼ **Data section: New execution time**

Start

If active, the new starting point incl. execution date and time can be defined here.

... - indicate date and time directly or select them.

i *If the control operation is already active, this entry is not possible anymore!*



Now

With this option, the execution time can be set to the current time so that the execution will start immediately upon storing. The selection for the start time will be deactivated if required.

inactive (default) - the defined **Start** time will be used for execution.

active - the control operations are executed directly upon storing.

i *If the control operation is already active, this entry is not possible anymore!*

End

Here it is possible to define the end with date and time for execution. By this indication, the value for **Duration** is adapted accordingly.

... - enter date and time directly or select them.

Duration

In addition, alternatively to entering the end time, it is also possible to directly indicate the duration of the control operation. By this indication, the selection of the end time will be adapted accordingly.

... - if required, indicate the duration as an alternative to **End**.

5.11.4 Calendar view

The table view contains all control operations defined in the system. It is possible to set up new control operations, to copy or to delete them. By double-clicking to one of the entries or by selection of an entry and clicking on the button [Form view](#)²⁶⁵, it is possible to open the editing window.

Window: Control operations - Calendar view

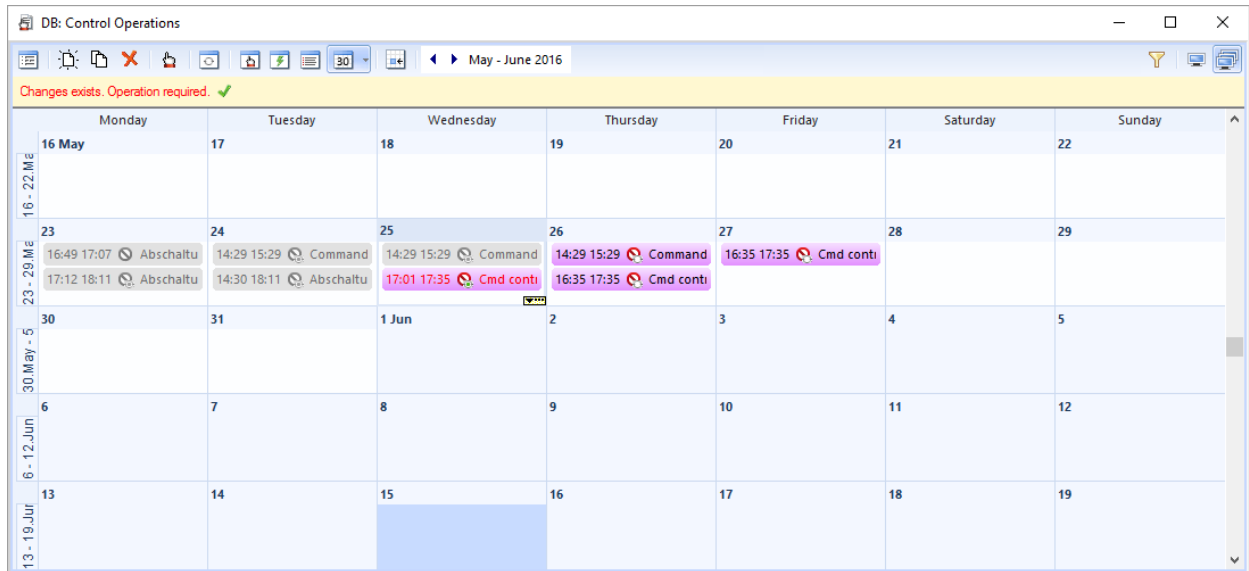


Figure 104: Control operations - Calender view



The functions of toolbar, filter, context menus etc. are almost identical to those of the [Table view](#)²⁶⁵ and described there!

5.11.5 Form view


The form view displays an editing form in which the data of a control operation can be entered or changed. Entry elements for different data such as e.g. category, Id, etc. are available.


Via the selection field on the right side at the top part of the form, it can be seen whether a **Single operation** or a **Series definition** is displayed in the form. The contained characteristics are the same for both cases.


For **Single operations**, start and end of execution are explicitly indicated as time points with date and time. Storage will be executed in UTC time. However, for user entries and display, it will always be switched to the local computer time.


For **Series definitions**, only the start date as well as an optional end date will be indicated, these relate to start and end of the series automatics itself. The definite start and end times within this time period will be set via the series scheme and depend on the selected time zone.

The datapoint list itself contains the datapoints and/or single detectors concerned by the control operation. In principle, datapoints of different categories and interfaces can be operated jointly.

 Upon automatic calculation of the duration, the time unit is also set. Automatically, the largest unit will be taken whose value can be displayed as a smooth number or a number with comma that is larger than 1. Thus, if the duration would be 75 minutes, this would be displayed as **1,25** hours, 36 hours would be **1,5** days, but 30 minutes would remain 20 minutes etc.!

 In addition, it has to be considered that the duration resp. start and end can deviate from the entered values if these are within the range of a time shift (e.g. summertime shift in Europe) (see: [Time shift](#)²⁵³)!

 All contained datapoints should support the global commands required for the control operations!

 **There will be no check whether the contained datapoints can really be operated (also jointly)!**

▼ Window: Control operations - Form view

DB: Control Operations

Changes exists. Operation required. ✓

Control Operation

Type: Off On Off

State: Started

Subject: Abschaltung Test-Serie 01

Info:

Start: 23.05.2016 Today

End: 25.05.2016 Without end

Time zone...

Series definition

Id: 101-2

Recurrence Datapoints Handling

Name	State	Location
🔥 Zone 2		Company, Logistics, 1st Floor, Engineering...

Company, Logistics, 1st Floor, Engineering Room

Figure 105: Control operations - Form view

▼ Functions: Toolbar form view

The toolbar functions change depending on the current status of the form view. As a consequence, functions such as **OK** or **Cancel**, etc. will only be visible or invisible after changes have been made.



Back (last table view)

This function switches the window back to table view.



OK

This function stores the current settings (such as **Save**) and switches back to **Table view**.



If required, scheduled control operations will be executed directly!



Cancel

With this function, the executed changes will be canceled without any further confirmation and it is switched back to **Table view**.



New

This function creates a new control operation.



Copy

This function creates a copy of the selected control operation.

 **Delete**


This function deletes the selected control operation after confirmation. It can be decided whether only this one element or, if required, the total series shall be deleted.

 **Undo**

This function resets the executed changes so that the information stored before will be displayed again.

 **Save**

This function stores the current settings.

 *If required, scheduled control operations will be executed directly!*

▼ **Data section: Control operation**

▼ **Type**

The [Type](#)²⁴⁶ of control operation is defined here. This type implicitly defines the actions to be executed upon start and end as well as the target state to be monitored, if required. Only global control operations (i.e. no interface-specific operations) will be used. Thus, an interface has to support global commands so that its datapoints can be controlled.

The following commands are available: **Off, Revision, Arm, Disarm, Active, Inactive and Note**


Off (default) - select the required type.


▼ **(Series type)**

The series type ([Single operation and Series](#)²⁴⁷) for the control operation is defined here and the required option can be selected.

Single operation (default) - a single control operation is defined.

Series definition - a control series is defined.

 *The default setting depends on the list from which it has been switched to the form (upon switching from the series list, the default setting will be e.g. series definition)!*

 *The series type can only be defined for new control operations and cannot be changed anymore after it has been saved!*

State

The execution state ([State](#)²⁴⁷) of the control operation is displayed as information. The field cannot be edited. For new data sets, the state **New** will be displayed before first storage. However, there might be commands available via the context menu.

Id

The Id is automatically created by the system and cannot be edited. It is displayed for information.

Subject

The subject ([Subject and Info](#)^[246]) can be entered manually or selected from a list of pre-defined subjects for this type of control operation.

Blank (default) - enter a text or select it.

i This is a mandatory field - max. length 100 characters!

 Info

Any information (free text) with regard to the control operation can be entered into the multi-line info entry field ([Subject and Info](#)^[246]).

Blank (default) - if required, enter a text.

i Max. length 255 characters!

Single operation:
 Start

For single operations, their start with date and time for execution is defined here.

Blank (default) - enter date and time directly or select them.

 Now

Using this option, the execution time can be set to the current time so that the execution will immediately start upon saving. If required, the start time selection will be deactivated.

inactive (default) - the defined **Start** time will be used for execution.

active - the control operations will immediately be executed upon saving.

i If this function is activated, it is not possible to enter/select a **Start** time!

 End

For single operations, the end is defined with date and time for execution. By this entry, the value for **Duration** is automatically adapted.

Blank (default) - enter date and time directly or select them.

 Duration

Alternatively to entering the end time, it is also possible to directly indicate a time period for the duration of the control operation. By this entry, the selection of the end time will be adapted accordingly.

Blank (default) - if required, enter the duration as an alternative to **End**.

Series definition:
 Start

Upon series definition, only the date is defined here. The time indication will then be made on the tab **Sequence pattern**.

Blank (default) - enter the date directly or select it.

Today

Using this option, the execution date can be set to the current date. Execution depends on the further definitions on the tab **Sequence pattern**. The selection of the **Start** date will be deactivated if required.

inactive (default) - the defined **Start** date will be used for execution.

active - the **Start** date will be set to the current date.



*If this function is activated, it is not possible to enter/select a **Start** date!*

 End

Upon series definition, the end date is defined here.

Blank (default) - enter the date directly or select it.

 No end

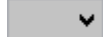
Using this option, the series definition can also be defined openly, i.e. without end date. Execution will then be realized until revoked. The selection of the **End** date will be deactivated if required.

inactive (default) - the defined **End** date will be used for execution.

active - the **End** date will remain open, execution until revoked.



*If this function is activated, it is not possible to enter/select an **End** date!*

 Time zone

In case a control operation has the same time zone as the local computer, first of all only the button **Time zone...** will be displayed. By selection of the button, the time zone including a selection list is displayed in which this setting can also be changed. If the control operation has a time zone that is different from the one of the computer, the time zone including selection list will be directly displayed.

Blank (default) - if required, select the desired time zone.



For better transparency, time indications for series definitions are always made including date + time + time zone, the actual execution time will be set accordingly with time and duration. The indication of a time zone is thus only made for series definitions!

Tabs:• **(Tabs ...)**

Information with regard to the tabs can be found in the following sections: [Tab Sequence pattern](#)^[270],

[Tab Datapoints](#)^[273], [Tab Handling](#)^[275].

 (Location)

In the output field at the bottom end of the window, there is an information with regard to the common location of all datapoints.

5.11.5.1 Tab Recurrence

In the combobox, the different series types **Daily**, **Weekly**, **Monthly** as well as **Schedule** are available. The fields in the tab change depending on the selection of the series type. The following description summarizes the functions in relation to the series types.

▼ Example: Control operations - Form view - Tab - Recurrence

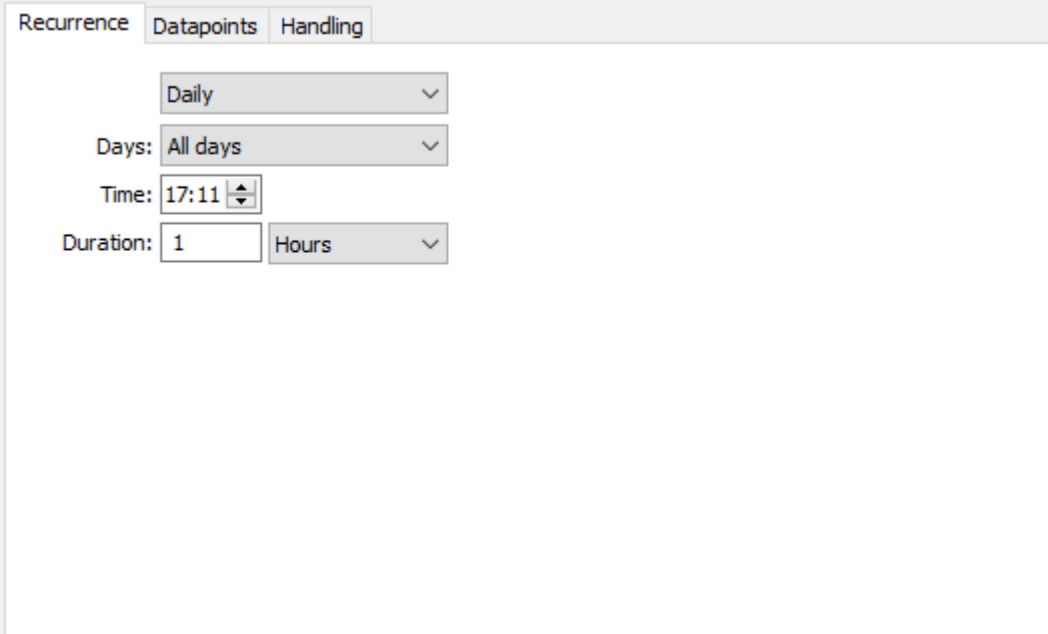


Figure 106: Control operations - Form view - Tab - Recurrence

▼ Data section: Tab - Recurrence

▼ (Series type)

The series type or cycle for the control operation is defined with the help of this selection field. Select the required series type.

Daily (default) - sets a daily execution.

Weekly - sets a weekly execution.

Monthly - sets a monthly execution.

Schedule - sets the execution schedule.

Daily:

▼ Days

Using this selection field, the day type for the control operation is set. The options used here correspond to those of the calendar definition.

All days (default) - the control operation will be executed every day.

Workdays - the control operation will only be executed at workdays.

Free days - the control operation will only be executed at free days.

i *Series elements can be added or omitted in case changes of the calendar days are made, even without that the series itself has been edited. For each calendar change, the IDs of the future series elements are re-assigned consecutively!*

Weekly:

Every # Week(s) at

A weekly cycle for execution of the control operation can be defined here (e.g. every second week).

1 (default) - enter the cycle for recurrence.



The calculation is made according to the start date of the series, the week will thus start on Monday!



(Weekday)

In addition to the cycle, the corresponding weekdays for execution of the control operation can be defined here.

Monday (default) ... Sunday - select the weekdays.

Monthly:

Every # Month(s)

A monthly cycle for execution of the control operation can be defined here (e.g. every third month).

1 (default) - enter the cycle for recurrence.



The calculation is made according to the start month of the cycle!



on the ... day

Here it is defined whether the action shall always be executed on a defined day (e.g. on the 3rd day) or on a certain weekday (e.g. on the 2nd Wednesday) of the month.

... - select the required option.

- on the 1 day (default) - enter the day.

- on the first Monday (default) - select the required settings.



Here the last day of the month will be taken in case this day does not exist in this month!

Schedule:

Schedule

Schedule is a special series type. The execution times are not defined via a sequence pattern here but explicitly defined by a separate time schedule.

The IDs for series elements of the series type Schedule have to be set up and managed in a special way as by editing of the schedule, it can always be that series elements are added or omitted. Therefore the IDs of the series elements will be re-calculated upon each change of the schedule.

Blank (default) - select the schedule.



*The **Schedule section 2** of the schedule defines the execution times (start, end), all other sections of the schedule are not relevant here!*



Schedule is the only series type for which several control operations can take place at the same day!



The execution times of series elements can change due to adaptations of the schedule without that the series itself has been edited. The adaptation of the corresponding schedule will thus have a similar impact as if the series definition itself would be changed!

Daily / weekly / monthly

Time

The end time for execution is defined here. By making this entry, the value for **Duration** will be adapted automatically.

Blank (default) - enter the time directly or select it.

Duration

Alternatively to entering the **Time**, it is also possible to directly indicate a time period for the duration of the control operation. By this entry, the selection of the **Time** is adapted accordingly.

Blank (default) - if required, enter the duration alternatively to **Time**.

5.11.5.2 Tab Datapoints

The contained datapoint/detector combinations are listed here with icon + name and their current state and location are displayed. In contrast to the state display in the datapoint tree, no hierarchic states are shown in the state display, i.e. if a detector is switched off, there will be no disablement symbol with an arrow downwards for the group.

The datapoints can be added to the list via Drag & Drop or via the (+) button in the selection dialog. Upon adding of a group, this group will be ungrouped and the contained datapoints will be added instead. Via keyboard and via the (X) button, it is possible to delete entries. The entries are sorted according to datapoint category and name, in the same way as in the datapoint tree.

▼ Example: Control operations - Form view - Tab - Datapoints

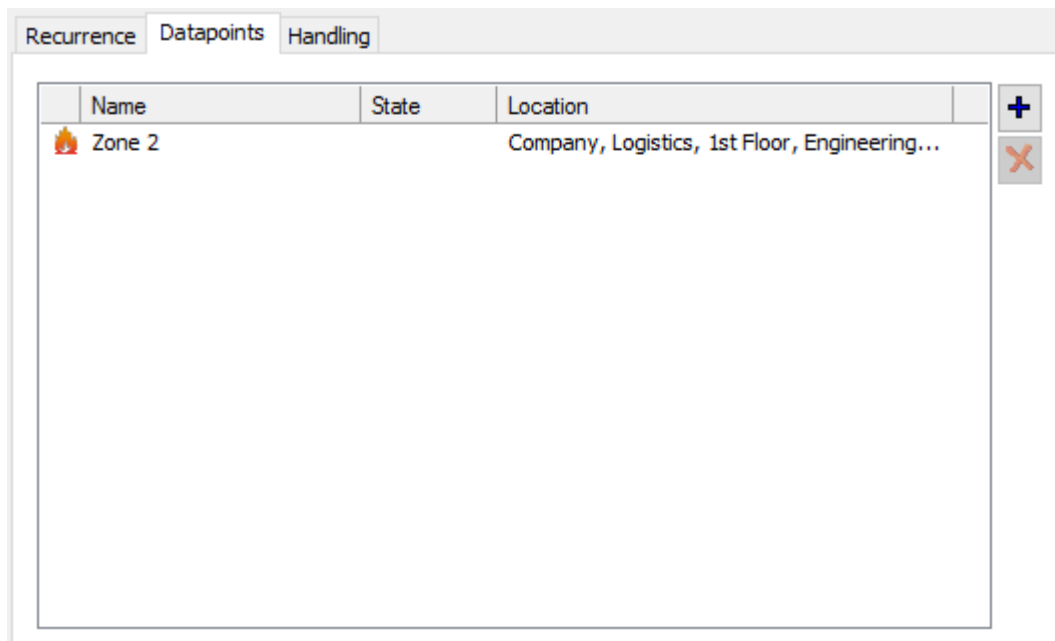


Figure 107: Control operations - Form view - Tab - Datapoints

▼ Data section: Tab - Datapoints

(Datapoint list)

The datapoints or detectors that are assigned to the control operation are defined here and displayed in a list including information with regard to the location and state.

Elements of the datapoint list:

- **(Symbol)** Symbol of the datapoint category
- **Description** Name of the datapoint, if required including detector number
- **State** State of the datapoint / detector
- **Location** Location of the datapoint / detector

Blank (default) - add the datapoints from the explorer via Drag&Drop.

(add datapoints)

This function opens a dialog for selection of datapoints.



(delete selected datapoints)

This function deletes the selected datapoints from the list without additional confirmation.

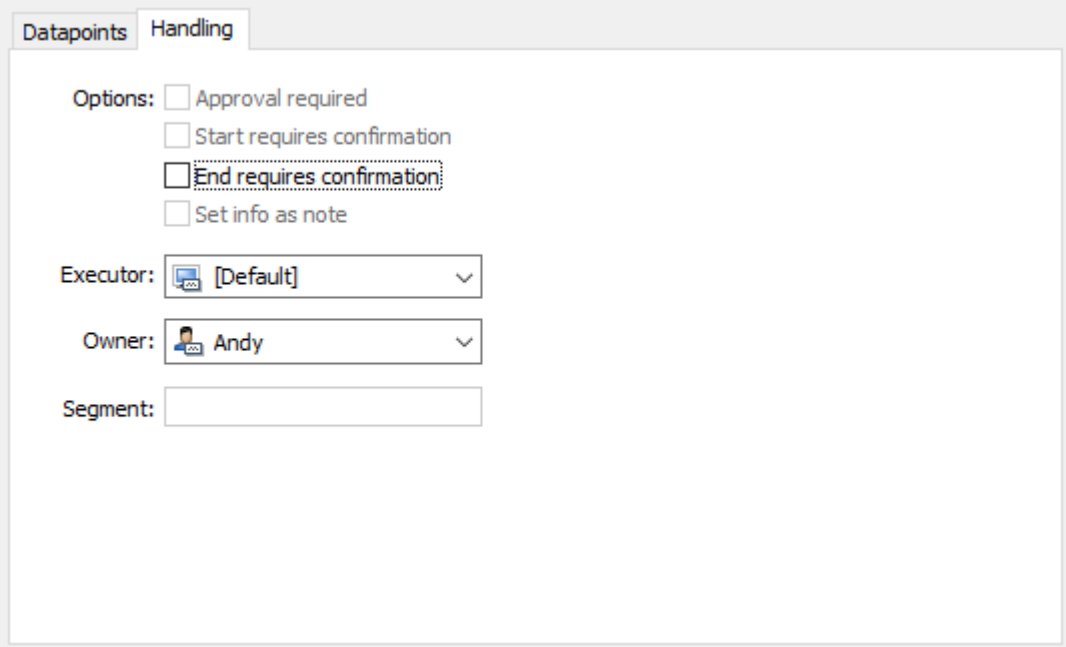


Control operations cannot be set up without that at least one datapoint has been added to the list.

5.11.5.3 Tab Handling

In this section, additional information with regard to the handling of control operations can be defined. It is thus possible to select e.g. an executor or owner and to select options for required confirmations.

▼ Example: Control operations - Form view - Tab - Handling



The screenshot shows a form with two tabs: 'Datapoints' and 'Handling'. The 'Handling' tab is active. Under 'Options:', there are four checkboxes: 'Approval required', 'Start requires confirmation', 'End requires confirmation', and 'Set info as note'. Below these are three fields: 'Executor' (a dropdown menu showing '[Default]'), 'Owner' (a dropdown menu showing 'Andy'), and 'Segment' (an empty text input field).

Figure 108: Control operations - Form view - Tab - Handling


▼ Data section: Tab - Handling

Approval required

This is not an option that is saved, however it can be selected upon setup of a new control operation. It will be set automatically if the user performing the setup does not have the required rights to manage control operations or the contained datapoints. The observers of the control operations will be notified and have the possibility to approve or reject the control operation. Only after approval, the control operation will be actually scheduled and executed in the same way as other control operations, in consideration of the other options.

inactive (default) - no approval required.

active - approval required.

 For series elements, this option is not available!

Start requires confirmation

This option defines whether the control operation will directly be executed at its start time or whether a confirmation (popup) is required. In case confirmation is required, the action will be set to **Wait for start-confirmation** and displayed with the state **Start?**. The observers of the control operation will be notified. Only after confirmation, the control operation will actually be started and the corresponding commands will be sent.

inactive (default) - no confirmation is required for start.

active - confirmation is required for start.

End requires confirmation

It is defined here whether the control operation will automatically end at the end of the control action or if it will be set to **Wait for End-confirmation** which will be displayed by the state **End?**. The observers of the control operation will be notified. Only after confirmation, the control operation will actually be ended and the corresponding commands will be sent.

inactive (default) - no confirmation required for end.

active - confirmation is required for end.

 Set info as note

This option defines whether the text defined as information will be set as note for all datapoints contained in the control operation or not. For the type Note, the option is automatically set and cannot be switched off. The indication of an info text is mandatory for such control operations.

inactive (default) - the info text will not be used as note.

active - the info text will be used as note.



*For control operations of the type **Note**, the option is automatically set and cannot be switched off!*

 Executor

The [Executor](#)^[245] can be selected here. All clients that have been defined as **Usable for control operations** can be selected. In addition, the entry **Active Server** (for network systems) or **Standard** (for standalone systems) is available, defining the standard behaviour. This field can only be edited by users having the special right **Administrate.Control operation**.

Default (default) - if required, select an Executor.



For series elements, the executor cannot be set anymore!

 Owner

The [Owner](#)^[245] of the control operation can be set here. All defined **User groups** and **Users** can be selected here. If the control operation has an owner that is not defined, this signature is displayed and offered in square brackets in addition to the selection. The field can only be edited by users having the special right **Administrate.Control operation**.

... (default) - select an owner.

 Segment

Here you can see assign segment definitions of the control operation by datapoint. In this case the control operation are only available on the appropriated workstations.

5.12 Video

In WinGuard, video is displayed on monitors. Depending on the video system, we are talking about the [monitors](#)^[285] that are part of the video system (as is usually the case with analog crossbars), or one of the display areas in WinGuard (only digital video systems).

For video data output, your primary option in the system is the [VideoManager](#)^[277]. However, video data may also be displayed in graphics or using the external [VideoDisplay](#)^[286]. The VideoManager can be used to control the VideoDisplay.

The VideoManager supports loading of cameras per drag & drop or via manual / automatic datapoint commands.

In WinGuard, cameras are used as the general access point for video data. To receive a video stream, it does not matter whether a workstation has a connection directly to the camera or to a central video server. To access archived data, storing video data on a dedicated video recorder or server is generally necessary.



Every workstation establishes its own connection to the respective video equipment (server, camera, etc.). Please note that these systems may require additional licenses!

5.12.1 VideoManager

The VideoManager enables centralized access to various video systems within WinGuard. In addition to displaying digital videos, VideoManager functions also include video control, access to archived data of the video system, as well as control of respective PTZ cameras. These functions are manufacturer independent, meaning that the user only has to learn a single program even though several video systems are in use.

Furthermore, the VideoManager serves as the main tool for controlling the external [VideoDisplay](#)^[286], which relates to another application for video display and can be installed on a separate computer.

The VideoManager can be opened and closed using the menu command, **View|VideoManager**. It has its own toolbar that is displayed on the upper edge of the window. Video data is displayed in the central part of the window. Right clicking on one of the display elements produces a context menu with available commands. The control functions for the PTZ cameras are located on the right hand side, and the lower section contains elements for video archive control or display of log data. Log data consists of an excerpt of the system log.

In addition, it is possible to create bookmarks via context menus in the Video Manager and to save or play sequences as clips. The further management of this data is realized via the video archive.



Camera control, archive control, and the log excerpt can be faded in or out via the context menu of the VideoManager.

Example: VideoManager

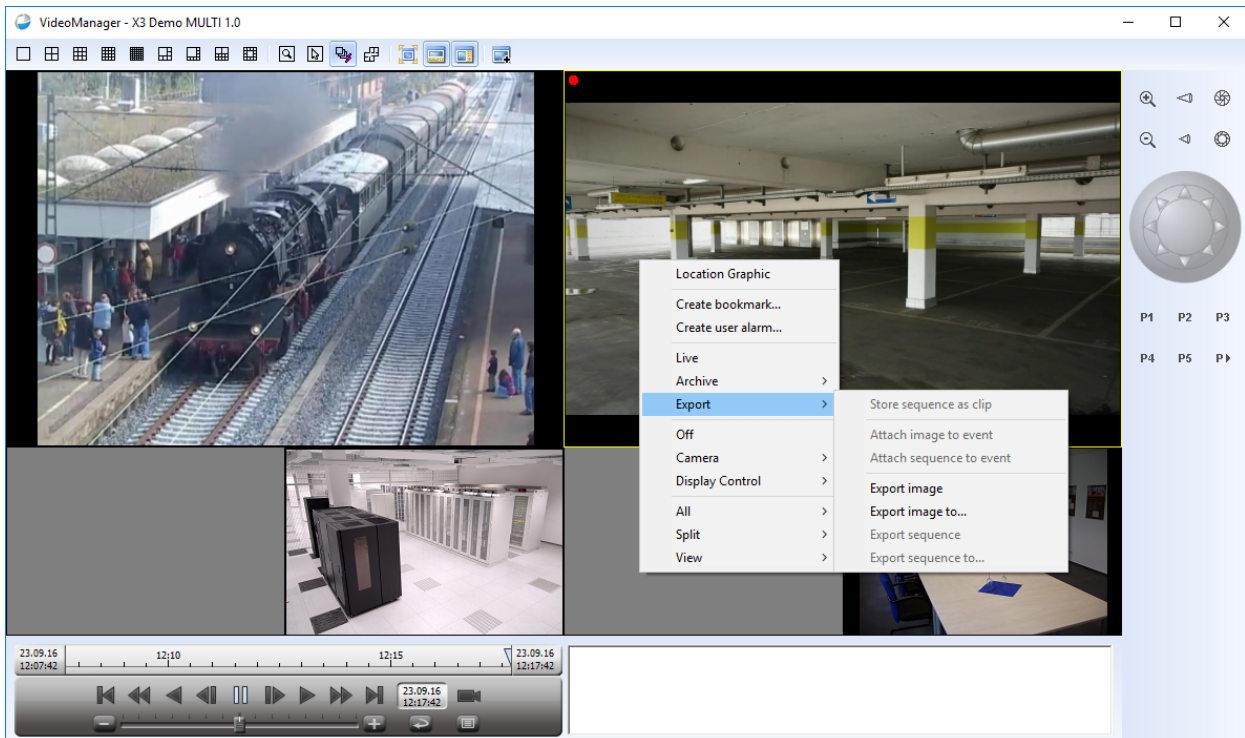


Figure 109: VideoManager

Functions: Context Menu - Display Area


Availability of the functions below depends on the displays, active cameras, and corresponding video system used. Some of these functions are also available directly via the toolbar.

- **Location Graphic**

This function displays the location graphic that is assigned to the location of the camera datapoint.


- **Create bookmark...**

This function opens the dialog for creation of bookmarks. If required, a time period can be selected before by setting the marks. If no marks are set, only the function **Create bookmark** can be executed for the current time in the stream.

 *This function is only available in archive mode!*


- **Trigger user alarm...**

This function opens the dialog for triggering of an operator alarm. The camera location is pre-selected there. If an operator alarm is actually triggered via the dialog, a bookmark with the current times will be created (such as for Create bookmark) and assigned to the operator alarm. The entry of an info is not possible upon execution of this combined function.

 *This function is only available in archive mode!*

- **Live**

The video display of the camera is switched back to live mode.


 *This function is only available in archive mode!*

- **Archive** ▶

Opens the context menu for archive control, sets the selected start-time, and switches the video display into archive mode.

You can choose from the following values:
Actual, Event, 5 min, 30 min, 1 h, 6 h, 24 h, 7 days, and **30 days**.
- **Export** ▶

Opens the context menu for export (see below).

 *This function is only available in archive mode!*
- **Off**

Deactivates the camera display in the respective display area.
- **Camera** ▶

Opens the context menu of available cameras for activation in the respective display areas.

Display Control ▶

This function opens a context menu for the selection of a control element for an external [VideoDisplay](#)^[286] and activates it in the respective area of the VideoManager. (Definitions in the the [video system settings](#)^[500]).

VideoDisplay1...4 - selection of the VideoDisplay to be controlled.
- **All** ▶

This function opens a context menu for the simultaneous control of all active video display areas. Selection in the context menu:

Off - deactivates all active video displays.
Live - puts all active video displays in live mode.
Archive - puts all active video displays in archive mode.
- **Split** ▶



This function opens a context menu that allows you to change the configuration of the video display area (Split/Layout).

1x1 - one single display area.
2x2 - Four display areas of equal size.
 ...
1+5 - one large, 5 small display areas.
 ...
2+4 - Two large, 4 small display areas.
- **View** ▶

Selection in the sub menu:

Full-screen image - change to full-screen view (revert by pressing <ESC>).
Camera Control - fade-in or out of the camera control.
Archive Control - fade-in or out of the archive control.
Log Excerpt - fade-in or out of the log display.

▼ Functions: Context menu - ... Export

- **Store sequence as clip**
This function allows to save a sequence as a clip.
- **Attach image to event**
Using this function, an image can be assigned to an event. This image will then be available in the event attachments.
 *Consider the license!*
- **Attach sequence to event**
Using this function, a sequence can be assigned to an event. This sequence will then be available in the event attachments.
 *Consider the license!*
- **Export image**
This function exports single images (JPEG) into the pre-defined directory.
- **Export image to...**
The function opens a dialog for file selection via which path and name of the file can be defined for the image.
- **Export sequence**
This function exports a sequence into the pre-defined directory.
- **Export sequence to...**
This function opens a dialog for file selection via which the path and name of the file can be defined for the sequence.

5.12.1.1 Toolbar

With the buttons on the left side of the toolbar, you can select the monitor configuration (layout) within the VideoManager.

The icon, **Monitor Zoom**, allows you to temporarily give the selected monitor the entire surface of the VideoManager, or to reverse that action. Using the function **Keep Background Active** you can determine if video contents, momentarily hidden due to a layout change or monitor zoom, remain active or are deactivated. With video systems that take a long time to load, it is recommended that you keep the video streams active in the background. The icon, **Transparent Operation**, determines if actions by the mouse are sent on to the video system or are only processed by the VideoManager. Depending on the functionality of the video system, context menus of the video system may be opened/operated in this manner.

The following functions regulate the full-screen display of the VideoManager as well as the display of the control elements for archive or PTZ control.

Via the last icon in the toolbar, a new VideoManager window can be created as long as the maximum number of 4 open windows has not been reached.

▼ Example: Toolbar - VideoManager

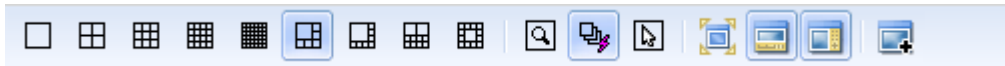


Figure 110: Toolbar - VideoManager

▼ Functions: Toolbar - VideoManager

Layouts (9 Icons)

Various icons (9) for the selection of layouts.

Additional layouts are available using the **Split** function in the context menu of the display areas.

Zoom monitor

The marked monitor is enlarged to the size of the entire display area. Another click brings you back to the previously-used layout with all respective camera activations.

The same functionality is also available by double-clicking.

Keep background active

The video contents remain active even when they are momentarily hidden through a change in layout or monitor zoom.

Transparent control

When this function is active, actions with the mouse are not processed by the VideoManager, but are sent on the monitor of the video system. Depending on functionality of the video system, context menus of the video system can be initiated in this manner.

Full-Screen

The VideoManager is switched to full-screen view. You can return to the window view by pressing the <ESC> key.

Archive Controlbar

Through this function, the archive control, located in the lower section of the VideoManager, can be faded in or out.

Camera Controlbar

Through this function, the camera control, located in the right area of the VideoManager, can be faded in or out.

New Window

Another window of the VideoManager is opened. A maximum of 4 VideoManager windows can be opened.

5.12.1.2 Camera Control

The camera or PTZ control allows you to guide the camera view directly via the VideoManager. Furthermore, PTZ cameras often provide functions to change focal length and aperture as well as to define pre-programmed view directions (**presets**).



Commands for PTZ control can alternatively be made via a PTZ-keyboard or joystick!

▼ Operation: Camera Control

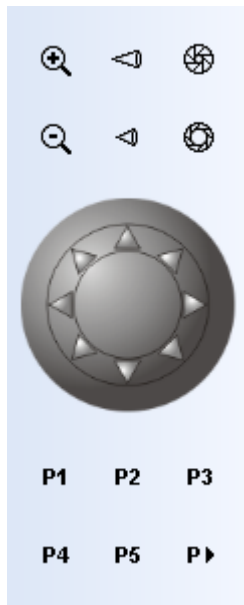


Figure 111: Operation: Camera Control

▼ Functions: Camera Control

This section describes the basic functions of the camera control.



Zoom +/-

With these two buttons, you can operate the zoom function of the camera, as long as the camera or interface supports this function.



Focus +/-

With these two buttons, you can operate the focus function of the camera, as long as the camera or interface supports this function.



Aperture +/-

With these two buttons, you can control the aperture function of the camera, as long as the camera or interface supports this function.



Control Element (guidance)

Using the control element, you can turn, focus, etc. a selected (active) camera, as long as the camera and the interface support these functions.



Preset 1...5

Using the buttons P1, P2, P3, P4, and P5 you can select the defined camera presets (positions), as long as the presets are defined and the functions are supported by the camera/interface.



Select/Define Preset

This function opens a context menu via which you can either select from the already defined presets or open the dialog, **Define Presets** (please see [camera control panel](#)²²¹).

▼ Functions: Camera Controls - Additional

Below are descriptions of several additional functions for camera control. However, these are only supported by a few video systems.

- **Brightness**
Regulator that allows you to adjust the brightness of the image of the selected camera.
- **Contrast**
Regulator that allows you to adjust the contrast of the images of the selected camera.
- **Saturation**
Regulator that allows you to adjust the saturation of the images of the selected camera.

5.12.1.3 Archive Control

Through the archive control, users have access to video system content that is stored in their respective archives. To enable this function, the respective video system archives must be established and functions for playback must be available.

The upper area of the archive features a time bar that displays the currently relevant time period of the archive. Time stamps with the current begin and end of the time bar are displayed in small fields. By clicking on the fields, you can open a small dialog that allows you to skip to another point in time. The area indicated in blue is the time segment to be replayed (the markers can be set via the context menu of the time bar).

Bookmarks are displayed as yellow points or, if these are bookmarks with a time period, as elongated sections. Over the symbols there is a tooltip displaying the info of the bookmark. By pressing STRG+left mouse key, the bookmarks can also be moved and thus their time can be edited. Using the right mouse button, it is possible to call a context menu for the bookmark via which the info can also be edited.

For time sections that have been saved as a clip, the timeline will be slightly colored in green in the bottom section (in which otherwise the markers are placed). Over this section, a tooltip with the time indications regarding the clip is displayed. Using the right mouse button, it is possible to call a context menu for the clip via which the storage time can be edited too.

Below the time bar are user elements to control the speed at which the video is played.

On the lower edge of the control area you will find additional elements for speed selection, buttons to activate the play mode, endless loop for marked areas, as well as a context menu.

▼ Control Elements: Archive Control

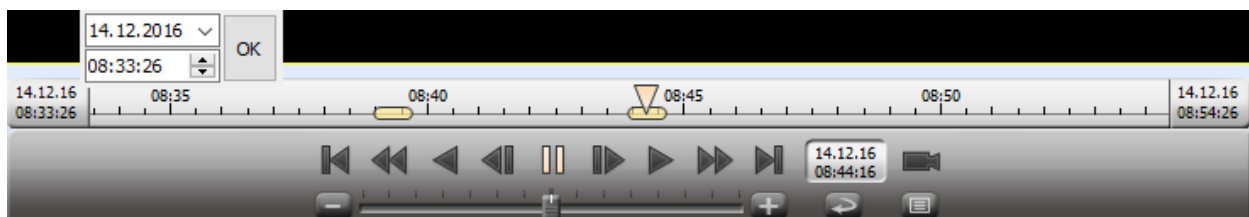


Figure 112: Control Elements: Archive Control

▼ Functions: Archive Control

Archive control functions are only available for cameras in archive mode.

- **Timeline**

Using the position marker of the timeline, the start time for playback can be defined resp. displays the archive time during playback. Bookmarks are displayed as yellow points or, if they are bookmarks with a time period, as elongated sections. For clips, the timeline will be slightly colored in green in the bottom section (in which otherwise the markers are placed). Via the corresponding context menus start and end time, these can be explicitly set.

**Archive Begin**

This function goes to the beginning of the archive.

**Fast Rewind**

Fast rewind.

**Play backwards**

Play backwards at normal speed.

**Single image backwards.**

Switches to single image backwards.

**Pause**

Pause (active after switch from live mode to archive mode).

**Single image forward**

Switches to single image forward.

**Play Forward**

Plays forwards at normal speed.

**Fast Forward**

Fast forward.

**Archive End**

This function skips to the end of the archive.

**Time Display Archive**

Display of the archive time. By clicking, you can open a dialog in which you can enter a time to which you wish the archive to go to.

**Return to Live Mode**

This function ends the archive mode and returns to live mode.

**Decrease play speed**

With this button the play speed can be decreased in small increments.

**Regulator - playback speed**

With this regulator, the play speed can be increased or decreased (by dragging the mouse).

**Increase playback speed.**

With this button the playback speed can be increased in small increments.

**Endless Loop**

Playback mode endless loop. Once the end marker is reached, playback goes back to the beginning in a continuous cycle.

**Context Menu**

Opens the context menu for the archive control.

▼ Functions: Archive Control - Context Menu

- **Create bookmark...**

This function opens the dialog for creation of bookmarks. If required, a time period can be selected before by setting the marks. If no marks have been set, only the function **Create bookmark** can be executed for the current time in the stream.
- **Bookmark**

This function is only available upon selection of an existing bookmark and opens the corresponding context menu with the available functions.
- **Create user alarm...**

This function opens the dialog for triggering of an operator alarm. The camera location is pre-selected there. If an operator alarm is actually triggered via the dialog, a bookmark with the current times will be created (such as for Create bookmark) and assigned to the operator alarm. The entry of an info is not possible upon execution of this combined function.
- **Set start marker**

A start marker is placed on the time bar indicating the beginning of the archive sequence.
- **Set end marker**

An end marker is placed on the time bar indicating the end of the archive sequence.
- **Remove marker**

Removes the start and end markers from the time bar.
- **Live**

The video display of the camera is switched back to live mode.
- **Archive**

Opens the context menu for archive control, sets the selected start-time, and switches the video display into archive mode.
You can choose from the following values:
Actual, Event, 5 min, 30 min, 1 h, 6 h, 24 h, 7 days, and 30 days.
- **Export** ▶

Opens the context menu for export (see [VideoManager](#)²⁷⁷).

5.12.2 Monitors

In WinGuard, digital video streams can be directly displayed using so-called monitors. These monitors are areas for video display in the VideoManager, in graphics, or in the VideoDisplay (external) that can be managed via monitor datapoints. These monitor datapoints are not assigned to an external interface and are defined as internal datapoints.

An internal monitor can be assigned to a video display area via the context menu. A new assignment of this internal monitor to another video display area cancels the previous assignment.

In the system, a camera can be displayed on such a monitor (video display area) via the command **Control Datapoint** and the command **Activate** of a camera datapoint.

If video systems with analog crossbars and respective external monitors are involved, control is achieved

in the same manner. In such cases, however, the monitors are assigned to the respective interfaces and cannot be directly visualized in WinGuard.

5.12.3 VideoDisplay

The VideoManager is an integral component of WinGuard at the workstation. However, if video streams are to be shown on a video wall, the VideoManager only has a limited capability to do so. In order to close this gap in functionality WinGuard provides a special workstation type **Display**. Controlling the VideoDisplay can be done using the VideoManager of the assigned workstations. Control of the VideoDisplay can be directly activated on a monitor (display area) of a VideoManager (or several).



A workstation can control up to four VideoDisplays simultaneously.

If you have successfully executed the installation of the VideoDisplay along with manufacturer components of the video system on the workstations that you wish to use for controlling the displays, you can display both live and archived images of the selected camera on the VideoDisplay.

A workstation type **Display** starts as a **client** with a special configuration:

- Default menu and toolbar are limited for this workstation type, but both can still be defined individually.
- Explorer and event list are basically hidden independent of the settings.
- Using the VideoManager some functions are hidden.
- No selection of the active monitor is shown.



The VideoDisplay is designed for the usage from other workstations. The local UI should only be used for configuration and implementing.

Control of the VideoDisplay

To control the VideoDisplay, internal video display elements (for example, [VideoManager](#)^[277] or video display element in a graphic) are used. Here you can activate the respective control elements similarly to activating a camera.

By right-clicking on a display field, you open a context menu in which you can activate the display control of one of the VideoDisplays (max. 4) and within those, one of the four windows of the respective VideoDisplay.

If the display control is active, you can perform other functions via the context menu such as: change the layout of the VideoDisplay, activate a camera, play an archived video sequence, or assign a monitor. Additionally, while the display control is active you can also assign a camera per drag & drop from the explorer to a display field in the VideoDisplay using the context menu.

As soon as you have executed monitor assignments via the display control, you can also activate cameras with the action [Control Datapoint](#)^[970] of a camera datapoint and the command **activate** (for example via buttons, event-related actions, please see [Tab Actions](#))^[731]. Alternatively you can also use [the camera control panel](#)^[221].

▼ Example: VideoManager with VideoDisplay Control

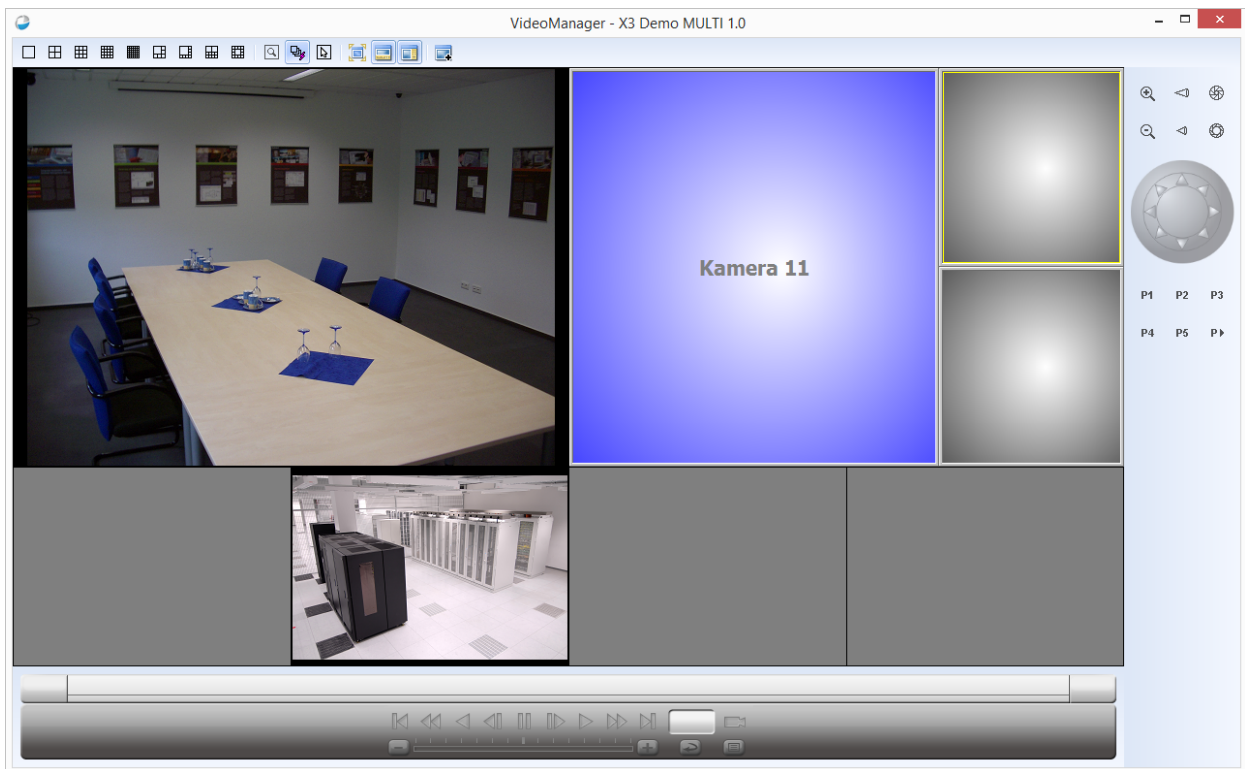


Figure 113: VideoManager with VideoDisplay Control

The figure shows an example of a [VideoManager](#)²⁷⁷ that is being used to control the VideoDisplay (external).

Via the context menu of the display field, the display control has been assigned. Within the display control, the layout 1+5 was assigned and in the respective display areas a camera is activated. Currently the field in the upper right is marked (with a yellow frame). If a guidable camera is activated there, it can be controlled by the elements to the right in the camera control panel if necessary. Archived images can be retrieved via the archive control in the lower section of the VideoManager.

But the images can only be viewed in the VideoDisplay. Only the control functions are executed in the VideoManager, the images cannot be seen in the VideoManager.

▼ **Example: VideoDisplay**

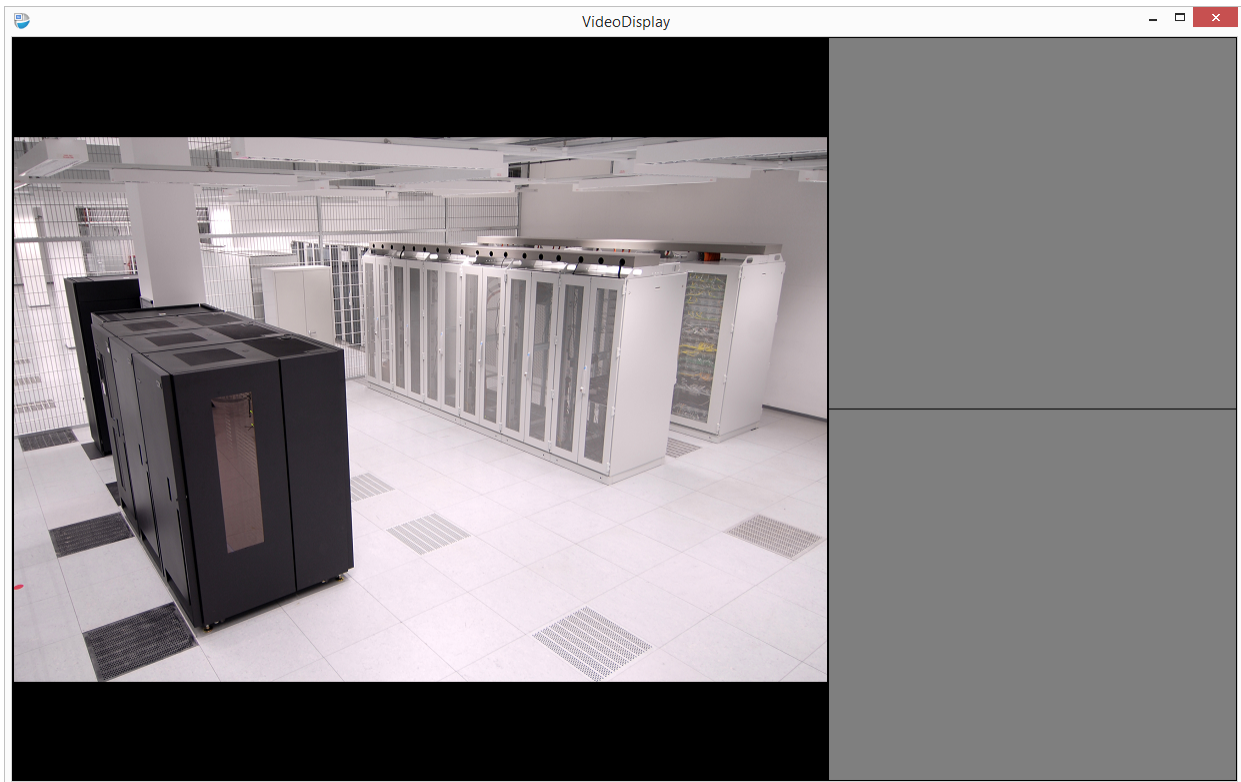


Figure 114: VideoDisplay

This figure shows a window of a VideoDisplay in which cameras are activated that are set up in the [VideoManager](#)^[277] as per the figure above.

The only function that can be carried out in the VideoDisplay directly is the turning on and off of the full screen mode via the context menu.

If the VideoDisplay has been started, a blue monitor symbol appears in the Windows taskbar which allows you to make the four display windows visible or invisible, and to access the dialog, **Settings**. You can find additional information about the settings in the section, [Installation and Update](#)^[15].

▼ **Example: Context menu - WinGuard Service Display**

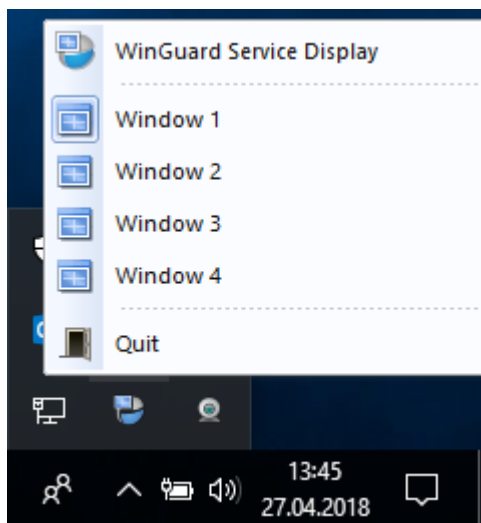


Figure 115: Context menu - WinGuard Service Display

▼ Functions: WinGuard Service Display

Here you find a short function description of the WinGuard Service Display.



WinGuard Service Display

With this function you can open the WinGuard application window.



Fenster 1-4

With this function you can show or hide the different windows of the VideoDisplay.



Quit

Here you can close the VideoDisplay (complete application).

5.12.4 Video Banks

WinGuard makes it possible to consolidate internal monitors into so-called video banks. On these, cameras can then be loaded up automatically depending on the event.

If you have defined several video banks, you have two options regarding the order of allocation. Either cameras are loaded up in accordance with the last event selected, or by priority ranking of each respective event.

5.12.4.1 Video Bank Definition

In the system settings, pertaining to **Video|VideoManager** (please see: [Video](#)⁵⁰⁰), under the item **Monitors for Event Display**, the defined monitors can be consolidated into a video bank. These can then be used for the display of event-dependent camera activations.

In order to define a video bank, simply enter the numbers of the desired monitors separated by a comma. Specifications for further video banks are added separated by a semicolon.

Example: Individual Video Bank: **21,22,23**

This bank automatically displays the cameras defined for the respective event on the internal monitors 21-23.

Example: Three Video Banks: **21,22,23;24,25,26;27,28,29**

On monitors 21-23 the cameras defined for a particular event are displayed. On the monitors of the additional video banks, depending on selected mode, the respective displays of the last selected events or of the event with the highest priority are shown.

The definition of the item **Event Display on Subsequent Banks** is also established here in the settings.



In order to reach the desired functionality, it is necessary to allocate a corresponding layout in the area of VideoManager windows in addition to the definition of the video banks.

5.12.4.2 Automatic Split Change

When using video banks, you also have to add the definitions of the respective splits to the appropriate VideoManager windows.

In the system settings, in the area **Video|Video-Manager Window 1..4** (please see: [Video](#)⁵⁰⁰), under the item **Layout for Event Display**, you can select splits for every window that are used automatically whenever cameras on one of the video banks are activated due to an event.

The respective video window, if desired, accepts the split defined for video bank display and reverts to

the previous status when there are no further event-related contents on the video banks.

If the video banks are to be displayed on the external [VideoDisplay](#)^[286], you must complete the corresponding definitions in the system settings. Analogous to the entries in the area **Video|Video-Display 1..4** (please see: [Video](#)^[500]), under the item **Layout for Event Display**, you must determine which split is used automatically when the video banks are activated due to an event.



*Especially the return to the original camera activation status (after completion of all events that generate camera activation) is only executed completely if the appropriate definitions have been established in the settings under **Layout for Event Display**.*

5.12.4.3 Define Cameras

In [Event Routing](#)^[1072], using the command **Define Cameras**, you can determine when, with which events, and under which exact circumstances cameras are assigned to the incoming event message.

For example, in order to define cameras 1, 2 and 3 for all events relating to datapoint **MG1**, using the editor, you would enter the following definition in Event Routing for the command **Define Cameras**:

```
...
if (datapoint==MG1)
  define cameras Camera1, Camera2, Camera3
end
...
```

5.13 Video Archive

The purpose of the video archive is the central management of video-related information and data. In addition to the bookmarks for the total video system, the video streams saved as clips in the system are stored here too.

Both clips and bookmarks each have an assigned camera datapoint as well as time-related information via which they are indirectly linked to each other and can be assigned to each other. For example, for the bookmark, the available sources are displayed (video streams and clips) and, for the clip, the respective bookmarks are available. In particular, clips can also be filtered via the information from the related bookmarks.

The user will mostly find as well as organize video sequences and the contained information via bookmarks, independent from their storage location. Bookmarks represent the logical user view and only here it is possible to save corresponding information such as descriptions and the related event. On the contrary, clips represent the physical level and only serve for management of the saved video files. Both bookmarks and clips are created via the VideoManager, if required, also automatically via a command in scripts (e.g. upon event reception). Upon creation of a bookmark with time sequence, it can be indicated whether the related video sequence shall also be saved as a clip.

Within the scope of event display, related bookmarks are clearly displayed in the new layout content **Video Archive**. The direct adding of video sequences as attachments to events is still supported as well. Via the settings, it is possible to configure which functions shall be available to the user.

5.13.1 Terms and Definitions

Important terms and definitions such as bookmarks, clips, etc. are explained here. The knowledge of these terms or of their functionality are important for operation and definitions of videos. In the rights configuration, corresponding [Rights](#) ⁵⁵⁴ for the video archive are available.

Bookmarks

A bookmark is a link to a time or time period within a video stream. As an option, a bookmark additionally contains text information as well as the linkage to an event. The information is managed as data sets in the database **media.mdb**.

As an option, bookmarks can also be linked to an event. In this case, in addition to the event ID, some other event information (event time, datapoint category, datapoint name, state type and state text) are directly stored with the bookmark in order to enable a quick searching.

The bookmarks linked to an event are displayed upon event display in the new layout content window **Video Archive** and can be directly retrieved from there and processed if required.



A bookmark can only be linked to one single event!

Clips

A clip is the sequence of a video stream that has been exported from a video system and transferred to the video archive for long-term storage. The descriptions of the clips are also managed as data sets in the database **media.mdb**. The corresponding video stream is separately stored as a file (e.g. MP4, AVI, .MKV, etc.) in the directory **media**.

In case a clip contains a bookmark, that means that clip and bookmark relate to the same camera and that the time periods defined in the clip and the bookmark overlap each other, the clip will be indirectly linked to the event and found via a corresponding search for a state type.

Rights

Bookmark and clip are available as object types for definition of activities in the rights dialog.

The definable functions/rights are:

- **Edit.Object**
Bookmarks or clips can be created, edited and deleted. For deletion of clips, the special right **Administrate.Clip** is required. However, this is in principle only possible for camera datapoints for which the user has the additional right **Control.Datapoint**.
- **Administrate.Clip**
Only with this right, the storage time of clips can be changed and clips can be deleted. The right only extends **Edit.Object** for clips which is always additionally required as a basis.
- **Video.Archive**
Only if this right is available for a camera datapoint, a corresponding clip can be played.

License

The video archive basically is available as a function. However, wise use is only possible in connection with the license for the VideoManager.

5.13.2 Behaviour

With regard to data retention, it is differentiated between the datasets of the bookmarks and clips as well as the video files (the actual video data of a clip).

Video Archive data sets

Video archive data sets are saved distributed in the network, such as other data sets in WinGuard. If two stations establish a connection with each other, they have to synchronize their data set at first in order to establish a common status. The data set coming from the server will not prevail automatically, but the synchronization will be executed based on time stamps and control information in the data set. In principle, the data set with the more recent time stamp will always prevail upon synchronization.

Some special control information as well as the principle of the data sets marked as deleted will lead to the fact that each data set will for sure reach the server, even if it has e.g. been created in a separated part of the system and deleted again immediately. Only the server will really delete data sets.

Video Archive files

On the contrary, video archive files are not automatically distributed in the network, first they are stored locally at the workstation that creates the clip. From there, the files are transferred to the server(s) and saved there centrally. If you intend to see a clip at a workstation, the corresponding file has to be downloaded from the server. A file downloaded in this way will remain stored at the workstation and only be removed upon deletion of the corresponding clip. In addition, the file will remain stored at the workstation that has created the clip.

Logging

Playing and exporting of video data is logged in the system log including indication of time and camera ID.

5.13.3 Table views

The application window serves as central element to access the bookmarks and clips in the video archive. It makes sense to use this together with the Video Manager, as the clips can be displayed there

and related actions can be executed. The application window is opened via the menu entry **Functions | Video Archive**.

In the different table views, the lists of available bookmarks and clips, depending on the selected filter settings, are displayed. The columns are fixed, only the width of the columns can be changed via dragging the mouse pointer.

Via the function in the toolbar, it is possible to change between different list views resp. the **Form view**, to execute different functions directly and to limit the display by using the **Filter** on the right side.

In the info bar (below the toolbar), the list title (if activated) and the activated filter settings are displayed together with icon and text for the various characteristics. If neither the title has been activated nor a filter is active, the info bar is not visible. The filter content is not displayed in the layout window and thus the info bar is only visible in case the title display has been activated.

▼ Example: Table view - Video archive - toolbar



Figure 116: Table view - Video archive - toolbar

▼ Functions: Symbol bar



Form view

Using this function, it can be switched into the form view to edit the selected element.



Bookmarks

Using this function, it can be switched to the bookmark table view.



Clips

Using this function, it can be switched to the clip table view.



Clips + Bookmarks (Split)

Using this function, it can be switched to the split table view in which clips + bookmarks are displayed together in a split window.



Get clip

A download for the directly (clip list) or indirectly (bookmark list) selected clip is started. If one or several clips are available for one bookmark, a selection window will be displayed in which a special clip or, in case of several clips, additionally **All** can be selected.



This function is only active if at least one not completely loaded clip has been selected directly or indirectly!



Play clip

The directly (clip list) or indirectly (bookmark list) selected clip will be displayed in the selected monitor of the Video Manager. If one or several clips are available for one bookmark, a selection menu will be displayed.



This function is only active if at least one clip has been selected directly or indirectly and if the clip is not defective so that display is visibly possible on the target monitor of the Video Manager!



Play stream

The source of the selected clip or bookmark will be displayed in the selected monitor of the Video Manager.

i This function is only active in case of an existing selection and if display is visibly possible on the target monitor of the Video Manager!



Filter

This function opens the dialog with the filter settings.

i The symbol shows a green checkmark if a filter has been activated!

5.13.3.1 Bookmarks

In this table view, a list of available bookmarks is displayed, depending on the selected filter settings. Further functions are available via a context menu.

The function of the toolbar are described in the previous section [Table views](#)²⁹².

Example: Table view - Video Archive - Bookmarks

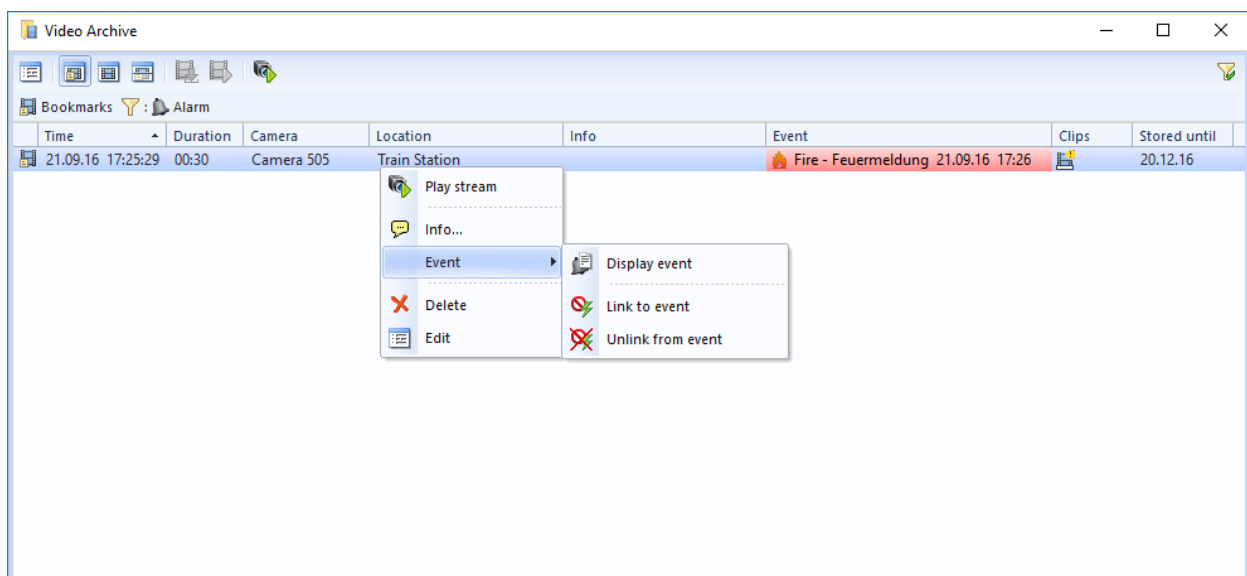


Figure 117: Table view Video Archive - Bookmarks

Columns: Table view - Video Archive - Bookmarks

- **(Symbol)**
Symbol for the type bookmark or clip. Overlays in the clip provide notes with regard to the state (requested, in creation, transmission, error, etc.)
- **Time**
Time stamp of creation of the element (Bookmark / Clip).
- **Duration**
The duration of the bookmark or length of the clip is displayed.

- **Camera**
Name of the camera datapoint.
- **Location**
The location to which the camera datapoint is assigned is displayed here.
- **Info**
The info stored together with the bookmark is displayed here.
- **Event**
Here you find information to the assigned event (if assigned).
- **Stored until**
This column shows the date of the storage end time.

5.13.3.2 Clips

This table view displays a list of available clips, depending on the selected filter settings. A double click on a list entry executes the function **Play clip**. Further functions are available via a context menu.

The toolbar functions are described in the previous section [Table views](#) ²⁹².

▼ Example: Table view - Video Archive - Clips

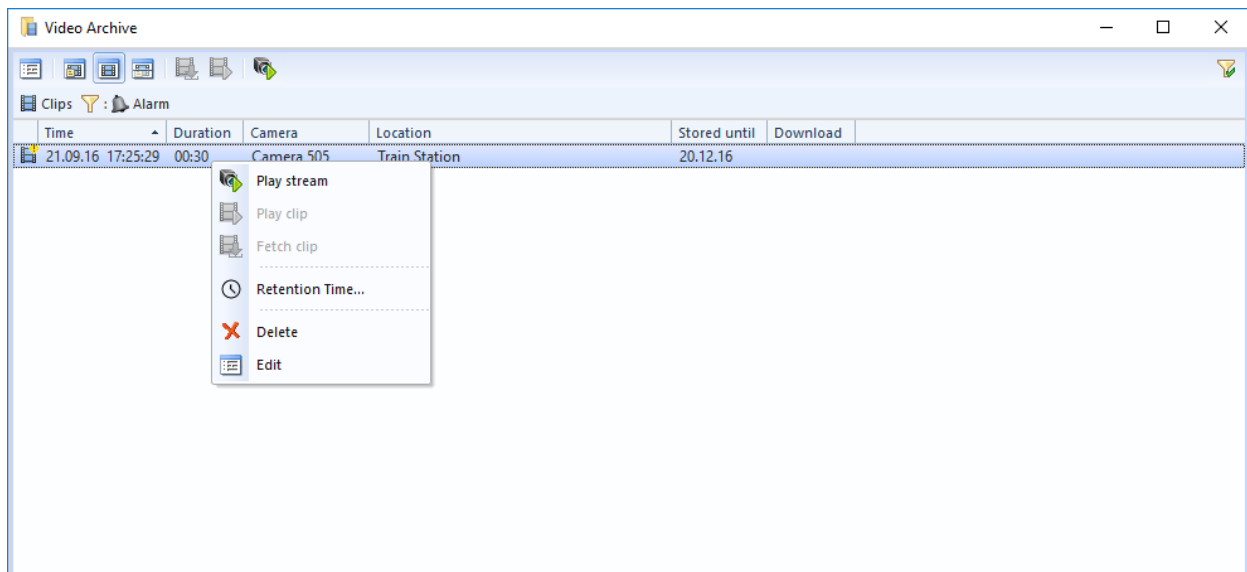


Figure 118: Table view - Video Archive - Clips

▼ Columns: Table view - Video Archive - Clips

- **(Symbol)**
Symbol for the type bookmark or clip. Overlay in the clip provide notes with regard to the state (requested, in creation, transmission, error, etc.)
- **Time**
Time stamp of creation of the element (Bookmark / Clip).

- **Duration**
The duration of the bookmark or length of the clip is displayed.
- **Camera**
Name of the camera datapoint.
- **Location**
The location to which the camera datapoint is assigned is displayed here.
- **Satored until**
This column shows the date of the storage end time.
- **Download**
Download state in percent, a small green bar shows this.

5.13.3.3 Split

This table view provides a list of the clips and a list of the bookmarks below each other. This view also depends on the selected filter settings. A double click on a list entry executes the function **Play clip**.

A description of the functions and the contents of the single columns can be found in the previous sections [Table views](#)^[292], [Bookmarks](#)^[294] and [Clips](#)^[295].

▼ Example: Table view - Video Archive - Clips+Bookmarks

Time	Duration	Camera	Location	Stored until	Download
21.09.16 17:25:29	00:30	Camera 505	Train Station	20.12.16	

Time	Duration	Camera	Location	Info	Event	Clips	Stored until
21.09.16 17:25:29	00:30	Camera 505	Train Station		Fire - Feuermeldung 21.09.16 17:26		20.12.16

Figure 119: Table views - Video-Archive - Clips+Bookmarks

5.13.3.4 Filter

To select the data in the table view, the selection elements are provided via the filter dialog.

▼ Dialog: Video Archive - Filter

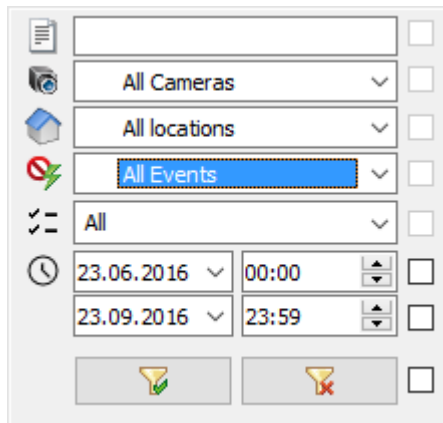


Figure 120: Video Archive - Filter

▼ Functions: Video Archive - Filter

i For activation of the filter elements, the checkboxes on the right side of the filter dialog have to be activated!

(Free text)

It is possible to enter a text for searching in Subject or Id. The search is executed case-insensitively.

Blank (default) - no filter - all elements will be considered.

... - only cameras with this text in their name will be considered.

(Camera Datapoints)

A camera datapoint category can be selected as filter here.:

All cameras (default) - no filter - all cameras will be considered.

... - only the selected camera will be considered.

(Location)

A location can be selected as filter here, whereas the location will be applied in relation to the datapoints. The following can be selected:

All locations or Current selection

All locations (default) - no filter - all locations will be considered.

Current selection - only locations that have been assigned or subordinated to the location selected in the location explorer will be considered.

i The selection relates to the location currently selected in the location explorer!

**(Event type)**

An event type can be selected as filter here. Multiple selection of event types is not possible. The following can be selected:

All events, current events and all event types such as e.g. Alarm, Active, Switch-off, revision, etc.

All events (default) - no filter - all types will be considered, the location filter will be deactivated!

Current event - it is filtered according to the definite event that has been selected in the event list.

... - only data sets of the selected type will be considered.

**(Options)**

Additional options can be defined as filter here.

All (default) - no filter - all options will be considered.

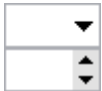
In creation - all clips that are currently created will be considered.

saved - all saved clips will be considered.

Error - all clips in error state will be considered.

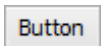
Locally available - all locally available clips will be considered.

Locally not available - all clips **not** available locally will be considered.

**(Time period)**

A time period in the format dd.mm.yyyy HH:MM can be set as filter here. Only the clips/bookmarks within the defined time period are considered.

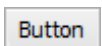
... (**default**) - if required, indicated the desired time period.

**(Delete filter)**

The function deactivates all active filter elements and closes the dialog.



The selected display form remains unchanged!

**(Use filter)**

By executing this function, the defined filter elements will be applied and the dialog will be closed.

**(Activate / deactivate filter element)**

Right to the filter elements or buttons of the dialog, there are checkboxes via which the corresponding filter elements can be activated.

inactive (default) - the element will not be considered for filtering.

active - the element will be considered for filtering.

5.13.4 Form views

In the form views, the corresponding functions and editing elements are displayed. For example, the times of the clips or information of bookmarks can be edited.

Via the functions in the toolbar, the functions for the current data set and the form can be executed. In case of changes that are not saved, additional functions are available.

▼ Example: Form view - Video archive - toolbar

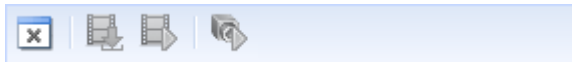


Figure 121: Form view - Video archive - toolbar

▼ Functions: Symbol bar



Back (last table view)

This function switches the window back to table view.



OK

This function saves the current settings (such as **Save**) and switches to **Table view**.



Pending control operations will be executed directly, if required!



Cancel

Using this function, the performed changes will be cancelled without any further confirmation and it will be switched back to **Table view**.



Undo

This function removes the performed changes so that the last saved information will be displayed again.



Save

This function saves the current settings.



Get clip

A download for the directly (clip list) or indirectly (bookmark list) selected clip is started. If one or several clips are available for one bookmark, a selection menu will be displayed in which one special clip or, in case of several clips, additionally **All** can be selected.



This function is only active if at least one not completely loaded clip has been selected directly or indirectly!



Play clip

The directly (clip list) or indirectly (bookmark list) selected clip will be displayed in the selected monitor of the Video Manager. If one or several clips are available for one bookmark, a selection menu will be displayed.



This function is only active if at least one clip has been selected directly or indirectly and if the clip is not defective so that display is visibly possible on the target monitor of the Video Manager!



Play stream

The source of the selected clip or bookmark will be displayed in the selected monitor of the Video Manager.



This function is only active in case of an existing selection and if display is visibly possible on the target monitor of the Video Manager!

5.13.4.1 Bookmarks

In the form view, the corresponding functions and editing elements are displayed. For example, the times and event assignment of bookmarks can be edited here.

The functions of the toolbar are described in the previous section [Form view](#)²⁹⁸.

Example: Form view - Video Archive - Bookmark

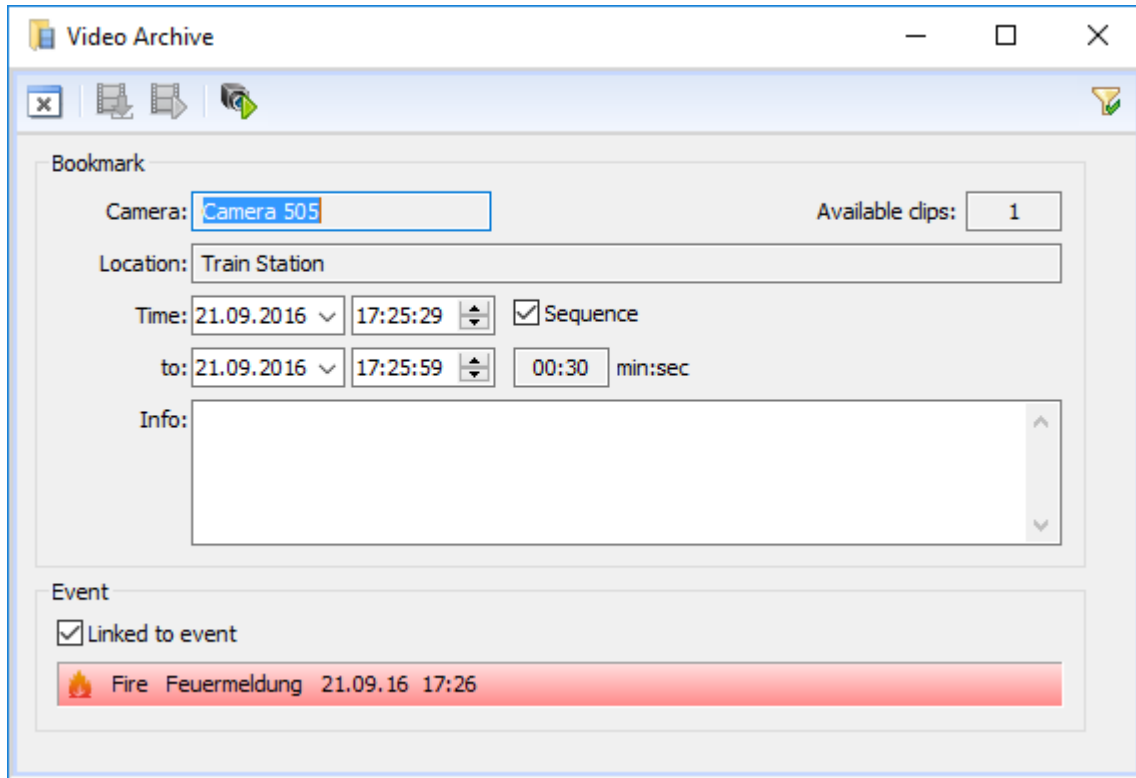


Figure 122: Form view - Video Archive - Bookmark

Data section: Bookmark

Camera

The name of the camera datapoint is displayed here.

Available clips

The number of available clips is displayed here.

Location

The location to which camera datapoints are assigned is displayed here.

Time

The start time with date and time for the bookmark is displayed here.

Sequence

If this option has been set, the bookmark links to a time period. An end time (**until**) later than the start time has to be indicated. Upon setting of the option, the end time will be set to the start time plus 30 sec or to the value set upon opening of the form.

inactive - only the start point is available.

active (default) - a sequence with start and end will be used.

until

For a bookmark with sequence, the end time will be indicated here, otherwise the field will remain blank.

... - if required, enter date and time.

(Duration in min:sec)

The duration of the clip will be displayed in minutes and seconds. Calculation is realized from start and end time. Upon changing the end time, the field will be updated. If the option **Sequence** has not been set, the field will remain blank.

Info

It is possible to define additional information (free text) for the bookmark here.

Blank (default) - if required, indicated the desired information.

▼ Data section: Event

 Linked to event

This option defines whether the bookmark is linked to an event or will be linked to an event. If this option is activated, the currently selected event will be set. If no event has been selected, the option cannot be activated.

inactive - the bookmark is not linked to any event. .

active - the bookmark is linked to an event.

(Event)

The linked event is displayed with icon, datapoint name and state text, highlighted in colour such as in the event list. The field only serves for information and cannot be changed. By doubleclicking on the field, the event can be displayed.

5.13.4.2 Clips

In the form view, the corresponding functions and editing elements are displayed. For example, the times of the clips can be edited here. It is also possible to download the clip.

The functions of the toolbar are described in the previous section [Form views](#)  298.

▼ **Example: Form view - Video Archive - Clip**

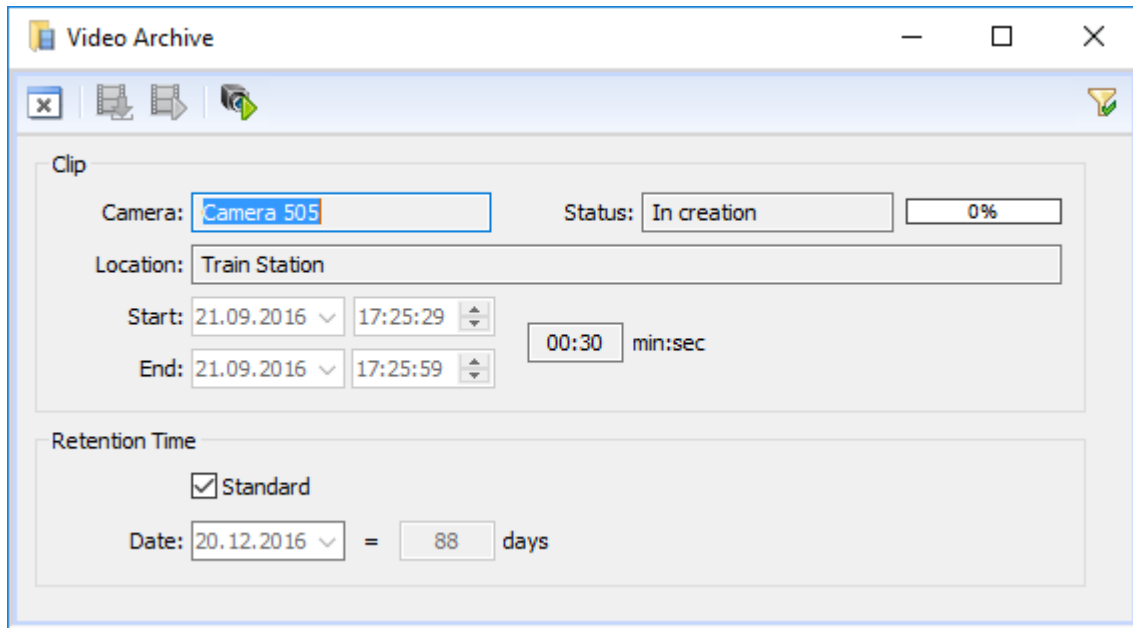


Figure 123: Form view - Video Archive - Clip

▼ **Data section: Clip**

Camera

The name of the camera datapoint is displayed here.

Status

The state of the file (Requested, Creation, Transmission, Ready) as well as the state of the download in percent is displayed here.

Location

The location to which the camera datapoints are assigned will be displayed.

Start

The start time with date and time for the clip is displayed here.

End

The end time with date and time for the clip is displayed here.

(Duration in min:sec)

The duration of the clip in minutes and seconds is displayed here. The calculation is realized from the start and end time.

▼ Data section: Retention time

Standard

Using this option, it can be defined whether standard storage time (settings) will be used or if the storage time can be defined here.

inactive - the storage time defined here will be used.

active (default) - the standard storage time from the settings will be used.

▼ **Date**

The date after which the clip will be deleted upon maintenance will be displayed or defined. The maximum date indication is 9999 days after the current date. For a later date, this date will be taken instead.

... - if required, enter another date.

(Duration in days)

Display of remaining days after which the clip will be deleted upon maintenance. The calculation will be realized from the current and the storage date.

5.13.5 Create bookmark

Using this dialog, bookmarks can be created. This is a form section that is displayed upon definition of the command **Create bookmark** to enter the specific command characteristics. The definitions differ from the explicit command of the user interface, as the definite camera as well as a time selection are already existing.

▼ **Dialog: Video Archive - Create bookmark**

The screenshot shows a 'Create bookmark' dialog box. It features a title bar with a close button. The main area is divided into four sections: 'Camera' with a list of 'Camera 504' and 'Train Station'; 'Time' with two date and time pickers, a 'Sequence to:' checkbox, and a 'min:sec' input field; 'Info' with a large text area; and 'Options' with a 'Link to event' checkbox and an empty input field. 'OK' and 'Cancel' buttons are at the bottom right.

Figure 124: Video Archive - Create bookmark

▼ **Data section: Camera**

Camera
The name of the camera datapoint is displayed here.

Location
The location to which the camera datapoints are assigned is displayed here.

▼ **Data section: Time**

▼ **Time**
 ▲
The start time with date and time for the bookmark is defined here.
... - if required, indicate date and time.

- Sequence to**
If this option has been set, the bookmark will relate to a time period. An end time (**until**) that is after the start time has to be indicated. Upon setting the option, the end time will be set to the start time plus 30 sec resp. to the value set upon opening of the form.
inactive - only the start time is available.
active (default) - a sequence with start and end will be used.

until

For a bookmark with sequence, the end time will be indicated here, otherwise the field will remain blank.

... - if required, indicate date and time.

(Duration in min:sec)

The duration of the clip in minutes and seconds is displayed here. The calculation is realized from start and end time. The field will be updated upon changing the end time. If the option **Sequence** has not been set, the field will remain blank.

▼ Data section: Info

(Info)

An additional information (free text) for the bookmark can be defined here.

Blank (default) - if required, indicate the desired information.

▼ Data section: Options

**Linked to event**

This option defines whether the bookmark is linked to an event or will be linked to an event. If this option is activated, the currently selected event will be set. If no event has been selected, the option cannot be activated.

inactive - the bookmark is not linked to any event. .

active - the bookmark is linked to an event.

(Event)

The linked event is displayed with icon, datapoint name and state text, highlighted in colour such as in the event list. The field only serves for information and cannot be changed. By doubleclicking on the field, the event can be displayed.

5.13.6 Layout window

The layout window will be displayed if a corresponding content has been defined in a layout. It mainly corresponds to the [Table views](#) ^[292] of the video archive, however with a special mode for use within the scope of event display.

Changes compared to the table view of the video archive:

- In this view there is no filter possibility available. This function is lacking in the toolbar.
- The current event is set as fixed filter, i.e. only bookmarks and clips that are linked to the current event are displayed.
- The entries cannot be edited via the form, the corresponding command is not available in the toolbar and the context menus. The direct change of the info text and the storage time via the corresponding dialogs is however possible.
- The column Event is lacking in the bookmark list.

- In the context menu Bookmark, there is no submenu **Event**, only the command **Separate from event** is available.

5.14 Event Archive

Once the handling of an event has been completed (closed), this event along with all processing information is saved in the **Archive**.

Whether saving in the archive occurs automatically, must be performed manually, or whether the event is discarded without saving depends on the system settings in the [Event Handling](#)^[475] section. Additionally, via the [Tab Command](#)^[731], you can assign commands to datapoints such as [Close Event](#)^[966], [Ignore Event](#)^[993], or [Don't Save Event](#)^[986] to handle the event accordingly.

Along with the event, the corresponding texts including all user entries are saved in the interactive objects. Thus, entries in [Entry Fields](#)^[919], the status of [Check Boxes](#)^[909] etc. are also saved in the archive. Because the entire text is archived as well, changes to text templates do not have any effect on archived events. From the archive, you can retrieve events and have them displayed exactly the same way they appeared at the time of saving into the archive.

Due to space requirements, corresponding graphics are only saved in the archive by file name (graphics are generally quite large in size). Any subsequent changes to the graphic will thus also show in the display of the archived event.

After executing the menu command **Functions | Archive...** first the [Filter View](#)^[307] of the **Archive** opens. Here you can determine filter criteria according to which the records in the archive are then displayed in [Table View](#)^[313]. You can then look at a selected entry in greater detail in [Event View](#)^[315].

A special case of the event archive is the **Event History**. This event history can be opened either via a button, that can be included for example in the [toolbar](#)^[654] of the event list, or via the context menu of [datapoints](#)^[182] and [locations](#)^[179] in the explorer and symbols in graphics that are linked with datapoints. It uses a predefined filter that can be configured in the [Event Handling settings](#)^[475]. All events matching this filter are displayed in [Table View](#)^[313]. The target pane used to display the event history can be configured in the [Contents settings](#)^[450].

5.14.1 Filter View

In filter view, an input screen is displayed in which you can enter the criteria for the selection of archive or log records.

Only records that meet all of your entered criteria are displayed; the criteria is thus joined by the logical **AND**. If one of the fields is left blank, the respective criterion is not incorporated in the search. One exception is time period. This entry is always required.

▼ **Example: Archive - Filter View**

The screenshot shows the 'Event Archive' application window with the 'Filter View' dialog open. The dialog has a blue header bar with an 'Apply' button. Below the header, there are several sections for filtering:

- Select entries**: A section with a blue header bar.
- Period**: Contains 'from' and 'to' date and time pickers. The 'from' date is 04/09/2018 and the 'to' date is 04/09/2018. There are also time pickers for 09:21:35 and 10:21:35. A 'past' checkbox is checked, and there is a '1' in a box and a 'Hours' dropdown.
- Properties**: Contains several dropdown menus: 'Event: All', 'Datapoint: All', 'Segment: All', 'Tags: All', 'Location: All'. There are also checkboxes for 'include children' and 'show current events'. On the right, there are 'Prio: Min. prio' and 'Max. prio' spinners, and dropdowns for 'IF: All', 'WS: All', and 'User: All'.
- Freetext**: Contains three empty text input fields and an 'Attribute' dropdown menu with 'All' selected.
- User inputs**: Contains two empty dropdown menus and a 'Context' dropdown menu with 'All' selected.
- Attachments**: Contains one empty text input field and a 'Type' dropdown menu with 'All' selected.

Figure 125: Archive - Filter View

▼ **Functions: Archive - Filter View Toolbar**



Apply

This function initiates the data search according to the defined filter settings and switches to table view.

▼ Data section: Time Period

From: (Start Date)

Definition of the start date for a search in **dd.mm.yyyy** format.

You can select the day via the calendar that opens via clicking on the arrow or entering a date manually with the keyboard.

Current Date (default) - select a different date if applicable.



*This field is inactive as long as the check box **past:** is active!*

(Start Time)

Definition of the start time for the search in **hh:mm:ss** format.

The selection can be made using the arrow keys or entered manually using the keyboard.

Current Time (default) - select another time if applicable.



*This field is not active as long as the check box **past:** is active!*

to: (End Date)

Definition of the end date for a search in **dd.mm.yyyy** format.

The selection can be made using the calendar, which can be opened by clicking on the arrow, or entered manually using the keyboard.

Current Date (default) - select a different date if applicable.



*The field is inactive as long as the check box **past:** is active!*

(End Time)

Definition of the end time for a search in **hh:mm:ss** format.

The selection can be made using the arrow keys or entered manually using the keyboard.

Current Time (default) - select a different time if applicable.



*The field is inactive as long as the check box **past:** is active!*

past:

With this option, you determine whether you are defining an explicit timeframe or whether you are choosing a selected past timeframe from the current time.

Active (default) - the current time with the selected past time period is applied.



With this setting, explicit entries of date and time are deactivated!

Inactive - the explicitly defined time period is applied.



With this setting, the following entries for a direct past time period are deactivated!

(Quantity)

Definition of the number of units indicated in the following field.

1 (default) - enter a different number if applicable.

(Time Type)

Here you select the desired time type.

Hours (default) - select another time type if applicable.

Choice of time types **hours**, **days**, or **months**.

▼ Data section: Properties

Event:

It is possible to select event types as filter here.

An event corresponds to the filter if the event type corresponds to one of the selected types. All event types can be selected, such as e.g. **Alarm**, **Fault**, etc.

All (default) - the filter is not active.

... - select one or several event types.

Prio:

It is possible to filter according to a priority range (from -999 up to +999) here. An event corresponds to the filter if its priority is within the range. Without indication of the **from** or **up to** values, check of the lower or upper section limit is not active.

Min. Prio / Max. Prio (default) - the filter is not active.

... - if required, indicate the priority range or select it.

Datapoint:

Using this selection, a datapoint category or a datapoint can be defined as filter. The event corresponds to the filter if it belongs to one of the selected datapoint categories or to the selected datapoint itself (datapoint Id).

The following can be selected: **all datapoint categories** and **Datapoints**.

All (default) - the filter is not active.

... - if required, select a datapoint category or datapoint.

SST:

Here, one or several interfaces can be defined as filter. The event corresponds to the filter if it belongs to one of the selected interfaces. The following can be selected: **all defined interfaces** and **without**.

All (default) - the filter is not active.

without - events of datapoints without interface.

... - if required, select one or several interfaces.

include children

With this option you define whether child datapoints of the datapoint selected in the datapoint filter should be considered as well.

Active - events for child datapoints of the selected datapoint are shown as well.

Inactive (default) - events for child datapoints of the selected datapoint are **not** shown.

Workstation:

The selection of a workstation can be made here. An event corresponds to the filter if it has been completed from one of the indicated workplaces. The following can be selected: **all workstations** plus **<No workstation>**, **Local workstation**, **Web**, **Mobile**, **SMS**.

All (default) - the filter is not active.

... - if required, select one or several workstations.

Segment:

A selection of one or several segments can be made here. An event corresponds to the filter if it is assigned to one of the selected segments. The following can be selected: **All defined segments** and **<No segment>**.

All (default) - the filter is not active.

... - if required, select one or several segments.

User:

One or several users can be selected here. The event corresponds to the filter if the event has been completed by one of these users. The following can be selected: **All defined users** and **Current**.

All (default) - the filter is not active.

Current - the user currently registered is used as filter.

... - if required, select one or several users.

Tags:

It is possible to filter according to the tags of an event here. An event possesses the tags of the triggering datapoint that have been active at the time of event. For the filter, any number of tags can be selected via a tree selection field. An event has a tag even if it has a tag subordinated in the hierarchy. All defined tags are available for selection.

- If several tags have been selected in the same hierarchy branch, the event only has to possess at least one of these tags (logic or) in order to correspond to the filter.
- If tags have been selected in different hierarchy branches, the event has to possess all of these tags (logic and). This also applies to combination.

All (default) - the filter is not active.

... - if required, select the corresponding tags.



To select several tags, hold the STRG button pressed during selection. Using the entry key (return), the selection is completed!

Location:

A location can be defined as filter here. An event corresponds to the filter if it has either exactly the searched location or a location that is subordinated to this location. All defined locations can be selected.

All (default) - the filter is not active.

... - if required, select a location.

show current events

With this option you define whether events not yet completed (events from the event list) should be considered as well.

Active - events not yet completed are shown as well.

Inactive (default) - only completed events are shown.

Data section: Free text**(Text / Attribute)**

This is the most flexible filter option. It can be searched for up to three free texts or text fragments within a definable amount of text attributes. Wildcards are supported for text entry. If no wildcard is used, the text has to correspond exactly to an attribute.

- If a text is entered only, all attributes will be considered for the search.
- If both text as well as attributes are entered, the text has to be present at least once in combination with the indicated attributes.
- For blank text entry, the filter option is deactivated.
- If neither text nor context is entered, the filter option is deactivated.

The following can be selected: ***Id, Group Id, Name, State, Detector type, Description, Text macro, Location name, Sensor type, User.Code, User.Login, User.First name, User.Last name***

Blank/All (default) - the filter is not active.

... - if required, enter the search texts and attributes.

i *In case of text macro, it will be searched in all text macros, and in case of user, it will also be searched in all user fields, thus both in the accepting as well as completing user!*

i *As **Wildcards**, (*) can be used for any number of any characters and (?) for exactly one character!
If it shall be searched for the special characters (*) or (?), these will have to be provided with the prefix (\)!
Upper and lower case spelling will not be considered!*

▼ Data section: User inputs

(Text / Context)

Using this option, it can be searched for any user entries or contexts as well as for combinations. Each automatic or manual user entry will be saved linked to a context. Both are a string.

Entry of the context is made via a selection field in which the names of the defined lists can be selected. Free text entry is possible too. Wildcards are supported for entry of the text fragment. If no wildcard is used, the entered text has to correspond exactly to a saved user entry.

- If a text is entered only, it will be searched for this text in all contexts.
- If both text as well as context are entered, the text has to be found in combination with the indicated context as user entry.
- In case of a blank text entry, it will only be searched for the context, i.e. the context has to exist at least once in a user entry.
- If neither text nor context are entered, the filter option is deactivated.

The following can be selected as context: ***all defined lists*** and ***free text entry***

Blank/blank (default) - the filter is not active.

... - if required, select a text and/or context or enter them directly.

i *As **Wildcards**, (*) can be used for any number of any characters and (?) for exactly one character!
If it shall be searched for the special characters (*) or (?), these will have to be provided with the prefix (\)!
Upper and lower case spelling will not be considered!*

▼ **Data section: Attachment**

(Text / Type)

Using this option, it can be searched for defined attachments or for note contents. Wildcards are supported upon entry of the search text.

- If a text is entered only, it will be searched for this text in all attachment types.
- If both text as well as attachment type are indicated, the text has to be found in combination with the attachment type.
- In case of blank text entry, it will only be searched for the attachment type, i.e. at least one attachment with one of the selected types has to exist.
- If neither text nor attachment type are indicated, the filter option is deactivated.

The following types can be selected: **All, Report, Graphic, Note, Other, Freeze image, Video. Blank/All (default)** - the filter is not active.

... - if required, enter a text and/or select the types.

i As **Wildcards**, (*) can be used for any number of any characters and (?) for exactly one character!
 If it shall be searched for the special characters (*) or (?), these will have to be provided with the prefix (\)!
 Upper and lower case spelling will not be considered!

5.14.2 Table View

In the table view, a list of completed events is shown. The columns are predetermined, only the width of the columns can be modified by dragging the mouse.

Rows are marked in different colors depending on the state type. The colors of the text and background correspond to the system settings pertaining to the [Event List](#)⁴⁶⁶.

Via the function, **Filter**, in the toolbar, you can switch back to the **Filter View**.

▼ **Example: Archive - Table View**

Datapoint	State	Location	Begin	End	Accepted	by	Completed	by	WS	Prio.	Description	Tags	Attachment
DemoPanel	IF		08.05.18 10:00	-----	08.05.18 11:49	Andy	08.05.18 11:49	Andy	WS1	4			
Administration-001	Motion alarm	Company, Administration, 1st Flo...	08.05.18 11:43	08.05.18 11:47	08.05.18 11:46	Andy	08.05.18 11:49	Andy	WS1	7			
DemoPanel	IF		08.05.18 11:48	08.05.18 11:49	08.05.18 11:49	Andy	08.05.18 11:49	Andy	WS1	4			
Zone 1 / 1	Off	Company, Administration, 1st Flo...	08.05.18 11:50	08.05.18 11:54	08.05.18 11:51	Andy	22.05.18 14:32	Andy	WS1	2	Administration...		
Zone 1 / 1	Off	Company, Administration, 1st Flo...	08.05.18 11:54	-----	08.05.18 11:54	Andy	22.05.18 14:32	Andy	WS1	2	Administration...		
DemoPanel	IF		22.05.18 09:29	22.05.18 11:29	22.05.18 14:32	Andy	22.05.18 14:32	Andy	WS1	4			
Zone 2 / 1	Off	Company, Logistics, 1st Floor, En...	22.05.18 11:45	22.05.18 12:45	22.05.18 11:53	Andy	22.05.18 14:32	Andy	WS1	2	Warning: CO2 ...		
Zone 2 / 2	Off	Company, Logistics, 1st Floor, En...	22.05.18 11:45	22.05.18 12:45	22.05.18 11:53	Andy	22.05.18 14:32	Andy	WS1	2	Warning: CO2 ...		

Figure 126: Archive - Table View

▼ Functions: Archive - Table View Toolbar



Display

This function starts the event display of a selected event. Double-clicking on an event has the same result.



Filter

This function returns to the Filter View.

▼ Columns: Archive - Table View

For Additional column definitions and information please refer to section [Data Type Event](#)^[647].

- **(Symbol)**
Combined symbol of datapoint category and state type.
The symbol for the [Datapoint Category](#)^[187] is in the background while the symbol indicating the state type is in the foreground (please compare with the table under state log: [Table View](#)^[324]).
- **Datapoint**
Name of the datapoint, if applicable followed by the separator / and sensor number.
- **State**
This is where the state text of the event is displayed. If the event does not contain an explicit state text, the state type is displayed.
- **Location**
Here you find the location to which the datapoint is assigned.
- **Begin**
Timestamp of event receipt.
- **End**
Timestamp of the time event was closed. If the event was not closed by a user but automatically by the system, no timestamp, but ---- is displayed in this column.
- **Accepted**
Timestamp of when the event was accepted by a user.
- **by**
ID of the user who accepted the event.
- **Completed**
Timestamp of when the event was completed.
Completion of the message can occur in various ways:
 - manually by a user
 - automatically through a command [Complete Event](#)^[966]
 - automatically via system settings (under [Event Handling](#)^[475]).
- **By**
ID of the user who completed the event.

- **Workstation**
Workstation from which the event was completed by a user. A value of **0** is indicated if the event was completed automatically without involvement by a user.
- **Priority**
This is where you can find the priority ranking of the event.
- **Description**
This is where the text under Description corresponding to the datapoint is displayed (please see: [Datapoints](#)^[723]).
- **Id**
Here the event ID of the event is displayed.
The event ID has two parts. The first is the number of the workstation that generated the event; the second is a running number (workstation related).
- **Attachments**
In this column you may find attachments assigned to the event if applicable.

5.14.3 Event View

In the Event View of archived events, the selected events are displayed in the same manner as as they are in [Event View](#)^[197] (i.e., with graphics, texts, system log, etc. if applicable). In order to return to the table view of the archive, simply close the event view (event toolbar).

No modifications can be made to archived events. The entries for the various text elements [Entry Field](#)^[919], [Selection Field](#)^[911], etc. remain as they were when the event was completed / closed.

5.15 Logs

In addition to handling of events and controlling linked installations, another important responsibility of a system such as WinGuard is to document processes in a traceable and comprehensive manner and to enable detailed searches in the stored data inventory. To that end, the system stores a broad range of data in protocols and archives.

On the one hand, this allows for the documentation and reconstruction of system processes and their handling by users, and on the other, vulnerabilities and potential sources of errors in the system can be recognized and removed quickly.

All fully handled **events** are stored in the **Archive** along with various processing information. The archive can be accessed via variable filters, and events can be redisplayed from the archive anytime.

All user actions are stored in the **System Log** and can thus be retraced in great detail whenever necessary.

The **Interface Log** stores all data that is sent or received via the interfaces to/from the external installations. The type and scope of the log for each interface depends on the interface module used.

Datapoint states and the history of changes in states are stored in a separate **State Log**.

All logs can be accessed via variable filters. Both the event archive and the logs can be exported as a CSV file (please see CSV [Export and Import](#)^[371]).

Furthermore, information from the archive and logs can be compiled in customized **reports** and printed out.

Records in the logs can be selected and copied to the clipboard. The separator that should be used to separate columns can be configured via the settings. Copying can be done via the key combination **<Ctrl+C>** or via a context menu.

5.15.1 System Log

The System Log stores system incidents and user reactions that can be retraced in great detail whenever necessary.

After executing the menu command **Functions|System Log...** the [Filter View](#)^[318] of the **System Log** is first opened. This is where you can define various filters to control the log data output. All entries are optional; only the time period is required.

By applying the filter, the selected data is displayed in a list with fixed columns in [Table View](#)^[319].

5.15.1.1 Filter View

In filter view, an input screen is displayed in which you can enter the criteria for the selection of archive or log records.

Only records that meet all of your entered criteria are displayed; the criteria is thus joined by the logical **AND**. If one of the fields is left blank, the respective criterion is not incorporated in the search. One exception is time period. This entry is always required.

▼ Example: System Log - Filter View

Figure 127: System Log - Table View

▼ Functions: System Log - Filter View Toolbar



Apply

This function begins the data search according to the defined filter settings and switches to table view.



Cancel

This function closes the system log window.

▼ Data section: Time Period



From: (Start Date)

Definition of the start date for a search in **dd.mm.yyyy** format.

You can select the day via the calendar that opens via clicking on the arrow or entering a date manually with the keyboard.

Current Date (default) - select a different date if applicable.



*This field is inactive as long as the check box **past:** is active!*



(Start Time)

Definition of the start time for the search in **hh:mm:ss** format.

The selection can be made using the arrow keys or entered manually using the keyboard.

Current Time (default) - select another time if applicable.



*This field is not active as long as the check box **past:** is active!*

to: (End Date)

Definition of the end date for a search in **dd.mm.yyyy** format.

The selection can be made using the calendar, which can be opened by clicking on the arrow, or entered manually using the keyboard.

Current Date (default) - select a different date if applicable.



*The field is inactive as long as the check box **past:** is active!*

(End Time)

Definition of the end time for a search in **hh:mm:ss** format.

The selection can be made using the arrow keys or entered manually using the keyboard.

Current Time (default) - select a different time if applicable.



*The field is inactive as long as the check box **past:** is active!*

**past:**

With this option, you determine whether you are defining an explicit timeframe or whether you are choosing a selected past timeframe from the current time.

Active (default) - the current time with the selected past time period is applied.



With this setting, explicit entries of date and time are deactivated!

Inactive - the explicitly defined time period is applied.



With this setting, the following entries for a direct past time period are deactivated!

(Quantity)

Definition of the number of units indicated in the following field.

1 (default) - enter a different number if applicable.

(Time Type)

Here you select the desired time type.

Hours (default) - select another time type if applicable.

Choice of time types **hours**, **days**, or **months**.

Data section: Source**Workstation:**

Here you can select a workstation. Only log entries initiated by the respective workstation are displayed. You can choose from all workstations in addition to **current**.

Blank (default) - optional - no limitations (all workstations).

Workstation - only log data of the selected workstation.

Module:

This is where you can define an interface as a filter. This means that only log entries of this particular interface are displayed. You can choose from all defined interfaces and the **Webserver**.

Blank (default) - optional - no limitations (all interfaces).

Interface - only log data of this interface.

▼ Data section: Incident

Type:

Using this filter, you can limit the selection to one type of incident.

Available types: *Info*, *Warning*, *Error*, *Success*, *Failure*.

Blank (default) - optional - no limitation of the incident type.

Type - limits results to the selected incident type.

Category:

Using this filter, you can limit the selection to one incident category. Available categories: *System*, *Data*, *Actions*, *etc*.

Blank (default) - optional - no category limitations.

Category - limits results to the selected category.

Text:

Here you can enter a search text. This text will be searched in the respective log text of the incident. This field is not case sensitive. Entering only a part of the column content (details) as criterion is sufficient.

Blank (default) - optional - no limitations (all incident texts).

Text - only incidents that contain this text in the incident text.

▼ Data section: Context

User:

Here you can select a user. Only incidents related to this user are displayed. You can choose from all defined users in addition to *Current*.

Blank (default) - optional - no limitations (all users).

User - only incidents within the context of the selected user.

Datapoint:

With this selection you can define a datapoint as a filter. Only incidents with a relevant context to your selection are displayed.

You can choose from all *datapoints*.

Blank (default) - optional - no limitations (all datapoints).

Datapoint - only incidents with a relevant context to this datapoint.

Specific:

This is a display field for definitions from an interface-specific dialog that can be opened with the following button.

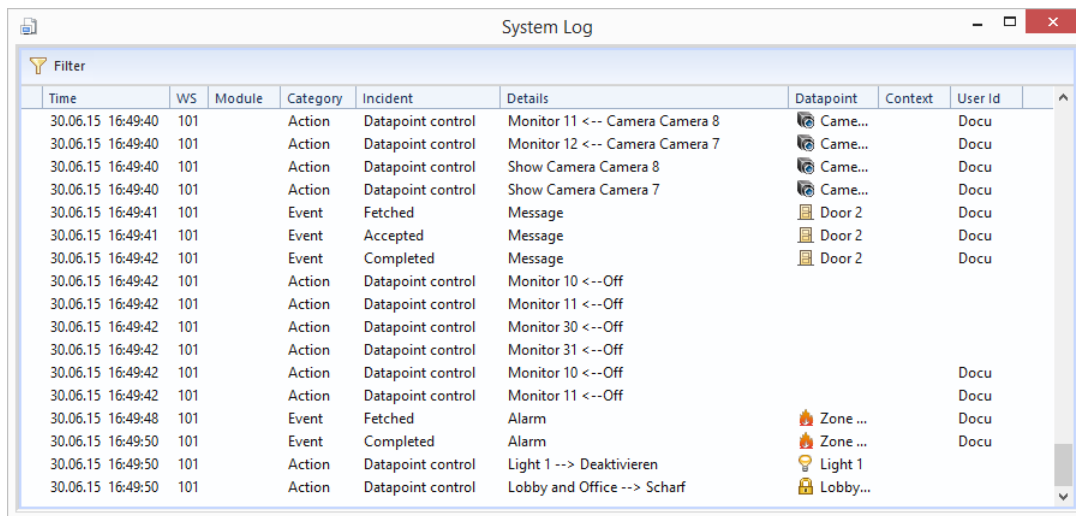
...

This button is only active if an interface was selected in the selection field, **Module**, that supports sending entries to the system log. By clicking on this button, an interface-specific dialog appears.

5.15.1.2 Table View

In the table view, you will find system incidents and user reactions. The columns are pre-determined; only their width can be modified by dragging the mouse pointer.

Example: System Log - Table View



Time	WS	Module	Category	Incident	Details	Datapoint	Context	User Id
30.06.15 16:49:40	101		Action	Datapoint control	Monitor 11 <-- Camera Camera 8	📷 Came...		Docu
30.06.15 16:49:40	101		Action	Datapoint control	Monitor 12 <-- Camera Camera 7	📷 Came...		Docu
30.06.15 16:49:40	101		Action	Datapoint control	Show Camera Camera 8	📷 Came...		Docu
30.06.15 16:49:40	101		Action	Datapoint control	Show Camera Camera 7	📷 Came...		Docu
30.06.15 16:49:41	101		Event	Event	Message	🚪 Door 2		Docu
30.06.15 16:49:41	101		Event	Accepted	Message	🚪 Door 2		Docu
30.06.15 16:49:42	101		Event	Completed	Message	🚪 Door 2		Docu
30.06.15 16:49:42	101		Action	Datapoint control	Monitor 10 <--Off			
30.06.15 16:49:42	101		Action	Datapoint control	Monitor 11 <--Off			
30.06.15 16:49:42	101		Action	Datapoint control	Monitor 30 <--Off			
30.06.15 16:49:42	101		Action	Datapoint control	Monitor 31 <--Off			
30.06.15 16:49:42	101		Action	Datapoint control	Monitor 10 <--Off			Docu
30.06.15 16:49:42	101		Action	Datapoint control	Monitor 11 <--Off			Docu
30.06.15 16:49:48	101		Event	Event	Alarm	🔥 Zone ...		Docu
30.06.15 16:49:50	101		Event	Completed	Alarm	🔥 Zone ...		Docu
30.06.15 16:49:50	101		Action	Datapoint control	Light 1 --> Deaktivieren	💡 Light 1		
30.06.15 16:49:50	101		Action	Datapoint control	Lobby and Office --> Scharf	🚪 Lobby...		

Figure 128: System Log - Table View

Functions: System Log - Filter View Toolbar



Filter

This function returns to the filter view.

Columns: System Log in Table View

- **(Symbol)**
The symbol for the incident type (warning, error, success, failure, blank for type: info).
- **Time**
Timestamp when the incident was registered.
- **WS**
The number of the workstation at which the logged incident took place.
- **Module**
Die interface that initiated the entry (only possible with certain interfaces).
- **Category**
An assignment of the logged incident established in the system.
- **Incident**
A superordinated description of the incident.
- **Details**
A further description of the incident.
- **Datapoint**
The datapoint involved in the incident.

- **Context**

For example a reference to a camera that is linked to the initiating datapoint (only possible with certain interfaces).

- **User ID**

The ID of the respective user.

5.15.2 State Log

The state log stores changes in the states of datapoints if available (depending on interface and datapoint category), as well as changes of analog values in datapoints.

You can open the window or the state log via the menu function **Functions|State Log...** First, the [Filter View](#)³²¹ appears in which you can define various filters for the log output.

All entries are optional; only the time period is a required field. By applying the filter, you will see the selected data in a list with fixed columns in [Table View](#)³²⁴.

5.15.2.1 Filter View

In the filter view, an input screen is displayed in which you can define the selection criteria for the search of records in the State Log.

In the individual areas of the selection criteria, you can define the respective filter. Indicating a time period is required.

Example: State Log - Filter View

Figure 129: State Log - Filter View

Function: State Log - Filter View Toolbar



Apply

This function begins the data search according to the defined filter settings and switches to table view.



Cancel

This function closes the state log window.

▼ Data section: Time Period

From: (Start Date)

Definition of the start date for a search in **dd.mm.yyyy** format.

You can select the day via the calendar that opens via clicking on the arrow or entering a date manually with the keyboard.

Current Date (default) - select a different date if applicable.



*This field is inactive as long as the check box **past:** is active!*

(Start Time)

Definition of the start time for the search in **hh:mm:ss** format.

The selection can be made using the arrow keys or entered manually using the keyboard.

Current Time (default) - select another time if applicable.



*This field is not active as long as the check box **past:** is active!*

to: (End Date)

Definition of the end date for a search in **dd.mm.yyyy** format.

The selection can be made using the calendar, which can be opened by clicking on the arrow, or entered manually using the keyboard.

Current Date (default) - select a different date if applicable.



*The field is inactive as long as the check box **past:** is active!*

(End Time)

Definition of the end time for a search in **hh:mm:ss** format.

The selection can be made using the arrow keys or entered manually using the keyboard.

Current Time (default) - select a different time if applicable.



*The field is inactive as long as the check box **past:** is active!*

past:

With this option, you determine whether you are defining an explicit timeframe or whether you are choosing a selected past timeframe from the current time.

Active (default) - the current time with the selected past time period is applied.



With this setting, explicit entries of date and time are deactivated!

Inactive - the explicitly defined time period is applied.



With this setting, the following entries for a direct past time period are deactivated!

(Quantity)

Definition of the number of units indicated in the following field.

1 (default) - enter a different number if applicable.

(Time Type)

Here you select the desired time type.

Hours (default) - select another time type if applicable.

Choice of time types **hours**, **days**, or **months**.

▼ Data section: Source

▼ Workstation:

Here you can select the workstation. This means that only log entries initiated by the respective workstation are displayed. You can choose from all workstations in addition to **Current**.

Blank (default) - optional - no limitations (all workstations).

Workstation - only log data of the selected workstation.

▼ Interface:

This is where you can define an interface as a filter. This means that only log entries of that particular interface are displayed. You can select from all defined interfaces.

Blank (default) - optional - no limitations (all interfaces).

Interface - only log entries of this interface.

▼ Data section: Filter

▼ Datapoint:

With this selection, you can determine a datapoint category or a datapoint. Only incidents that have a relevant context to your selection are displayed.

You can choose from all **datapoint categories** and **datapoints**.

Blank (default) - optional - no limitations (all datapoints).

Datapoint - only incidents that are relevant to this datapoint or datapoint category.

▼ State:

Here you can enter a state as a filter for the selection. Only incidents in this state are then displayed.

States available for selecting include: **alarm, fault, ..., armed, etc.**

Blank (default) - optional - no limitations (all states).

State - only incidents in this state.

▼ Value:

Here you can determine if the the value from the log should be **greater than or equal to** , or **smaller than or equal to** the following defined value in the entry field.

<= (default) - only log values that are **smaller than or equal to** the following value.

=> - only log values that are **greater than or equal to** the following value.



If the following entry field is left blank the function will not execute!

(Value)

Only log entries are displayed in which a datapoint of the category **measurement** has a value greater than or equal to / smaller than or equal to the entered number. Decimal places are indicated with a period.

Blank (default) - optional - Filter is inactive.

Value - Filter is active with the function **<=** or **=>**.

Only State Changes

When this function is active, rows that contain a datapoint with a change in value but no change in state (such as sleep mode, alarm, or fault), are faded out.

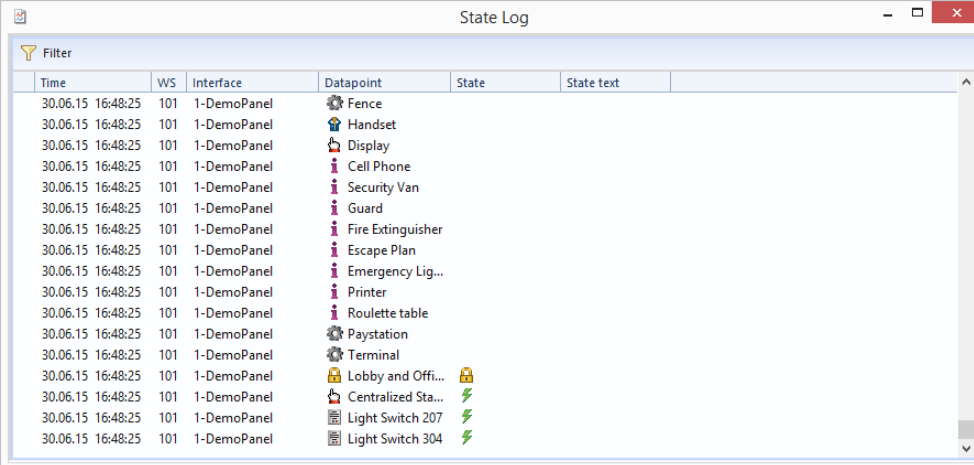
Active (default) - only changes in value with concurrent changes in state are displayed.

Inactive - all changes in value are displayed.

5.15.2.2 Table View

The table view shows the list of datapoints with the corresponding changes in state or values. The individual columns are predetermined, only their width can be modified by dragging the mouse pointer.

Example: State Log - Table View



Time	WS	Interface	Datapoint	State	State text
30.06.15 16:48:25	101	1-DemoPanel	Fence		
30.06.15 16:48:25	101	1-DemoPanel	Handset		
30.06.15 16:48:25	101	1-DemoPanel	Display		
30.06.15 16:48:25	101	1-DemoPanel	Cell Phone		
30.06.15 16:48:25	101	1-DemoPanel	Security Van		
30.06.15 16:48:25	101	1-DemoPanel	Guard		
30.06.15 16:48:25	101	1-DemoPanel	Fire Extinguisher		
30.06.15 16:48:25	101	1-DemoPanel	Escape Plan		
30.06.15 16:48:25	101	1-DemoPanel	Emergency Lig...		
30.06.15 16:48:25	101	1-DemoPanel	Printer		
30.06.15 16:48:25	101	1-DemoPanel	Roulette table		
30.06.15 16:48:25	101	1-DemoPanel	Paystation		
30.06.15 16:48:25	101	1-DemoPanel	Terminal		
30.06.15 16:48:25	101	1-DemoPanel	Lobby and Offi...		
30.06.15 16:48:25	101	1-DemoPanel	Centralized Sta...		
30.06.15 16:48:25	101	1-DemoPanel	Light Switch 207		
30.06.15 16:48:25	101	1-DemoPanel	Light Switch 304		

Figure 130: State Log - Table View

Functions: State Log - Filter View Toolbar

 **Filter**










This function returns to the filter view.

Columns: State Log - Table View

- **(Blank)**
- **Time**
Timestamp of when the change in state or values was registered.
- **WS**
The number of the workstation on which the interface is active.
- **Interface**
ID and module name of the interface that initiated the change in state or values.

- **Datapoint**
Name of the datapoint that changed in state or values, as well as the symbol of the datapoint category (please see [Datapoint Categories](#)¹⁸⁷).
- **State**
State symbol for the state of the datapoint (blank=neutral).
- **State Text**
New values at datapoint (as long as supported by interface and datapoint category).

▼ Symbols of the State Log

Symbol	Datapoint State
·	Silent / normal (no symbol)
	Alarm
	Fault
	Event
	Warning
	Pre-Alarm
	RevAlarm (revision alarm)
	RevFault (revision fault)
	RevEvent (revision event)
	Active
	Disarmed
	Armed
	Locked
	Off
	Revision
	Unknown

5.15.3 Interface Log

The interface log stores data received and sent via the interfaces. What kind of information is logged and the scope of the log for each interface depends on the respective interface module used.

You can retrieve the interface log via the menu function **Functions | Interface Log...** First the [Filter View](#)³²⁶ appears, in which you can define various filters for the selection of log information.

All entries are optional; only the time period is a required field. Once you apply the filter, a [Table View](#)³²⁸ of the corresponding data is displayed in a list with fixed columns.

5.15.3.1 Filter View

In filter view, an input screen is displayed in which you can enter selection criteria for the records in the interface log.

In the individual areas of the selection criteria you define the respective filter for the selection data. Entering a time period is required.

Example: Interface Log - Filter View

Figure 131: Interface Log - Filter View

Functions: Interface Log - Filter View Toolbar



Apply

This function switches to table view and initiates the record search using the defined filter settings.

Data section: Time Period



From: (Start Date)

Definition of the start date for a search in **dd.mm.yyyy** format.

You can select the day via the calendar that opens via clicking on the arrow or entering a date manually with the keyboard.

Current Date (default) - select a different date if applicable.



*This field is inactive as long as the check box **past:** is active!*



(Start Time)

Definition of the start time for the search in **hh:mm:ss** format.

The selection can be made using the arrow keys or entered manually using the keyboard.

Current Time (default) - select another time if applicable.



*This field is not active as long as the check box **past:** is active!*

to: (End Date)

Definition of the end date for a search in **dd.mm.yyyy** format.

The selection can be made using the calendar, which can be opened by clicking on the arrow, or entered manually using the keyboard.

Current Date (default) - select a different date if applicable.



*The field is inactive as long as the check box **past:** is active!*

(End Time)

Definition of the end time for a search in **hh:mm:ss** format.

The selection can be made using the arrow keys or entered manually using the keyboard.

Current Time (default) - select a different time if applicable.



*The field is inactive as long as the check box **past:** is active!*

past:

With this option, you determine whether you are defining an explicit timeframe or whether you are choosing a selected past timeframe from the current time.

Active (default) - the current time with the selected past time period is applied.



With this setting, explicit entries of date and time are deactivated!

Inactive - the explicitly defined time period is applied.



With this setting, the following entries for a direct past time period are deactivated!

(Quantity)

Definition of the number of units indicated in the following field.

1 (default) - enter a different number if applicable.

(Time Type)

Here you select the desired time type.

Hours (default) - select another time type if applicable.

Choice of time types **hours**, **days**, or **months**.

▼ Date section: Source**Workstation:**

This is where you can select a workstation. This means that only log entries that were initiated from this particular workstation are displayed. You have a choice of all workstations in addition to **current**.

Blank (default) - optional - no limitations (all workstations).

Workstation - only log data from interfaces connected to the selected workstation.

Interface:

Here you can define an interface as a filter. This means that only log entries of this particular interface are displayed. You have a choice of all defined interfaces.

Blank (default) - optional - no limitations (all interfaces).

Interface - only log data of this interface.

▼ Data section: Incident

Type:

With this filter you can limit the selection to one incident type.
 Available Types: *Info, Warning, Error, Success, Failure, Sent, Received, Blank (default)* - optional - no limitations of the incident type.
Type - limits results to the selected incident type.

Node:

This filter allows you to limit the selection to one node number.
Blank (default) - optional - no limitation to one node number.
Node - limits results to the selected node.

Text:

Here you can enter search text. This text is searched in the respective log text of the incident. This field is not case sensitive. Only a part of a column entry (incident) is sufficient as criterion.
Blank (default) - optional - no limitations (all incident texts).
Text - only incidents that include this text in their incident text.

5.15.3.2 Table View

The table view shows a list of records sent or received via the interface. The individual columns are predetermined, only their width can be modified by dragging the mouse pointer.

▼ Example: Interface Log - Table View

Time	WS	Interface	Node	Incident
30.06.15 16:44:59	101	1-DemoPanel		Intercom: Sprechstelle 100 Verbunden -> 100
30.06.15 16:48:17	101	1-DemoPanel		*** Connection FAULT ***
30.06.15 16:48:25	101	1-DemoPanel		*** Connection OK ***
30.06.15 16:48:25	101	1-DemoPanel		Init-Anforderung
30.06.15 16:48:25	101	1-DemoPanel		EMA: Bereich 1 Scharf
30.06.15 16:48:25	101	1-DemoPanel		IO: Analog Out 10 Elevator = 1
30.06.15 16:48:25	101	1-DemoPanel		IO: Analog Out 1 Temperature = 20.0 °C
30.06.15 16:48:25	101	1-DemoPanel		IO: Analog Out 2 Pressure = 0.00 bar
30.06.15 16:48:25	101	1-DemoPanel		IO: Analog In 3 Wind Direction = 300 °
30.06.15 16:48:25	101	1-DemoPanel		IO: Analog In 10 Free Parking Places = 3
30.06.15 16:48:25	101	1-DemoPanel		IO: Digital Out 636 Centralized Station 2 = 1
30.06.15 16:48:25	101	1-DemoPanel		IO: Digital Out 639 Light Switch 207 = 1
30.06.15 16:48:25	101	1-DemoPanel		IO: Digital Out 640 Light Switch 304 = 1
30.06.15 16:49:07	101	1-DemoPanel		IO: Digital Out 2 Deaktivieren
30.06.15 16:49:07	101	1-DemoPanel		ELA: Panel Connect (DG1/1)
30.06.15 16:49:07	101	1-DemoPanel		EMA: Bereich 1 Scharf
30.06.15 16:49:07	101	1-DemoPanel		MSG: Display 1 Text setzen:
30.06.15 16:49:07	101	1-DemoPanel		IO: Digital Out 2 Deaktivieren

Figure 132: Interface Log - Table View

▼ Functions: Interface Log - Table View Toolbar




Filter


This function goes back to the filter view.

▼ Columns: Interface Log - Table View


- **(Symbol)**


This column indicates a symbol for the incident type if applicable.

 Received


 Sent

• Info (no symbol)

 Success

 Failure

 Warning

 Error

- **Time**

Timestamp of when the change in value or state was registered.

- **WS**

Number of the workstation at which the interface is active.

- **Interface**

ID and module name of the interface that initiated the change in values or state.

- **Node**

Node number, as far as the datapoint or the telegram contains a respective definition (if supported by interface).

- **Incident**

Description of incident (texts depend on interface).

5.16 Analysis

In addition to the direct analysis of logs and archives, WinGuard also makes it possible to use this information in reports. The reports are text documents into which respective analyses of archive or log data can be integrated.

The History display can be used for the analysis or presentation of analog information. Here, values are represented as graphics in diagrams as a time function.

Another option for data analysis is via the CSV export function. Using separate programs, you can access the exported data for further processing.

5.16.1 Reports

Reports are WinGuard-texts in .WGT format that show specialty functions. They serve to collect excerpts from the event archive and the various logs and to supplement them with additional information. A report is therefore an element for documenting the work with the system. As soon as you store a WinGuard text in the project subdirectory **Texts\Reports**, you can open the Dialog Reports via the menu function **Functions|Reports**. to display this file.

▼ Dialog: Reports

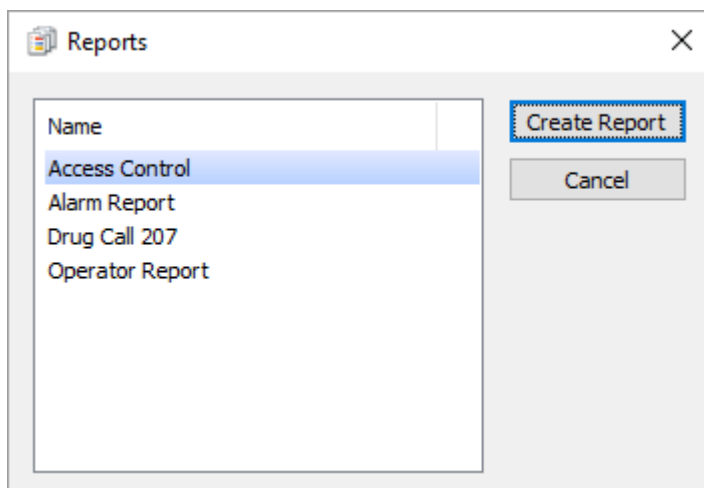


Figure 133: Dialog Reports

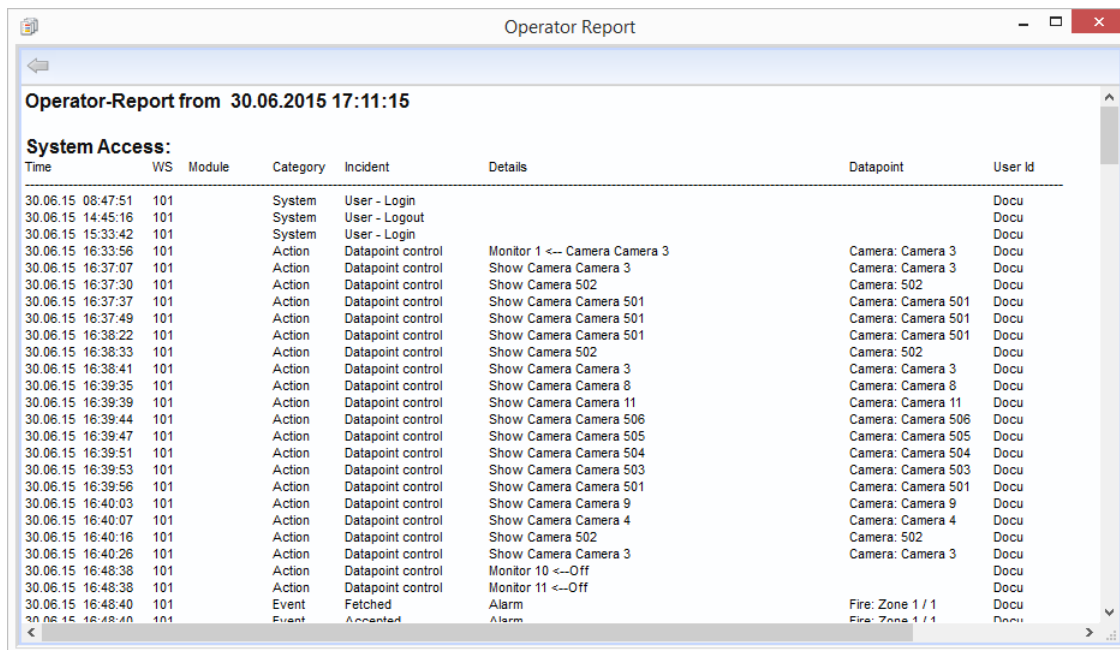
Reports are filed with the text editor, as described in the chapter, [Texts](#)⁸⁸⁷. Furthermore, by using the action, [Create Report](#)⁹⁸², you can select any of the texts stored in the above-mentioned directory. Through execution of the action, the selected report is either displayed, stored, or printed, according to the definitions. The central element of a report is the **log query** that can be accessed via the icon bar or via the menu function **Text|Insert|Log query**. You will then see the dialog **Text Properties** ([Log Query Tab](#)⁹²⁶).

When the report is displayed, you will receive the log query in table format with the respective information from the selected archive or log with application of the defined filter.

The output format of the log query cannot be defined, neither the number or configuration of columns, nor the font or background.

However, using the text editor, you can arrange other elements of the log query such as headings, inserted comments, [Variables](#)⁹³⁹, [Buttons](#)⁹⁰⁶, etc. The display of the various elements can also be made dependent on [IF Conditions](#)¹⁰⁴⁷.

Example: Operator Report



Operator-Report from 30.06.2015 17:11:15

System Access:							
Time	WS	Module	Category	Incident	Details	Datapoint	User Id
30.06.15 08:47:51	101		System	User - Login			Docu
30.06.15 14:45:16	101		System	User - Logout			Docu
30.06.15 15:33:42	101		System	User - Login			Docu
30.06.15 16:33:56	101		Action	Datapoint control	Monitor 1 <-- Camera Camera 3	Camera: Camera 3	Docu
30.06.15 16:37:07	101		Action	Datapoint control	Show Camera Camera 3	Camera: Camera 3	Docu
30.06.15 16:37:30	101		Action	Datapoint control	Show Camera 502	Camera: 502	Docu
30.06.15 16:37:37	101		Action	Datapoint control	Show Camera Camera 501	Camera: Camera 501	Docu
30.06.15 16:37:49	101		Action	Datapoint control	Show Camera Camera 501	Camera: Camera 501	Docu
30.06.15 16:38:22	101		Action	Datapoint control	Show Camera Camera 501	Camera: Camera 501	Docu
30.06.15 16:38:33	101		Action	Datapoint control	Show Camera 502	Camera: 502	Docu
30.06.15 16:38:41	101		Action	Datapoint control	Show Camera Camera 3	Camera: Camera 3	Docu
30.06.15 16:39:35	101		Action	Datapoint control	Show Camera Camera 8	Camera: Camera 8	Docu
30.06.15 16:39:39	101		Action	Datapoint control	Show Camera Camera 11	Camera: Camera 11	Docu
30.06.15 16:39:44	101		Action	Datapoint control	Show Camera Camera 506	Camera: Camera 506	Docu
30.06.15 16:39:47	101		Action	Datapoint control	Show Camera Camera 505	Camera: Camera 505	Docu
30.06.15 16:39:51	101		Action	Datapoint control	Show Camera Camera 504	Camera: Camera 504	Docu
30.06.15 16:39:53	101		Action	Datapoint control	Show Camera Camera 503	Camera: Camera 503	Docu
30.06.15 16:39:56	101		Action	Datapoint control	Show Camera Camera 501	Camera: Camera 501	Docu
30.06.15 16:40:03	101		Action	Datapoint control	Show Camera Camera 9	Camera: Camera 9	Docu
30.06.15 16:40:07	101		Action	Datapoint control	Show Camera Camera 4	Camera: Camera 4	Docu
30.06.15 16:40:16	101		Action	Datapoint control	Show Camera 502	Camera: 502	Docu
30.06.15 16:40:26	101		Action	Datapoint control	Show Camera Camera 3	Camera: Camera 3	Docu
30.06.15 16:48:38	101		Action	Datapoint control	Monitor 10 <--Off		Docu
30.06.15 16:48:38	101		Action	Datapoint control	Monitor 11 <--Off		Docu
30.06.15 16:48:40	101		Event	Fetchd	Alarm	Fire: Zone 1 / 1	Docu
30.06.15 16:48:40	101		Event	Accepted	Alarm	Fire: Zone 1 / 1	Docu

Figure 134: Operator Report

Functions: Operator Report

← (Back)

This function returns users to the previous text display.

Columns: Operator Report

- **Time**
The time stamp of when the incident was registered.
- **WS**
The workstation number on which the logged incident occurred.
- **Module**
The interface that initiated the entry (only possible with certain interfaces).
- **Category**
A fixed grouping of the logged incident.
- **Incident**
A primary description of the incident.
- **Details**
A further description of the incident.
- **Datapoint**
The datapoint involved in the incident.

- **ID**

The ID of the respective user.

5.16.2 Event Reports

The event report compiles almost all relevant information regarding an event in a uniform PDF document. You can find additional information about event reports under [Events](#)^[197] in the section, [Event Report](#)^[212].

5.16.3 History Display

The History Display is a graphic representation of the course a value over time in a two-coordinate system. This function is available for all datapoints that are defined as a value category and on the tab, [Value](#)^[741], the option **store history** is activated. The unit of time on the **x axis** can be changed via the icon bar in the History Display window. Unit and scale of the **y axis** depend on the value range of the datapoint, according to the settings on the tab, [Value](#)^[741]. The color settings for the individual elements of the display can be changed globally in the systems [Settings](#)^[424].

The History Display can be opened via the menu function **View|History Display**, or via the context menu of the relevant datapoints, or more specifically via the Explorerbar or via linked objects in graphics.

You have two options to establish the relationship between a datapoint and the History Display:

- If you have retrieved the History via the system menu, you can use the context menu that you get to when you right mouse click in the display window.
- You pull the datapoint via drag & drop either from the Explorerbar or from a linked object from a graphic into the History window.

You can **scroll** using the buttons in the icon bar, or by clicking on the display and, while holding down the left mouse key, moving it either left or right. To zoom the display, the mouse has to be positioned in the display field and the mouse wheel has to be turned. If the mouse position is left of the Y axis, zooming will have an impact on the Y axis, otherwise also on the X axis.

▼ Window: History Display

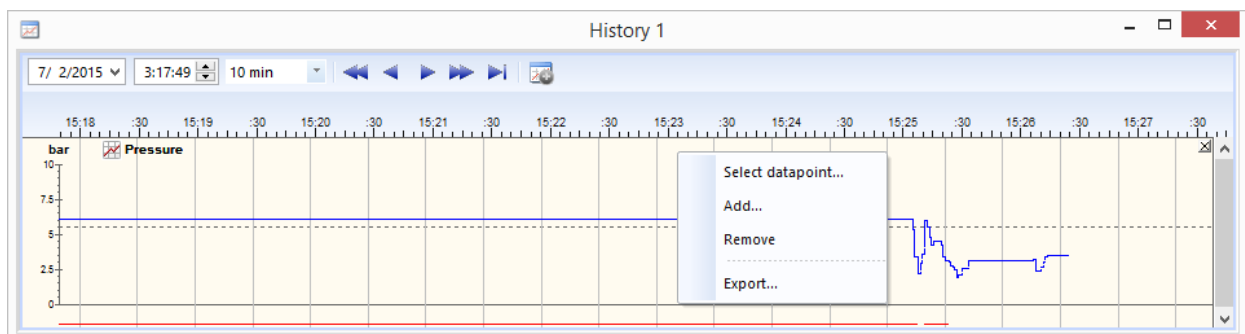


Figure 135: History Display

▼ Functions: History Display - Toolbar

▼ (Date and time)

Date/time that is zero for the start of the time axis.

**(Time frame)**

Definition of the time frame for the representation of the data according to the selected time.

10 min (default) - time frame of 10 minutes.

You can choose from the following values:

1 min, 5 min, 10 min, 30 min, 1 h, 6 h, 12 h, 24 h, 5 days, 15 days, 30 days.

**(Scroll backward - fast)**

Scrolls backwards quickly on the time axis.

**(Scroll backward - slow)**

Scrolls backwards slowly on the time axis.

**(Scroll forward - slow)**

Scrolls slowly forward on the time axis.

**(Scroll forward - fast)**

Scrolls quickly forward on the time axis.

**Scroll to the end**

Scrolls to the end of the available time frame (present).

**Ancillary Window**

Opens an additional History Display window (only available if the History Display was retrieved via the system menu).



Speed is dependent upon the selected time frame.

▼ Functions: History Display - Context Menu

- **Select...**
Opens the dialog, **Selection**, from which you can choose one of the datapoints that has been activated for History Display. The selection replaces the earlier display.
- **Add...**
Opens the dialog, **Selection**, from which you can choose one of the datapoints that has been activated for History Display. The selection enhances the current display, meaning that if graphics are already displayed, the display window is enlarged, and the selected graphic is additionally displayed.
- **Remove**
Removes the graphic in the History Display you clicked on.
- **Export...**
Opens the dialog, **Export**, in which you can enter the path and name of the file (CSV format), in which you can store the data on which the History is based. A table with two columns is generated: the precise time stamp and the corresponding measured value.

5.16.4 CSV Export

Using the CSV Export function you can take data from various sources such as archives, system data, project data, etc. and export it in CSV-format files. You can then use programs such as MS Excel® to process these files further and create other reports, etc.

A CSV export can also be executed as an action, to automate it, make a button for it, etc. Defining the action is done using the same dialog as when directly accessing the CSV export. But instead of executing the export, only its definition is accepted.

You can find additional information about [CSV export](#)^[371] in the section, [Database Functions](#)^[341].

5.17 Monitoring

WinGuard enables you to have monitoring capabilities for various parts of system communication or execution of certain actions for analysis or control purposes.

These are available in dialogs or windows with the respective functionalities. For example, you can observe and analyze network traffic between clients or data exchange among interfaces in the linked systems.

Monitoring is thus an important aid in analyzing problems, but does require relevant knowledge in respective areas.

5.17.1 Net Monitor

In the **System** menu, when you select the function **Network Monitor...**, the window of the network monitor opens in which the network communication between servers and clients can be observed and also saved for error analysis purposes.

In cooperation with your support, you can analyze which workstations are participating, which are sources and which are destinations of data packets, what message types are being sent, the size of the data packets, and their content.

Example: Monitor Network

Time	Conn-info	Conn-Id	Src	Dst	Id	Len	Class	Msg	Flags	Data
02.07.15 17:52:21							INFO	DESTINATIONS		DST=(WS-2)(WS-101)(SRV)(SRV-101)
02.07.15 17:52:22	DOWN	WS-2	WS-2	WS-ALL	51	78	SYSTEM	STATE	MSG	WS-2=OK,NAME=WS2,USER=,LIC=DE-0000-1234 # 2,TYPE=CLT
02.07.15 17:52:22	DOWN	WS-2	WS-2	.	52	20	SYSTEM	QUERY	REQ	
02.07.15 17:52:22	DOWN	WS-2	.	WS-ALL	221	102	SYSTEM	STATE	MSG	WS-101=OK,NAME=SERVER,USER=Doccu,LIC=DE-0000-1234 # 1,TYPE=S.
02.07.15 17:52:22	DOWN	WS-2	.	WS-2	52	20	SYSTEM	QUERY	RSP	
02.07.15 17:52:22	DOWN	WS-2	WS-2	WS-ALL	53	20	DPSTATE	UPDATE	MSG	
02.07.15 17:52:22	DOWN	WS-2	WS-2	.	54	20	DPSTATE	QUERYALL	REQ	
02.07.15 17:52:22	DOWN	WS-2	.	WS-ALL	222	2900	DPSTATE	UPDATE	MSG	ITEMS=227 IDS=1,...,346
02.07.15 17:52:22	DOWN	WS-2	.	WS-2	54	20	DPSTATE	QUERYALL	RSP	
02.07.15 17:52:22	DOWN	WS-2	.	WS-2	223	74	SYSLOG	REQUEST_REPLICATION	MSG	ITEMS=1 'ws02_20150701.log'
02.07.15 17:52:22	DOWN	WS-2	.	WS-2	224	24	STATELOG	REQUEST_REPLICATION	MSG	
02.07.15 17:52:22	DOWN	WS-2	.	WS-2	225	24	DEVLOG	REQUEST_REPLICATION	MSG	
02.07.15 17:52:23	DOWN	WS-2	WS-2	WS-ALL	55	86	SYSTEM	STATE	MSG	WS-2=OK,NAME=WS2,USER=Doccu,LIC=DE-0000-1234 # 2,TYPE=CLT
02.07.15 17:52:25	DOWN	WS-2	WS-2	.	56	1566	SYSLOG	REPLICATE_FILES	MSG	ACTION=Update ITEMS=1 'ws02_20150701.log'
02.07.15 17:52:25	DOWN	WS-2	WS-2	.	57	20	SYSLOG	REPLICATION_DONE	MSG	
02.07.15 17:52:26	DOWN	WS-2	WS-2	WS-ALL	58	86	SYSTEM	STATE	MSG	WS-2=OK,NAME=WS2,USER=Doccu,LIC=DE-0000-1234 # 2,TYPE=CLT
02.07.15 17:52:26	DOWN	WS-2	WS-2	.	59	20	SYSTEM	QUERY	REQ	
02.07.15 17:52:26	DOWN	WS-2	.	WS-ALL	226	102	SYSTEM	STATE	MSG	WS-101=OK,NAME=SERVER,USER=Doccu,LIC=DE-0000-1234 # 1,TYPE=S.
02.07.15 17:52:26	DOWN	WS-2	.	WS-2	59	20	SYSTEM	QUERY	RSP	
02.07.15 17:52:26	DOWN	WS-2	WS-2	.	60	20910	STATELOG	REPLICATE_FILES	MSG	ACTION=Update ITEMS=1 'ws02_state01_20150701.log'
02.07.15 17:52:26	DOWN	WS-2	WS-2	.	61	20	STATELOG	REPLICATION_DONE	MSG	
02.07.15 17:52:26	DOWN	WS-2	WS-2	.	62	2838	DEVLOG	REPLICATE_FILES	MSG	ACTION=Update ITEMS=1 'ws02_dev01_20150701.log'
02.07.15 17:52:26	DOWN	WS-2	WS-2	.	63	20	DEVLOG	REPLICATION_DONE	MSG	

Figure 136: Monitor Network

Functions: Monitor Network

If the save function is active when the monitor window is closed, the save function is also ended and the log file is closed.



Filter Settings

This button opens the dialog **Filter for Network Monitor**, in which you can determine the settings for the filtering of displayed data.



HEX (column on/off)

Switches the column, **Data**, between hexadecimal and plain text formats.

**Pause**

With this function you can pause the network monitor. When clicking on the button again, the display resumes, but data exchanged during the pause is discarded.

When the monitor is paused the icon is shaded in color.

**Delete**

This function deletes the internal buffer and restarts the monitor.

**Print**

With this function you start the printout of the last data analogous to the display in the monitor window. Data in the respective column is displayed in either hexadecimal or plain text format.

**Save**

With this function you perform a one-time save of the current data displayed in the monitor window in a CSV format file. First, the dialog, **Save As** is displayed in which you enter/select a path and a file name. If you do not make any entries, the file is saved under the name **network-yyyymmdd-hhmm.csv** in your project directory in the **log** folder.

Analogous to the display in the monitor window the respective column is in hexadecimal or plain text format.

▼ Columns: Monitor Network

- **(Symbol)**

Here a symbol for the direction of the message is displayed.



Received



Sent



Other info

- **Time**

Time stamp the event was registered.

- **Conn-Info**

Type of connection (for the server, for example **DOWN** and the first connection of a client **UP-1**).

- **Conn-Id**

Number of the workstation (WS-x).

- **Src**

Number of the workstation from which information was sent.

- **Dst**

Number of the workstation to which information was sent.

- **Id**

ID or number of the message.

- **Len**

Length of the message in bytes.

- **Class**
Class of the log information (for example, SYSLOG, EVENT, ... (please also see Filters)).
- **Msg**
Type of message (for example, UPDATE, QUERY, EVENT_INFO, ...)
- **Flags**
Additional information about the **Msg** for further classification (for example, REQ, RSP, MSG, ...).
- **Data**
Information about the data packet.

▼ Dialog: Net Monitor Filter

In this dialog, you can select various filter for the data output displayed in the network monitor.

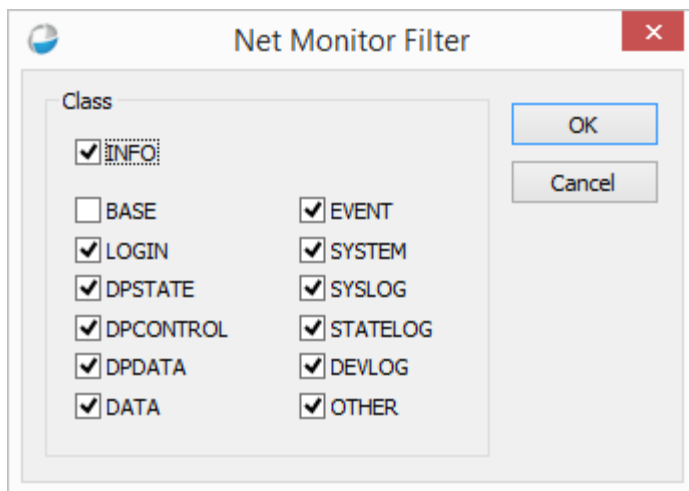


Figure 137: Net Monitor Filter

▼ Data section: Class

Using the check boxes, respective classes of log data can be activated or deactivated.

- INFO**
- BASE**
- EVENT**
- LOGIN**
- SYSTEM**
- DPSTATE**
- SYSLOG**
- DPCONTROL**
- STATELOG**

- DPDATA**
- DEVLOG**
- DATA**
- OTHER**

5.17.2 Interface Monitor

With interfaces that have this function, the Interface Monitor can be started with the respective function via the interface window [Table View](#) for the specific interface currently selected. A separate monitor window is opened for each interface. Here you can follow the data traffic of the interface for support in error searches or startup of operation. You may also print out or save data here. Data packets can be displayed in different forms.

One form is the list view in which data packets (telegrams) are displayed in rows. In the column on the far left, sent data is indicated with a red arrow pointing left, and received data with a green arrow pointing right. The timestamp is also faded in and you have the option of displaying data in a hexadecimal or ASCII format. Since only one row of the telegram is displayed, these are generally abbreviated, but can be viewed in their entirety via the respective tooltip.

In compact view, all bytes are logged in sequence, so that it is possible to view the complete data without tooltip. However, the beginnings and ends of separate telegrams are not marked and can only be interpreted via a documentation of the interface log.

Switching between views during operation is possible at any time without incurring losses.

Example: Monitor Interface ...

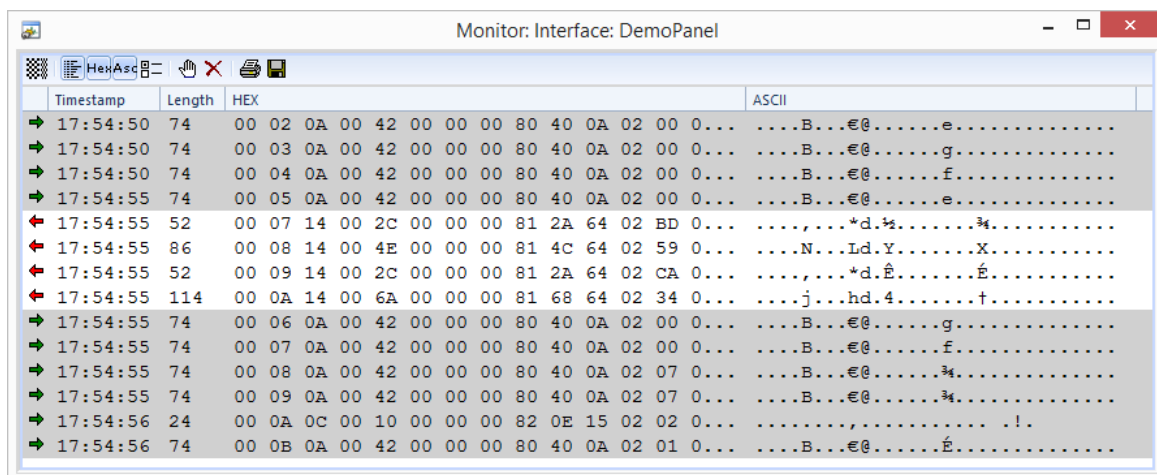









Figure 138: Monitor Interface ...

Functions: Monitor Interface

When closing the monitor window, if the save function is active, the save function is also ended and the log file is closed.



- Compact View**
This function allows you to switch from list view to compact view.
- List View**
This function allows you to switch from compact view to list view.

-  **Hex (column on/off)**
This function is only available in list view and makes the column with the hexadecimal display visible or invisible.
-  **ASCII (column on/off)**
This function is only available in list view and makes the column with the ASCII display visible or invisible.
-  **Filter Settings**
This function opens a dialog through which settings for filtering the displayed data can be made (please see below).
-  **Pause**
With this button you can pause the interface monitor. Clicking on this button again resumes the display but the data that was exchanged during the pause are discarded.
When the monitor is paused, the button is shaded in color.
-  **Delete**
This function deletes the internal buffer and starts the monitor again.
-  **Print**
This function starts the print out of the last data analogous to the display in the monitor window. Received characters are displayed in gray shading to distinguish them.
-  **Save**
With this function you can start or end saving the data in a text file. First, the dialog **Save Monitor Data** is retrieved where you can enter the path and a file name. If you do not make an entry, the file is saved under the name **dev#-yyyymmdd-hhmm.txt** (with # = number of the interface) in your project directory in the **log** folder. The save occurs only if the monitor window remains open. As long as the save function is active, the button is shaded in color. If the button is clicked again, the save function is ended. The entire content of the internal buffer is saved followed by the running data traffic.



At the interfaces, the interface monitor remains open during a restart and data continues to be saved (as long as the function is activated)!

▼ Columns: Interface Log

- **(Symbol)**
Here a symbol is displayed for the event type.
 -  Received
 -  Sent
- **Time**
The time stamp of telegram receipt.
- **Length**
Length of the received telegram in bytes.
- **HEX**
Display of received data in hexadecimal format.

- **ASCII**
Display of received data in ASCII format.

▼ Dialog: List view filter

In this dialog you can select various filter for data output in the interface monitor.

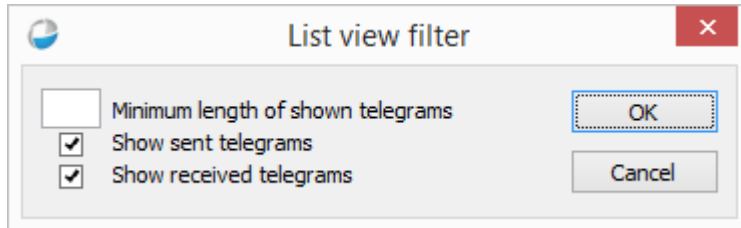


Figure 139: Filter for interface monitor

▼ Data section: List view filter

- Minimum length of telegrams to be displayed**
Here you can determine the minimum length of the characters that are to be displayed in the monitor.
Blank (default) - the standard length is applied.
nnn - modify the length to meet your requirements if applicable.
- Display sent telegrams**
This function turns the display of sent telegrams on or off.
Active (default) - output of these telegrams is active.
Inactive (default) - output of these telegrams is not active.
- Display received telegrams**
This function switches the display of received telegrams on or off.
Active (default) - output of these telegrams is active.
Inactive (default) - output of these telegrams is not active.

5.18 Database Functions

Under the menu item **System | Database** WinGuard compiles various functionalities relating to separate files and data. This includes creating backups, re-loading/restoring back-up data, adding files, maintenance functions, and exporting/importing data. The following sections describe these functions in greater detail.

5.18.1 Files

The application window **Files** offers an explorer functionality similar to the one of the Windows® explorer and offers access to the files managed by the WinGuard data layer. The entry **WinGuard** (left side) lists the files from the subdirectory **files** in their virtual directory structure. The entry **This PC** shows the files from the Windows® file system.

This explorer has to be used as a standard for managing (adding, deleting, etc.) files in WinGuard. If a file is created or changed outside the system (e.g. a CAD graphic or an INI file), the adding at any workstation will trigger that the file will be integrated into the file system and directly replicated to all workstations. The file explorer can be accessed via the menu command **System | Database | Files....**

In the file explorer, the functions for editing the file structures are available. Here it is possible to edit directories and files. Some of the file functions are also available directly in the explorer for graphics and texts. Important functions are the export and adding of files.

To enable access from WinGuard to external file types (e.g. PDF, HTML, etc.), there is a setting in the characteristics for publishing of folders. If folders are activated for publishing, the copies of the original data will be provided temporarily in the **Project folder** under **\temp\files** in corresponding paths and files if the function is activated in the settings. However, such mirroring only functions in one direction, i.e. changes in WinGuard will also affect the mirrored folder, but changes to the mirrored folder will not lead to any changes of the assigned files in WinGuard. If WinGuard is terminated or the publishing is canceled, the paths/files will be deleted again immediately.

It is only possible to publish folders, but all files and subfolders (the total hierarchy) will implicitly published too and cannot be explicitly excluded from publishing. Explicitly published folders will be marked with a special overlay icon in the file explorer.



The access to the WinGuard files and the file structure resp. the adding or exporting of files using the Windows® explorer is not possible!



If you insert new files from other X4 projects, please consider that the link information is not valid in your project and therefore all links must be linked again!



If you insert new files from older X3 projects, please consider that the function Update formats must be executed manually to convert the files!

Alternatively the inserted files can be opened and directly saved with the appropriate editor for conversion!

▼ **Window: Files**

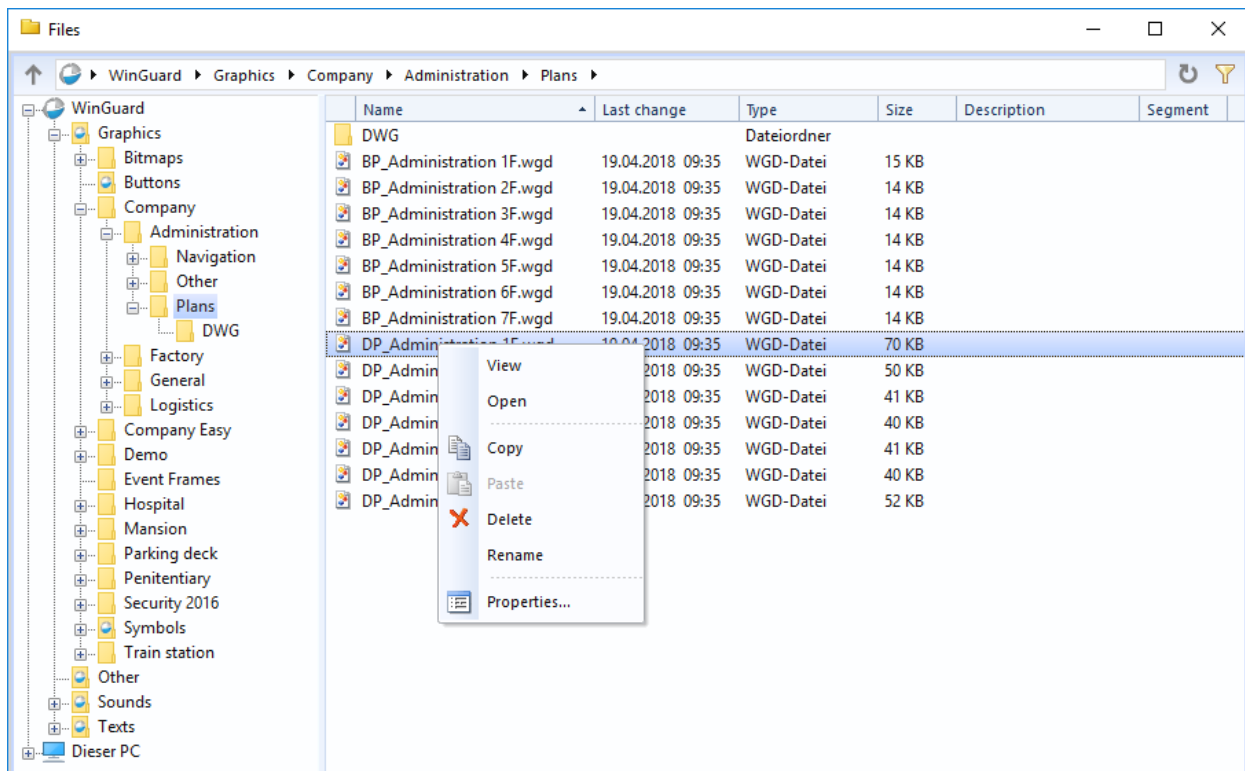


Figure 140: Files

▼ **Functions: Navigation bar**

↑ **Up**

This function navigates to the next structure element up.

📍 **Path**

Here the actual path is shown. Navigation with the arrow control elements is possible.

🔄 **Refresh**

This function refresh the view.

🔍 **Filter**

This function opens a filter dialog. Here you can define a text with (*) and (?) for the search in the description text.

Blank (default) - the filter is not active.

... - only matched files and folders are shown.

▼ **Functions: work space**

The functions are provided via the context menus. Which of these functions are available for the particular user depends on the file types and the specific user rights.

- **View**

Corresponds to the double click on the explorer and the file will be displayed (provided that the format is supported) in the corresponding display window. By making a right click in the display window and selecting the function **Open**, the file can, if required, be opened directly with the corresponding editor.

- **Open**

This function opens (provided that the format is supported) a window of the particular editor in which the corresponding file will be loaded.

- **New**

This function opens a selection via which a new folder or a new file (type depending on the particular directory) can be created with a default name in the selected folder. If there already is an element having the same name, a consecutive number will be added to the name.

**Copy**

Using this function, a copy of the selected files or folder is copied into the clipboard.

**Paste**

With this function the files or folder from the clipboard are inserted in the selected folder.

- If the identical files or the folder already exist (selected before with Copy), they will be created with the same name and an added consecutive number (#).
- If the file or folder are not identical a window is shown where you can choose to replace or create a copy of this files or folder. If you create a copy they will be created with the same name and an added consecutive number (#).



Consider admissible file types for the corresponding directories!

**Delete**

This function deletes the selected files or folders including all subfolders and their content after confirmation.

- **Rename**

Using this function, the name of the selected file or folder can be changed directly in the explorer. The function can also be executed in the right section using the mouse by making two time delayed clicks on the entry.

**Properties**

This function opens a dialog to setup the properties of a folder or a file. Here you can define the **name** and **description** and a **segment** assignment. Additionally you will find information about type, last changes, etc.

▼ **Dialog: Properties File / Folder**

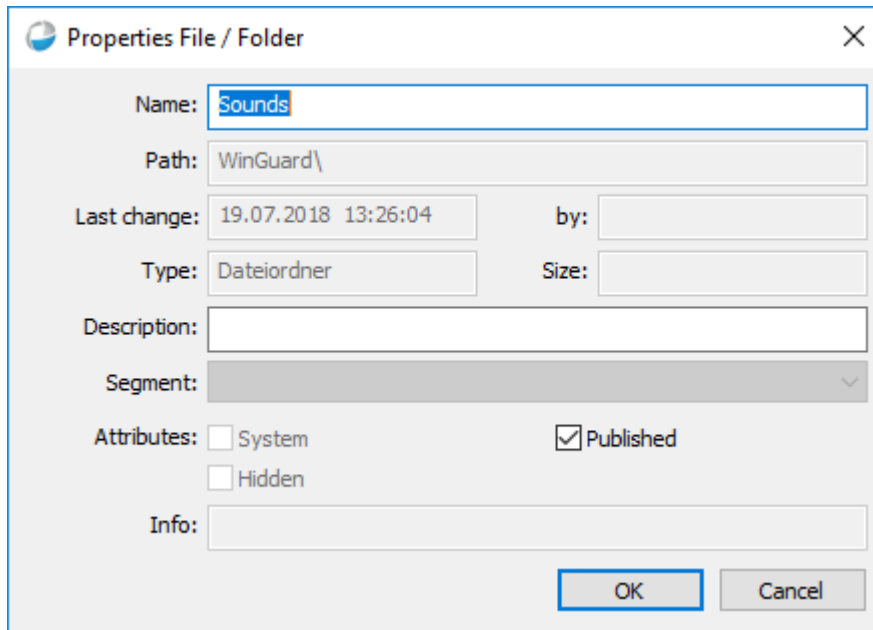


Figure 141: Properties File / Folder

▼ **Data section: Dialog - Properties File / Folder**

Name

The name of the folder or the file in the virtual data structure can be defined here.
... - if required, enter the name of the folder or file.

Path

The path of the folder or file in the virtual data structure is displayed here.

Last change / by

The information with regard to the last change of the folder or file is displayed here.

Type / Size

The information concerning type and size of the folder or file is displayed here.

Description

A description for the folder or file can be defined here.
... - if required, enter the description for the folder or file.

▼ **Segment**

A segment can be assigned to the folder or file here. This data might then only be available at the corresponding workstations.


blank (default) - if required, select a segment for the folder or file.



If a segment is assigned to a folder, this will automatically apply to all subordinated folders and files, whereas their original own segments will be removed!



If a segment is assigned to a superordinated datapoint, the selection is not active and the inherited segment will be displayed here!

 *Segments of locations are not inherited to assigned datapoints!*

Attributes



- System

This option displays whether the file belongs to the system files.



- Hidden

This option displays whether the file belongs to the hidden files.





- Published


With this option, it can be defined whether the folder including all subfolders and files shall be published. If this action is active, the files with the corresponding paths are temporarily provided in the project folder under \temp\files.

inactive (default) - Publishing of the folder is **not** active.

active - Publishing of the folder is active.

 *This option is only available provided that the corresponding rights or settings are in place!*

 *If a folder is published, this setting also applies for all subfolders and their files. This option cannot be changed anymore there!*

 *The data is available only as long as the action and the workstation are active. Changes will become active immediately!*

Info

Further information with regard to the folder or file can be displayed here.

5.18.2 Analyze

The Analyze function provides the possibility to check the database for problems and errors. Primarily, existing links of objects are checked here. Operation and display of the results is realized in the window **Analyze** that can be opened via the menu command **System/Database/Analyze...**

The analysis process can started and stopped. It is processed in the background without having any impact on the operability of the system. However, it will be active only as long as the window **Analyze** is opened. If this window is closed, the process will stop automatically. Upon end or abortion of the analysis process, the current result will be stored locally at the station until the next start of an analysis process (in the temp directory) and can be called up again. Filtering does not have any influence on the analysis process, the process will be always executed completely, only the display in the list will be influenced by the filter.

Window: Analyze

Type	Object	Description	Details
✘ Datapoint	Assault	Invalid reference	Graphic -> Graphics\Demo\GIS\Assault.wgd
✘ Datapoint	Advancis DE	Invalid reference	Location -> {8f0c9b23-315c-faac-c232-54ee75ce367a}
✘ Datapoint	Advancis AT	Invalid reference	Location -> {8f0c9b23-335c-faac-c232-54ee75ce367a}
✘ Datapoint	Advancis NL	Invalid reference	Location -> {8f0c9b23-355c-faac-c232-54ee75ce367a}
✘ Datapoint	Advancis ME	Invalid reference	Location -> {8f0c9b23-375c-faac-c232-54ee75ce367a}
✘ Location	Company, Administration	Invalid segment	Administration has to have the same segment as Parent
✘ Graphic	Symbols\Fire\3d_Flash.wgd	Invalid reference	Link -> Data\TB-ALARM.cas
✘ Graphic	Symbols\Fire\3d_Push.wgd	Invalid reference	Link -> Data\TB - Fire.cas
✘ Graphic	Symbols\Fire\3d_Sensor.wgd	Invalid reference	Link -> Data\TB - Fire.cas
⚠ Graphic	Penitentiary\Building A\Navigatio...	Invalid reference	Layer "Buttons" -> Button "Graphics\Buttons\Power_02+04.wgd" -> Graphics\Buttons\Stromentzug...
⚠ Graphic	Penitentiary\Building A\Navigatio...	Invalid reference	Layer "Buttons" -> Button "Graphics\Buttons\Workstation_01.wgd" -> Graphics\Buttons\GD.wgd
⚠ Graphic	Penitentiary\Building A\Navigatio...	Invalid reference	Layer "Buttons" -> Button "Graphics\Buttons\Empty_01.wgd" -> Graphics\Buttons\GD.wgd
⚠ Graphic	Penitentiary\Building A\Navigatio...	Invalid reference	Layer "Buttons" -> Button "Graphics\Buttons\Empty_01.wgd" -> Data\btnJVA.cas
⚠ Graphic	Penitentiary\Building A\Navigatio...	Invalid reference	Layer "Buttons" -> Button "Graphics\Buttons\Empty_01.wgd" -> Graphics\Buttons\GD.wgd
⚠ Graphic	Penitentiary\Building A\Navigatio...	Invalid reference	Layer "Buttons" -> Button "Graphics\Buttons\Empty_01.wgd" -> Graphics\Buttons\GD.wgd
⚠ Graphic	Penitentiary\Building A\Navigatio...	Invalid reference	Layer "Buttons" -> Button "Graphics\Buttons\Empty_01.wgd" -> Graphics\Buttons\GD.wgd
⚠ Graphic	Penitentiary\Building A\Navigatio...	Invalid reference	Layer "Buttons" -> Button "Graphics\Buttons\Empty_01.wgd" -> Graphics\Buttons\FD.wgd
⚠ Graphic	Penitentiary\Building A\Navigatio...	Invalid reference	Layer "Buttons" -> Button "Graphics\Buttons\Empty_01.wgd" -> Graphics\Buttons\MD.wgd
⚠ Graphic	Penitentiary\Building A\Navigatio...	Invalid reference	Layer "Buttons" -> Button "Graphics\Buttons\Empty_01.wgd" -> Graphics\Buttons\SD.wgd
⚠ Graphic	Penitentiary\Building A\Navigatio...	Invalid reference	Layer "Buttons" -> Button "Graphics\Buttons\Empty_01.wgd" -> Graphics\Buttons\blau-orange.wgd
⚠ Graphic	Penitentiary\Building A\Navigatio...	Invalid reference	Layer "Buttons" -> Button "Graphics\Buttons\Empty_01.wgd" -> Graphics\Buttons\blau-orange.wgd
⚠ Graphic	Penitentiary\Building A\Navigatio...	Invalid reference	Layer "Buttons" -> Button "Graphics\Buttons\Empty_01.wgd" -> Data\BMA.cas
⚠ Graphic	Penitentiary\Building A\Navigatio...	Invalid reference	Layer "Buttons" -> Button "Graphics\Buttons\Empty_01.wgd" -> Graphics\Buttons\blau-orange.wgd
⚠ Graphic	Penitentiary\Building A\Navigatio...	Invalid reference	Layer "Buttons" -> Button "Graphics\Buttons\Empty_01.wgd" -> Data\BMA.cas
⚠ Graphic	Penitentiary\Building A\Navigatio...	Invalid reference	Layer "Buttons" -> Button "Graphics\Buttons\Empty_01.wgd" -> Graphics\Buttons\blau-orange.wgd

Figure 142: Analyze

Functions: Toolbar



(Start Analyze)

Using this function, the analysis is started, whereas the analysis will always be executed completely and the filter will only have an influence on the display. If the window is opened again, it might be that the data of the last analysis will be displayed first.



(Filter)

This function opens the dialog with the filter settings. The button displays a green checkmark (✓) if a filter has been activated (see Dialog: filter analysis).

(Info bar)

The info bar will be displayed, if required, with the following contents below the toolbar.

- During the analysis, the progress and the currently analyzed file type will be displayed here.
- If the filter is active, its current characteristics will be displayed here.

(List)

In the list, different functions are available via the context menu:

- Copy (e.g. export via the clipboard)
- Select all
- Edit (direct opening of the corresponding editing window)

▼ Dialog: Filter - Analyse

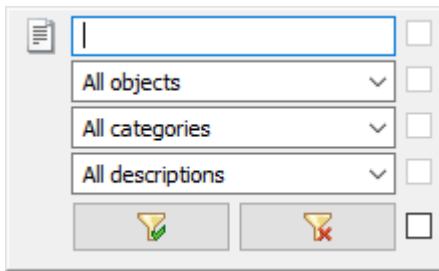


Figure 143: Filter - Analyse

▼ Functions: Filter - Analyse

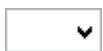


(Text)

A text to search can be defined here. All entries for which the text is contained in the objects or details will be considered.

Blank (default) - no filter - all entries will be considered.

... - only entries with this text in objects or details will be considered.



(Objects)

It is possible to select objects (also several tags) as filter here.

Available objects are:

All objects, Locations, Datapoints, Persons, Interfaces, Workstations, Control Operations, Clips, Bookmarks, Sensor types, Graphics, Texts and Settings

All objects (default) - the filter is not active.

... - only selected objects will be considered.



Categories

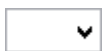
It is possible to select categories (also several tags) as filter here.

Available categories are:

All Categories, Error, Warning, Info

All Categories (default) - the filter is not active.

... - only selected categories will be considered.



Descriptions

It is possible to select description types (also several tags) as filter here.

Available description types are:

All descriptions, Invalid reference, Invalid segment, Deprecated ID

All descriptions (default) - the filter is not active.

... - only selected description types will be considered.



Button

(Apply filter)

By execution of this function, the defined filter elements will be applied and the dialog will be closed.



Button

(Delete filter)

This function deletes all defined filter elements and closes the dialog.

▼ Columns: Analyze window

(Symbol)

Here, a symbol for the entry type will be displayed.

 Fault

 Warning

 Info

- **Type**

Data type of the concerned object (Datapoint, Location, Graphic, Text, Setting).

- **Object**

Concrete object for which the problem has been detected (Datapoint, Graphic, etc.)

- **Description**

Fault description such as e.g. **Invalid link**.

- **Details**

Detailed indication concerning the problem, e.g. at which position in the object the problem exist, if required, info regarding the referenced object, etc.

5.18.3 Maintenance

Here you will have the opportunity to remove data from the system manually and thereby maintain its stability and performance. Especially for large-sized projects, it is highly recommended that you automate maintenance. The same actions that you execute manually with the dialog, Maintenance, you can also define in the system settings and set them up to execute automatically at certain intervals (please refer: Settings - Global - [System](#)⁴²⁴ section **Automatic maintenance**. and [Maintenance](#)¹¹³⁶ in chapter Tips and Help resolving Problems).



The manual maintenance is not a global action. That means that the function is only executed locally on your workstation!



WinGuard uses SQLite databases as standard. Using the maintenance function, databases can be compressed again and non-used space is released - performance improvement!

▼ Dialog: Maintenance

Figure 144: Maintenance

▼ Functions: Maintenance

Button

Start

With this function you start **Maintenance** for your workstation according to established parameters.



The respective data is deleted without prior confirmation!

Button

Cancel

With this function you close the **Maintenance** window without executing any further actions.

▼ Data section: Compact



Valid for all settings in this data section:

Active - the database is compressed.

Inactive (default) - no action.

- Local.db**
This option determines if the local database has to be compressed.
- Core.db**
This option determines if the core (project) database has to be compressed.
- Files.db**
This option determines if the file database has to be compressed.
- Media.db**
This option determines if the media database has to be compressed.
- Event.db**
This option determines if the current event database has to be compressed.
- EventArchive.db**
This option determines if the event archive database has to be compressed.
- SystemLog.db**
This option determines if the system log database has to be compressed.
- InterfaceLog.db**
This option determines if the interface log database has to be compressed.
- StateLog.db**
This option determines if the state log database has to be compressed.

▼ Data section: Remove



Valid for all settings in this data section:

Active (default) - data will be removed.

Inactive - no action.

0 - if you specify the time period (no. of days = **0**) at the input field the log entries should be saved. - no action.

- Undefined tags**
This option determines if the undefined tags in the project database are removed (at the moment tags are only used with datapoints and locations).
- Clips with expired retention time**
This option determines if cop archive entries that are older than indicated in the box are to be deleted.
- Bookmarks older than ... days**
 This option determines if bookmarks that are older than indicated in the box below are to be deleted.
30 (default) - enter the desired time period if applicable.

**Cops older than ... days**

This option determines if cop archive entries that are older than indicated in the box are to be deleted.

360 (default) - enter the desired time period if applicable.

**Archive entries older than ... days**

This option determines if event archive entries that are older than indicated in the box are to be deleted.

360 (default) - enter the desired time period if applicable.

**System log entries older than ... days**

This option determines if system log entries that are older than indicated in box are to be deleted.

90 (default) - enter the desired time period if applicable.

**Interface log entries older than ... days**

This option determines if interface log entries that are older than indicated in the box are to be deleted.

90 (default) - enter the desired time period if applicable.

**State log entries older than ... days**

This option determines if state log entries that are older than indicated in the box are to be deleted.

90 (default) - enter the desired time period if applicable.

**Users with info entry and inactivity since ... (days)**

This option defines whether users having an info entry (only LDAP login) might be removed in case their last login is older than the time period indicated here.

360 (default) - if required, adapt the time for removal of the corresponding users.



If a user has been removed as last member of a group, the group will remain!

**Disable users with info entry and inactivity since ... (days)**

This option defines whether users having an info entry (only LDAP login) might be disabled in case their last login is older than the time period indicated here.

active (default) - corresponding users will be deactivated.

inactive - no action.

180 (default) - if required, adapt the time for disabling of the corresponding users.



*Users having an **Info entry** are usually users that have been created automatically upon login via **LDAP** (for better traceability). The inactivity relates to the last login time. If a user did not log in upon time of the maintenance, the last change time will be used!*

▼ Data section: Disable

Users with info entry and inactivity since ... (days)

This option defines whether users having an info entry (only LDAP login) might be disabled in case their last login is older than the time period indicated here.

active (default) - corresponding users will be deactivated.

inactive - no action.

180 (default) - if required, adapt the time for disabling of the corresponding users.

i Users having an **Info entry** are usually users that have been created automatically upon login via **LDAP** (for better traceability). The inactivity relates to the last login time. If a user did not log in upon time of the maintenance, the last change time will be used!

5.18.4 Update Formats

As part of the WinGuard updates, it may be necessary to perform this function. Here for example, you can initiate automatic data adaptations following an upgrade to a current version. Making these changes ensures continued smooth operation of your system.

If this function is required following certain updates, the program will notify you accordingly. Via the menu command **System|Database|Update Formats ...** you can open the dialog, **Update Formats**, which provides you with the necessary functions.

i If you are unsure whether or not this function should be executed, you can do it at any time. The data is analyzed and, if necessary, appropriate adaptations are made!
- Don't forget to do a backup beforehand!

▼ Dialog: Update Formats

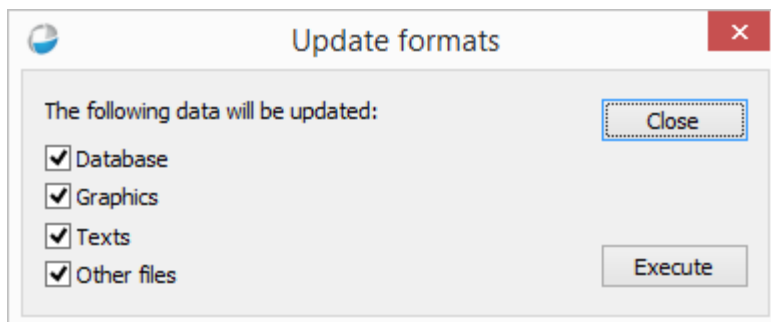


Figure 145: Update Formats

▼ Functions: Update Formats

Button **Close**

With this function you close the **Update Formats** window without executing any other actions.

Button **Execute**

With this function you start the function according to defined parameters.

▼ Data section: Update Formats

- Database**
Data such as profiles, users, locations, datapoint, etc. are processed in the respective database if applicable.
 - Graphics**
Graphics in WGD format stored in the project directory, **Graphics**, or its subdirectories are processed, if applicable.
 - Texts**
Texts in WGT format stored in the project directory, **Texts**, or its subdirectories are processed, if applicable.
 - Other files**
Data in the project directory, **Files**, such as rights, lists, time schedules, animation patterns, layouts, etc. are processed, if applicable.
- Generally, this applies to all check boxes:
Active (default) - data is incorporated.
Inactive - data is **not** incorporated.


5.18.5 Backup

If you are interested in a simple method to secure your data, you could just copy the project and program files onto a data storage device. However, during data copying, the system must be inactive. But in order to secure your data in a highly compressed format and to differentiate which files need to be secured and which ones do not, you have the option of creating a backup through WinGuard using the menu function **System | Database | Backup...** or **System | Database | Data Package...** The backup can run during operation (online). However, in this case, the program files will not be included in the backup.

The backup function (data protection) allows you to secure all or part of the data supply, as well as runtime data such as archives and logs. Backups are also stored as data packages. In contrast to the data package window, the selection possibilities for creation of a backup are not that finely structured. For example, it is not possible to select single files for a backup, but only total categories. This also applies for the restore process. However, backups can be edited afterwards by using the data package window for fine adjustment. In the same way, data packages that have been created with the data package window can be used for a restore.

After the backup has been initiated, the dialog, **Backup Progress** opens. The respective files are first analyzed and then the backup file is generated. When the backup has been completed, the progress display is automatically closed and no further display appears. You can check to make sure that the backup file has been created in the destination folder.

The backup file is stored in ZIP format and can be used at a later date to restore damaged or lost files via the menu function **System | Database | Restore....** The system also contains an automatic backup function that is described in the sections [Setup](#)⁵²⁶ and [Workstation](#)⁵²⁴.

 *A backup should always be executed on the server!*

i The time required to complete a backup depends on the amount of data to back up. For large systems, you should calculate 10 minutes or more.

i During data analysis, the progress display is not yet active. It starts when the data is being copied!

! If a backup is performed on a client instead of a server, only the locally-stored events and logs (runtime data) are backed up. There is no access to the event archive or logs of the other interfaces!

▼ **Dialog: Backup**

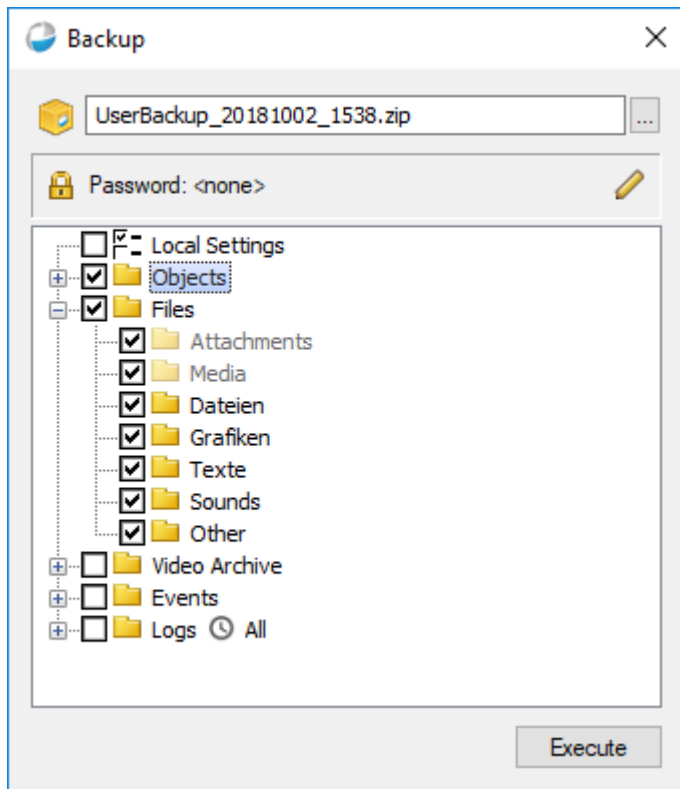


Figure 146: Backup Dialog

▼ **Functions: Backup**

Button **Execute**

With this function you start the backup with your defined parameters.

i This function only becomes available if a file name has been entered!

▼ **Data section: Destination file**

(File name)

Here, enter the path and name of the destination folder in which the backup shall be created.

Blank (default) - enter the path and file name here.

**(Select File)**

This button opens the system dialog, **Select File**, in which folder and file names can be selected or entered.

▼ Datenbereich: Infos

**(License)**

License ID of the backup / packet.

**(Program version)**

Program version of the backup / packet.

**(Workstation)**

Name of the workstation.

**(Date and time)**

Creation date and time of the backup / packet.

**(User)**

Name of the creator of the backup / packet.

**(Password)**

Info if a password is used.

**(Define password)**

This function opens the system dialog **Define password** to define a password.

... *(default)* - indicate a password if applicable.



The Function is after a package extraction with password or after creation of a package available!



The password is needed to restore the data - please keep carefully!

▼ Data section: Content / Range

**(Data selection)**

In this list the data will be shown.

Basically valid for all check boxes here:

Active - data are included.

Inactive - data are **not** included

**Local Settings**

This option defines if the local settings are added to the backup.

**Objects**

This option defines if the objects of the core database are integrated.

Content:

- Datapoints (including persistent states and datapoint groups), Locations, Persons, User, Profiles, Segments, Workstations, Interfaces, Printer, Control Operations, Scheduled commands, Timers, Event Handlings, Sensor types, Panes.

**Files**

This option defines if the project files are integrated (folder: **files/core**).

Content:

- Attachments, Media, Data, Graphics, Texts, Sounds, Other

**Video Archive**

This option defines if data of media data base are integrated (folder: **files/media**).

Content:

- Clips (including assigned clip files), bookmarks.

**Events**

This option defines if current event data respectively event archive data are integrated. During activation or deactivation all options of subordinated event definitions are set in the same state.



Please consider that protocol information are often part of the events!

**- Current events**

This option defines if data of current events (event list) are integrated.

Content:

- Current events (including assigned attachments).

**- Event Archiv**

This option defines if data of the event archive are integrated (folder: **files/attachment**).

Content:

- Event Archiv data (including assigned attachments).

**Logs**

This option defines if log data are integrated. During activation or deactivation all options of subordinated log definitions are set in the same way.

**- System log**

This option defines if system log data are integrated.

**- Interface log**

This option defines if interface log data are integrated.

**- State log**


This option defines if state log data are integrated.


5.18.6 Restore


If you made a backup of your system at a previous date, you can use this file to restore your system. Via the menu command, **System|Database|Restore...** you can set your data back to its status at the time of backup. Please note that your system data is deleted or overwritten in this process, and a reset can only be accomplished with a respective backup.


In a server-client system, the restore function must be executed exclusively on the server. In systems that include a server, standby-server, and possibly clients, the standby server should be shut down prior to initiating the restore function. The restore is then to be carried out on the active server. The standby server can be restarted after completion of the procedure (look at Tips: [Restore](#)¹¹³⁵).

If the restore function is executed on a client instead of a server, the backup will only contain the messages and logs (runtime data) of the client. If such a backup is loaded on the server (restore), runtime data should be excluded (if available). Additionally, following a restore, some settings on the server have to be manually restored.

 *Before a restore, all clients have to be shut down!*

 **A restore should always be executed on the active server or standalone workstation. If a standby server is part of the system configuration, it must be shut down prior to executing a restore on the active server!**

 **A restart is necessary after a restore (all server and clients)!!!**

 **A restore using a client-backup should only be executed in case of emergency and if you have detailed knowledge about this procedure. Runtime data and server setting will be overwritten!**

▼ Dialog: Restore

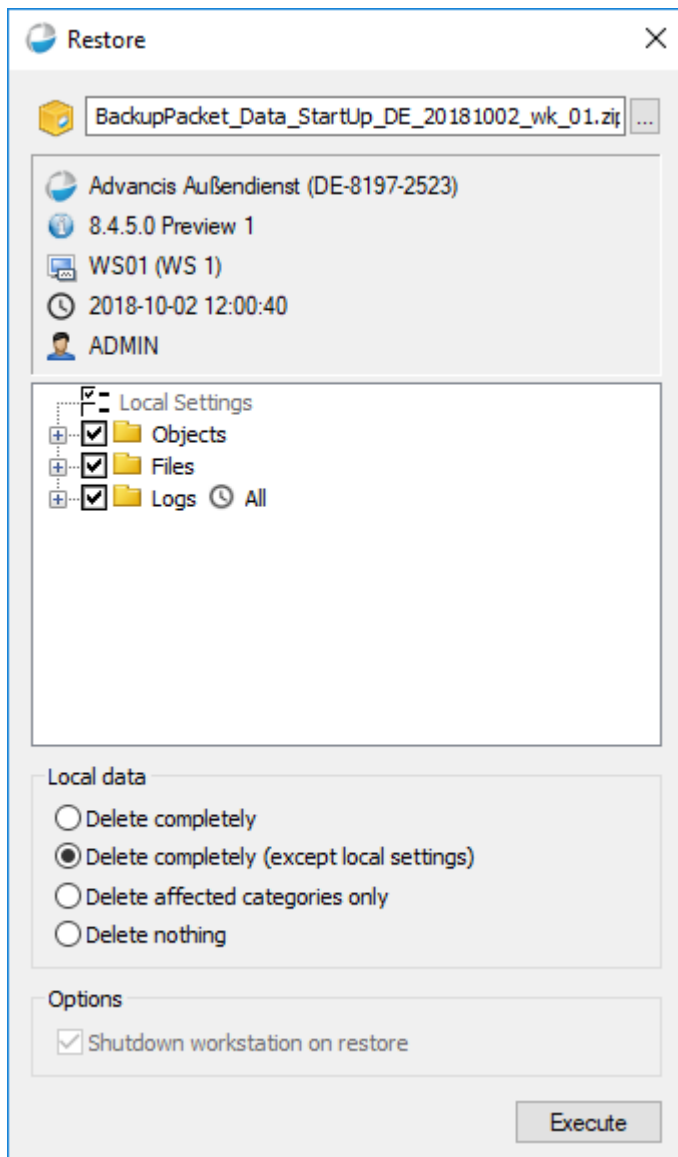


Figure 147: Dialog Restore

▼ Functions: Restore

Button **OK**

With this button you start the **Restore** function according to defined parameters.

i *This function becomes available only after a filename has been entered!*

! **The respective files on the database are deleted or overwritten without further confirmation!**

Button **Cancel**

With this function you close the **Restore** window without executing any further actions.

▼ Data section: Source file



(Filename)

Enter the path and name of the source file that is to be used to execute the restore.
Blank (default) - enter the path and filename here.



(Select File)

This button opens the system dialog **Select File**, in which the directory and filename can be selected.

▼ Data section: Password



(Password)

Info if a password is used.



(Define password)

This function opens the system dialog **Define password** to define a password.
... (default) - indicate a password if applicable.



The Function is after a package extraction with password or after creation of a package available!



The password is needed to restore the data - please keep carefully!



The check boxes are active only after a source file has been selected. Which check boxes are active depends on which data categories the backup contains. Data categories not contained in the backup remain inactive.

▼ Data section: Content / Range

(Data selection)

In this list the data will be shown.

Basically valid for all check boxes here:

Active - data are included.

Inactive - data are **not** included



Local Settings

This option defines if the local settings are added to the backup.



Objects

This option defines if the objects of the core database are integrated.

Content:

- Datapoints (including persistent states and datapoint groups), Locations, Persons, User, Profiles, Segments, Workstations, Interfaces, Printer, Control Operations, Scheduled commands, Timers, Event Handlings, Sensor types, Panes.

**Files**

This option defines if the project files are integrated (folder: **files/core**).

Content:

- Attachments, Media, Data, Graphics, Texts, Sounds, Other

**Video Archive**

This option defines if data of media data base are integrated (folder: **files/media**).

Content:

- Clips (including assigned clip files), bookmarks.

**Events**

This option defines if current event data respectively event archive data are integrated. During activation or deactivation all options of subordinated event definitions are set in the same state.



Please consider that protocol information are often part of the events!

**- Current events**

This option defines if data of current events (event list) are integrated.

Content:

- Current events (including assigned attachments).

**- Event Archiv**

This option defines if data of the event archive are integrated (folder: **files/attachment**).

Content:

- Event Archiv data (including assigned attachments).

**Logs**

This option defines if log data are integrated. During activation or deactivation all options of subordinated log definitions are set in the same way.

**- System log**

This option defines if system log data are integrated.

**- Interface log**

This option defines if interface log data are integrated.

**- State log**

This option defines if state log data are integrated.


▼ Data section: Local Data

It can be defined here whether or which data shall be deleted before:




All objects and files of the corresponding sections of the current DB will be deleted or overwritten without any further confirmation!


Delete completely

 **Before the restore, all data will be deleted and afterwards the selected data will be imported!**

Delete completely (except local settings)

 **BEfore the restore, all files except the local settings are deleted and afterwards the selected data will be imported!**

Delete concerned categories only

 **Before the restore, all data of the selected categories will be deleted and afterwards the selected data will be imported!**


Delete nothing

 **Data will not be deleted, already existing data will be overwritten!**

▼ **Data section: Options**

Shutdown workstation for Restore

It can be selected whether WinGuard shall be shutdown for restore.

 *The activation of this option is recommended!*


5.18.7 Data Package


Data packages enable storage and exchange of linked files or data sets between systems. A data package can contain a partial amount of project data up to the complete data. This data is stored in the same way as in the project directory with additional management information. Basically it is a ZIP file containing a describing XML file.

Via the menu function **System|Database|Data package...**, the window for editing of the data package can be opened or activated. Here it is not only possible to create data packages, but also to read them and import their data.

After reading of an external data package, its content will be displayed. Via drag & drop and context menus, contents can be exchanged between WinGuard and the data package or between data packages. Upon selection of the file entry in the bottom area of the window, the files contained in the package will be displayed just like in the WinGuard file explorer and can be accessed separately via drag & drop. To create a data package, the files can be compiled via context menus here and be stored then.

The backup function automatically creates the same form of data packages as the data package window. Using the data package window, there is the possibility to selectively restore contents of a backup, e.g. single files. Restore recovers the data of a data package automatically to a certain extent, notwithstanding how the package was created.

 **Importing of data packages should only be executed at the active server or at a standalone client, standby servers might have to be terminated before!**

 **After importing of data packages, the total system (including all servers and clients) should be re-started!!!**

▼ Window: Data Package

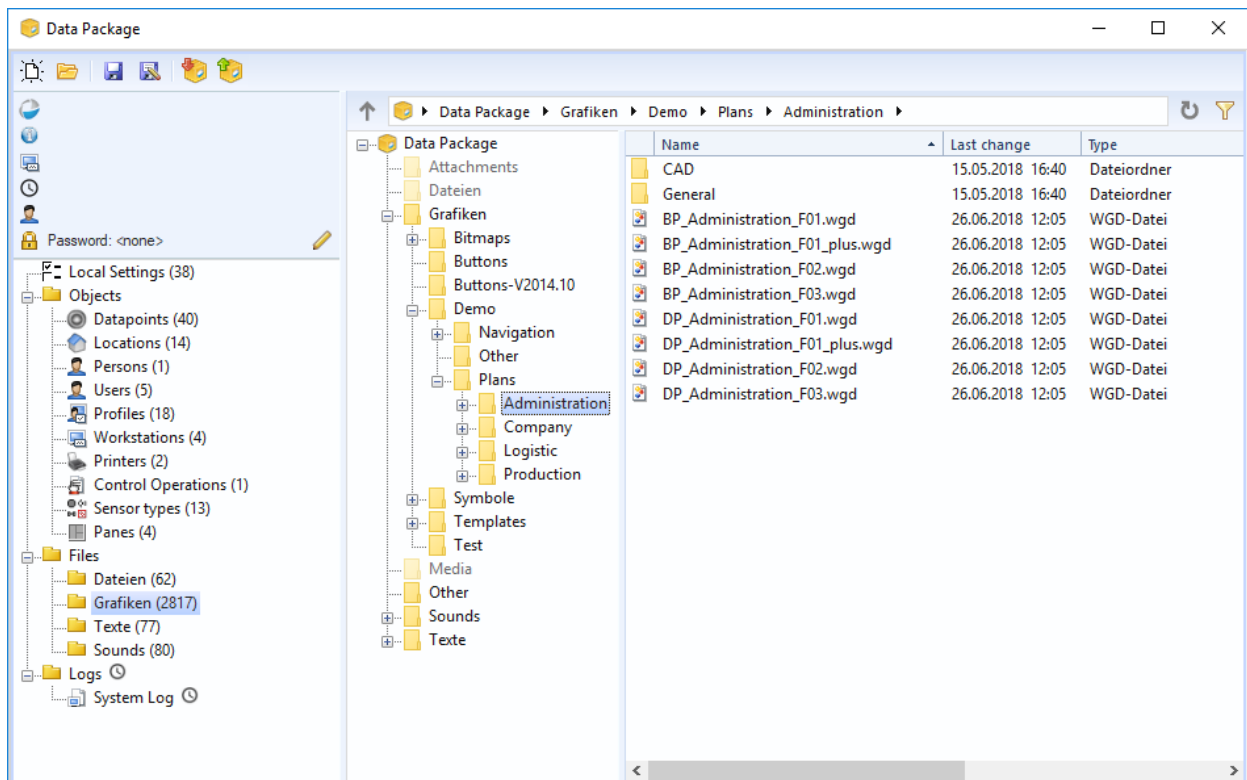


Figure 148: Window - Data Package

▼ Functions: Toolbar



Open

Using this function, the dialog for file selection is opened in order to select an available data package.



Load

This function opens a previously opened file for further editing or for importing of data.



Save changes

This function serves for saving (creation) of a package file with the selected content. If path and file name are already known, this data will be stored directly without any further confirmation. If it is a new file, the file dialog for definition of path and name will be opened.



Save as

This function servers for saving (creation) of a package file with the selected content. The file dialog for definition of path and name will always be opened.



Add

Using this function, the dialog **Restore** will be opened. Here, the appropriated data can be selected and added to the package.



Only selectable if the current package is not part of an active operation!



Restore

Using this function, the dialog **Restore** is opened. Here, the corresponding data can be selected from the package and then taken over.



Only selectable if the current package is not empty and not involved in any operation!



Extract package

Using this function, the content of a package can be unpacked. After selection of a package, the function is available in the middle of the right window section.

If an already existing package is opened, only its content will be displayed. It has to be unpacked in order to be able to make any changes to this package.



The unpacking will be implicitly realized before most operations, if required!

- **Remove**

If required, this function is available in the context menu of the category explorer in order to remove correspondingly selected categories from the package.

- **Cancel**

If required, this function is available in the info line of the window in order to cancel the currently active action. Data already taken over will remain.



A cancellation upon restore should be avoided, as the project data might be in an inconsistent status then!

▼ Data Section: Info (up left)



(License)

License ID of the backup / packet.



(Program version)

Program version of the backup / packet.



(Workstation)

Name of the workstation.



(Date and time)

Creation date and time of the backup / packet.



(User)

Name of the creator of the backup / packet.



(Password)

Info if a password is used.

**(Define password)**

This function opens the system dialog **Define password** to define a password.

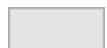
... *(default)* - indicate a password if applicable.



The Function is after a package extraction with password or after creation of a package available!



The password is needed to restore the data - please keep carefully!

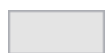
▼ Data Section: Content (down left)**(Content)**

After selection and loading of a package file or upon creation of a package file, information concerning the content of the file will be displayed here. Using the functions of the context menus, particular objects and files can be selected for storage (export) or for restore (import).

The following sections are available :

- Local settings
- Objects
 - Datapoints (including persistent states and datapoint groups), Locations, Persons, User, Profiles, Segments, Workstations, Interfaces, Printer, Control Operations, Scheduled commands, Timers, Event Handlings, Sensor types, Panes.
- Files
 - Attachments, Media, Data, Graphics, Texts, Sounds, Other.
- Video archive
 - Clips (including assigned clip files), bookmarks.
- Protocols
 - System log, interface log and state log.
- Events
 - Current events (including assigned attachments),
 - Event archive (including assigned attachments); can be defined by filters.

▼ Data Section: Detail (right)



(File explorer)

By default, it will only be displayed here that no detailed view is available. In addition, the data type and the number of objects resp. the time span will be displayed. For the category **Files** and its **subcategories**, the file explorer will be displayed here.

Drag & Drop of files/folders is possible in both directions. Upon Drag & Drop of WinGuard into the package, the directory structure will be maintained. Upon Drag & Drop of the package to WinGuard, the files will be put under the target folder. Using the context menu, it is possible to restore single files, whereas these will keep their directory structure.

The following folders are available for data packages (depending on the settings):

- Attachments
- Files
- Graphics
- Media
- Other
- Sounds
- Texts

5.18.7.1 Add to Package

Using the dialog **Add to package**, the corresponding data can be selected and added to the package. The adding of data to a data package usually describes copying of data from WinGuard to a data package. However, another data package can also serve as source for such an operation.

Using Drag & Drop it is possible to add single data sets from WinGuard or a data package to another data package. However, currently this is only possible for files so that single files can be dragged into another data package from the file explorer of WinGuard or from a data package. For other data sets, Drag & Drop can be realized too, however only from WinGuard to a data package (e.g. from the datapoint or persons list).

▼ Dialog: Add to package

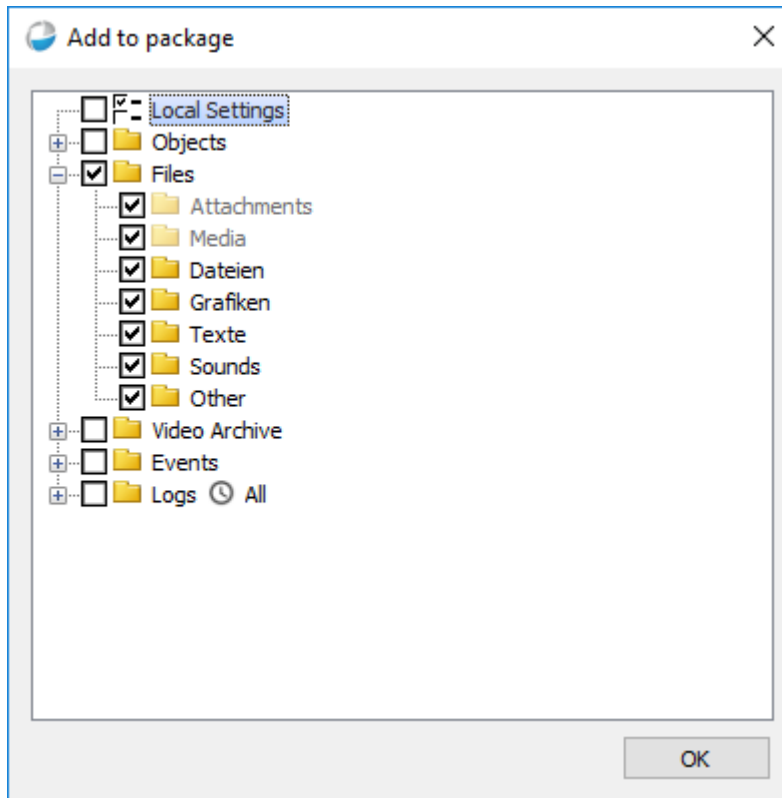


Figure 149: Dialog - Add to package

▼ Functions: Dialog

Button OK

With this function, the data transfer to the package is started.

i The function is only available after selection of data!

▼ Data section: Selection list

Add

With this function, the dialog **Add to package** is opened. Here, the corresponding files can be selected and added to the package.

- i** **DB:** If there already is a data set with the same Id in the target package, it will be overwritten.
- Files:** If there already is a data set with the same name in the same folder, a conflict dialog will be displayed offering a selection between skipping, overwriting and canceling.
- Clips:** Automatically adds the related media files.
- Events/Events archive:** Automatically adds the related attachment files.
- Segmentation:** Segmented data sets keep their assigned segment upon adding. An exception are files whose superordinated folder has another segment in the target data package. In this case, they will take over its segment.

- If the target package (or source package) is not unpacked already, it will be implicitly unpacked upon adding!
- It is only possible to add something to a package if this is not currently involved in another operation!

5.18.7.2 Restore

Using the **Restore** dialog, the corresponding data can be selected from the package and transferred afterwards. The restoring of data from a data package in WinGuard does the same as a [Restore](#)³⁵⁷, however with additional selection possibilities.

Via Drag & Drop it is possible to restore single data sets from a data package in WinGuard. Currently, this is however only possible for files, so that single files can be taken from the detailed view of a data package and dragged in the file explorer of WinGuard.

▼ Dialog: Restore

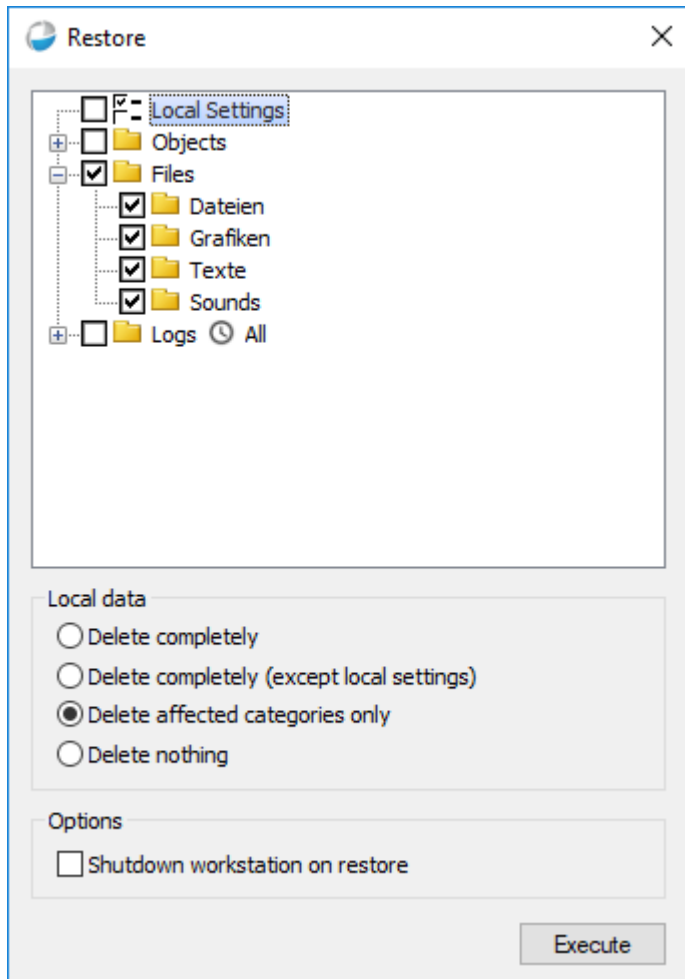


Figure 150: Dialog - Restore

▼ Functions: Dialog

Button

Execute

Using this function, the data of the selected categories is taken over into the current database, considering the selected settings.



- **DB:** *If there already is a data set with the same Id in WinGuard, it will be overwritten!*
- **Files:** *If there already is a data set with the same name in the same folder, a conflict dialog will be displayed offering a selection between skipping, overwriting and canceling.*
- **Clips:** *Automatically restores the related media files.*
- **Events/Events archive:** *Automatically restores the related attachment files.*
- **Segmentation:** *Segmented data sets keep their assigned segment upon adding. An exception are files whose superordinated folder has another segment in the target data package. In this case, they will take over its segment.*



At segmented stations, a restore without shutdown is not possible!

Button

Close

After execution of the restore function, this function is available for closing the dialog.

▼ Data section: Content / Range

(Data selection)

In this list the data will be shown.

Basically valid for all check boxes here:

Active - data are included.

Inactive - data are **not** included



Local Settings

This option defines if the local settings are added to the backup.



Objects

This option defines if the objects of the core database are integrated.

Content:

- Datapoints (including persistent states and datapoint groups), Locations, Persons, User, Profiles, Segments, Workstations, Interfaces, Printer, Control Operations, Scheduled commands, Timers, Event Handlings, Sensor types, Panes.



Files

This option defines if the project files are integrated (folder: **files/core**).

Content:

- Attachments, Media, Data, Graphics, Texts, Sounds, Other

**Video Archive**

This option defines if data of media data base are integrated (folder: **files/media**).

Content:

- Clips (including assigned clip files), bookmarks.

**Events**

This option defines if current event data respectively event archive data are integrated. During activation or deactivation all options of subordinated event definitions are set in the same state.



Please consider that protocol information are often part of the events!

**- Current events**

This option defines if data of current events (event list) are integrated.

Content:

- Current events (including assigned attachments).

**- Event Archiv**

This option defines if data of the event archive are integrated (folder: **files/attachment**).

Content:

- Event Archiv data (including assigned attachments).

**Logs**

This option defines if log data are integrated. During activation or deactivation all options of subordinated log definitions are set in the same way.

**- System log**

This option defines if system log data are integrated.

**- Interface log**

This option defines if interface log data are integrated.

**- State log**

This option defines if state log data are integrated.

▼ Data section: Local Data

It can be defined here whether or which data shall be deleted before:



All objects and files of the corresponding sections of the current DB will be deleted or overwritten without any further confirmation!

**Delete completely**

Before the restore, all data will be deleted and afterwards the selected data will be imported!

**Delete completely (except local settings)**

BEfore the restore, all files except the local settings are deleted and afterwards the selected data will be imported!

Delete concerned categories only



Before the restore, all data of the selected categories will be deleted and afterwards the selected data will be imported!

Delete nothing



Data will not be deleted, already existing data will be overwritten!

▼ **Data section: Options**

Shutdown workstation for Restore

It can be selected whether WinGuard shall be shutdown for restore.



The activation of this option is recommended!

5.18.8 CAD Preview

This function allows users to create CAD preview objects (PNG graphics) to significantly speed up graphics displays. In CAD graphics displays, these objects (graphics) can first be displayed as a preview while the CAD graphic is not yet fully loaded. As soon as the CAD graphic is available, the preview graphic is replaced. This occurs automatically and is hardly noticeable with appropriate settings.

Execution of this function is workstation-specific and will take varying amounts of time depending on the number of graphics that are to be generated. While this function is active in the background, the processing progress is indicated in a respective dialog and you can continue to work in the system during processing.

A CAD preview for individual graphics can also be automatically created when the graphic is displayed. This allows faster processing of the next display in preview. You can establish parameters for this mechanism in the system settings.

▼ **Dialog: CAD Preview**

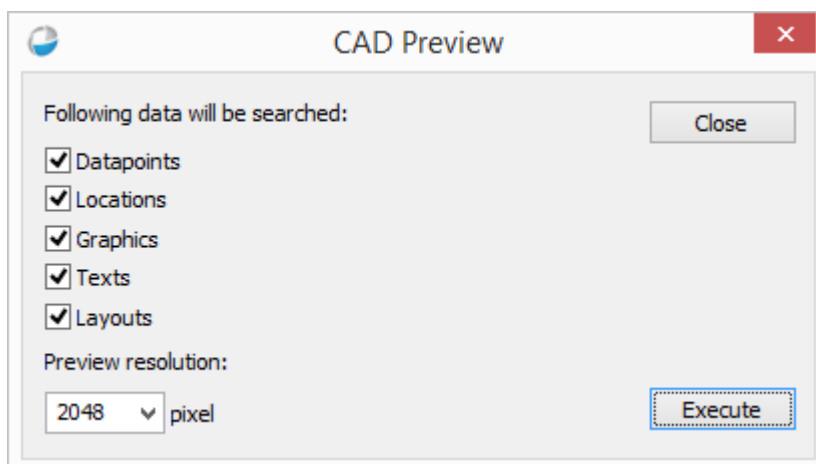


Figure 151: CAD Preview

▼ Functions: CAD Preview

Button

Close

With this function you close the **CAD Preview** window without executing any further actions.

Button

Execute

With this function you start the creation of respective CAD preview objects according to established parameters.



The respective data is only created on the individual workstation (no replication)!

▼ Data section: CAD Preview

This option allows you to determine for which areas CAD preview objects should be created.



Datapoints

This option determines if the graphics of the datapoints are included in the creation of the preview objects.



Locations

This option determines if the location graphics are included in the creation of the preview objects.



Graphics

This option determines if the graphics of the graphics folder in WinGuard are included in the creation of the preview objects.



Texts

This option determines if the graphics contained in WinGuard text modules are included in the creation of preview objects.



Layouts

This option determines if the graphics contained in WinGuard layouts are included in the creation of preview objects.

Generally, this applies to all check boxes:

Active (default) - data is incorporated.

Inactive - data is **not** incorporated.

Preview resolution: (pixel)

The resolution of the preview graphics created here is determined using this definition.

2048 (default) - enter the desired preview resolution if applicable.



Here the objective is to find the perfect balance between size/precision and speed - try it out!

5.18.9 CSV Export

You can export a broad range of project data, event archive information, logs, etc. in files with CSV format. CSV files can be processed with simple text editors and a variety of other programs. This allows you to put together various comprehensive project documentation in any format using the exported

data.

You can also use the CSV export function to process data sets externally, and then to reload them using the function [CSV Import](#)³⁸⁶. If the same changes are to be made to a large number of datasets, external processing is often a good approach. The export of various log data is also very helpful, especially in cases where you need to contact the support hotline.

A CSV export can also be executed via an action. Data export can be automated or executed via buttons. The export parameters are saved in a respective file that can be loaded and used at any time.

During runtime of the program, the entries in the dialog are consistently stored (also via a change notification of a user). It is thus possible to close the dialog and then reopen it and start exactly where one left off.

In addition to persistence, the dialog entries can be saved anytime under a freely selectable name as export definitions and later retrieved. The information is stored in a **.edf**-format file in the **Files** subdirectory of the project. The stored definitions are available to all users. To execute this function, there are three buttons located in the right lower edge of the dialog and a selection field available.

For external data processing, a spreadsheet program such as MS Excel is very helpful (please see: [Helpful hints about CSV Editors](#)¹⁴⁴¹).

Exportable Archive and Log Data:

- Event Archive
- System Log
- Interface Log
- State Log

Exportable Project Data:

- Datapoints
- Persons
- Profiles
- Locations
- Sensor Types
- Interfaces
- Workstations
- Printer Profiles
- Settings
- Segments

To carry out a CSV export manually, select the menu command **System | Database | CSV Export**.

▼ Dialog: CSV Export

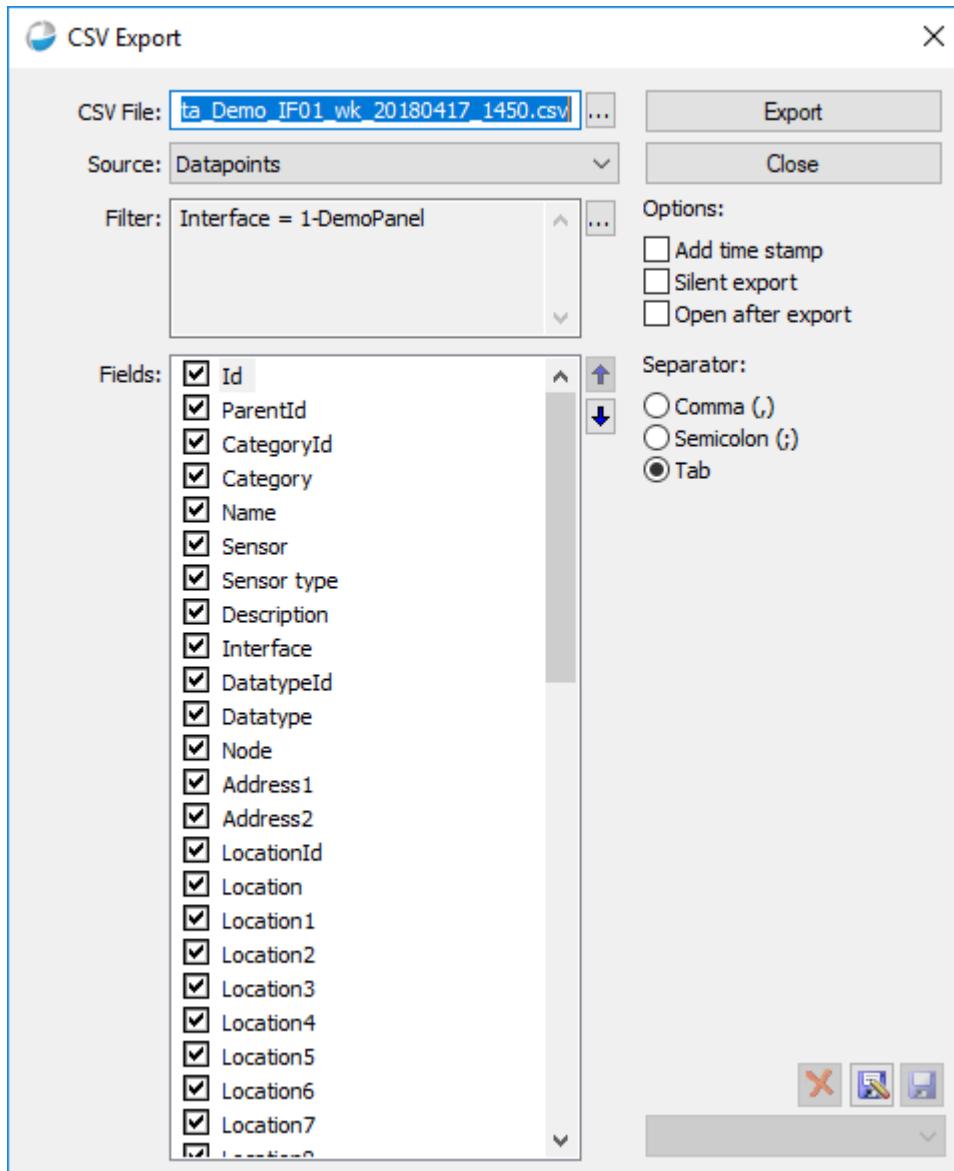




Figure 152: Dialog CSV Export

▼ Functions: CSV Export

 **Export**

With this function you start the **CSV Export** according to defined parameters.

 **Close**

With this function you close the **CSV Export** window without executing any further actions.

 **Delete**

If you have selected a definition, after confirmation, this definition is then deleted.

 **Save As**

This function allows you to always store the current status of the user entries under a new name. For this function, the dialog **Export Definition** is opened for entering the file name.

**Save**

Changes can be stored at any time with this function.



This function is only active when changes have been made and a file has been selected!

**(File Selection)**

By selecting the corresponding file, a saved definition can be retrieved.



If no corresponding file exists, the selection list is inactive!

▼ Data section: CSV Export**CSV File:**

Path and name of the file that is to be created for the data export.

Blank (default) - As file name, the term that was chosen under **Source** is used and the file is saved in the file subdirectory of the current project.

Name - enter the desired path and names if applicable.

**(File Selection)**

With this function you open the dialog, **Select File**, which allows you to choose the file path and enter the file name.

**Source:**

With this selection list you determine which type of data is to be exported.

You can choose from: **Datapoints**, **Persons**, **Profiles**, **Locations**, **Sensor Types**, **Interfaces**, **Workstations**, **Printer Profiles**, **Event Archive**, **System Log**, **Interface Log**, **State Log**, and **Settings**.

Filter:

Display of the selected filter properties that can be determined with the following function.

**(Filter Dialog)**

This function opens the dialog for the filter settings. It is only available for the following sources: **Datapoint**, **Event Archive**, and the **Logs**. For Datapoints, you can also filter by category, name, interface, location, or status.

For the other sources, the filter dialogs of the respective logs are retrieved (please see: [Filters](#)^[375]).

Fields:

After source selection, the available data fields are listed. Using the check boxes, the appropriate elements for export can be selected or deactivated.

Active (default) - element is incorporated into the export.

Inactive - element is **not** incorporated into the export.

**(Change Position)**

The element selected in the area of **Fields** is moved up or down in the list. This allows you to change the order in the export file.

▼ Data section: Options



Add Time Stamp

This option determines if a time stamp is automatically added to the file name (for example, Name_yyyymmdd_ssmm.csv).

Active - a time stamp is added to the name of the destination file.

Inactive (default) - the name of the destination file remains unchanged.



This option may be very helpful in preventing the overwriting of files during automatic export!



Silent export

This option determines if information dialogs, etc. are displayed.

Active - Information dialogs, etc are **not** displayed.

Inactive (default) - Information dialogs, etc. are displayed.



Open after export

With this option, you determine if the file is automatically opened with the program registered for this file type after export.

Active (default) - the file is automatically opened after export.

Inactive - the file is **not** opened after export.

▼ Data section: Separators

Here you determine which separator will be used between column elements in the CSV file.



Comma (,)

Active - a comma is used as separator.



Semicolon (;)

Active - a semicolon is used as separator.



Tab

Active (default) - the tab is used as separator.



*CSV is the acronym for **Character Separated Values**. Such a file contains the information of a dataset in each row, the individual fields are listed one after the other, separated by defined characters. The first row contains the name of the field (heading) instead of its content. Headings are listed in the same manner.*



When using editors such as MS Excel to process CSV files, it should be noted that data is often converted automatically. For example, leading zeros (0) in numbers are often removed. (Conversion of text into a number or date). To avoid problems, make sure to select the same separator that is defined as separator in the regional settings of the Windows operating system.

5.18.9.1 Filters

The filter settings for CSV export depend on the selected source. You can find the description of the filters for logs and the archive in the respective passages under [Logs and Archives](#)³¹⁶. However, you can find the description of the filters for the export of datapoints here. For some sources, no additional

filters are available.

Sources with filters:

- Datapoints (description below)
- Archive (please see: [Archiv](#) ³⁰⁷)
- System Log (please see: [System Log](#) ³¹⁶)
- Interface Log (please see: [Interface Log](#) ³²⁶)
- State Log (please see: [State Log](#) ³²¹)

Datapoint filters:

Using the datapoint filter dialog, you can define various criteria for datapoint export. Only datapoints that meet all of your specifications are included; the criteria are thus connected with the logical **AND**. If one of the fields is left blank, the respective criterion is not included in the search.

In the export of datapoints, a list of datapoints can be optionally presented in the filter. If you add a datapoint group, the group itself is not exported, but all datapoints contained therein, as well as datapoints in all subgroups. This allows you to design a defined datapoint export dynamically, by changing the group affiliations accordingly.

▼ Dialog: Datapoint filter (CSV Export)

The screenshot shows the 'Datapoint filter' dialog box. The 'Filter' section includes the following fields:

- Category: [Dropdown menu]
- Name: [Text input field]
- Interface: [Dropdown menu]
- Location: [Dropdown menu, value: All]
- Segment: [Dropdown menu, value: All]
- State: [Dropdown menu]
- Datapoints: [List area with '+' and 'X' icons]
- Tags: [Dropdown menu, value: All]

At the bottom, there is a checkbox labeled 'without sensors'.

Figure 153: Datapoint filter (CSV Export)

▼ Functions: Datapoint filter

OK

With this function you start the **CSV Export** according to defined parameters.

Cancel

With this function you close the **CSV Export** window without executing any further actions.

▼ Data section: Filter

Category:

With this selection, you can determine the datapoint category (incl. datapoint groups) as a filter. This means that only datapoints of this category are incorporated.

You can select from all *Datapoint categories*.

Blank (default) - optional - no limitations (all datapoints).

Datapoint category - only datapoints of this category are incorporated.



If a datapoint group is selected, the datapoint group itself is not incorporated, but all datapoints contained in all groups!

Name:

Here you can define a text (a datapoint name or part of a datapoint name) as a filter. This text is then searched in the respective name of the datapoint. This function is not case sensitive.

Blank (default) - optional - no limitations (all datapoints).

Text - only datapoints that have this text included in the datapoint name.



If you are using text IDs (refer: [Translations](#)⁵⁸¹), the text ID is always used and not the translated text!

Interface:

Here, you can define an interface as a filter. This means that only datapoints of this interface are incorporated.

You can select from all defined interfaces.

Blank (default) - optional - no limitations (all interfaces).

IF - only datapoints of this interface.

Location:

Here you can define a location as a filter. This means that only datapoints that are subordinated to this location are incorporated.

You can select from all defined locations.

All (default) - optional - no limitations (all locations).

Location - only datapoints subordinated to this location.

Status:

Here you can define a status as a filter. This mean that only datapoints in this state are incorporated.

You can select from these states: *alarm, fault, ..., armed, etc.*

Blank (default) - optional - no limitations (all states).

State - only datapoints currently in that state.

Datapoints:

Only datapoints included in this list are incorporated (exception: blank list).

If a datapoint group is added here, it itself is not incorporated, but all datapoints contained therein as well as all datapoints in subgroups.

Blank (default) - optional - no limitations (all datapoints).

Not blank - only these datapoints are incorporated.

**(add datapoint to list)**

Using this function, you open the dialog, **Selection**, through which you select the datapoints and add them to the datapoint list.

**(Remove datapoint from list)**

This function removes selected datapoints without confirmation from the datapoint list.

**without sensors**

This option determines whether to export only the datapoints themselves or also the sensors of the datapoints.

Active - only the datapoints themselves are incorporated.

Inactive (default) - datapoints and their sensors are incorporated.

5.18.9.2 Data Supply (Export and Import)

This section describes the sources of the data supply for which both export and import is available. The following tables provide an overview of available elements, depending on the respective source. Information about the sources for which only export is available can be found in the section: [Data Supply \(Export Only\)](#)³⁸¹.

Explanation of Symbols:



These elements can also be imported.



These elements can only be exported.



Definition only possible for datapoints (also applies to sensors).



Separate definitions for datapoints and sensors possible.



These elements are numbers.



These elements are texts.



These elements contain a timestamp (date, time).

▼ CSV Elements: Datapoints

Here is a list of CSV export/import elements available for datapoints. Data can be limited for export using filters.

Identifier	Info			Description
Id	✓		12	Database ID of the datapoint.
Parent ID	✓		12	Database ID of the parent datapoint. (the superordinated datapoint in the explorer view)
Category ID	✓		12	ID of the datapoint category that the datapoint is assigned (1=fire, etc.).
Category	✗		ab	Plain text about the category ID.
Name	✓		ab	Name of the datapoint. (identical for datapoint and all sensors)
Sensor	✓	+	12	Number of the sensor (0 for the datapoint itself).
Sensor Type	✓	+	ab	Name of the sensor type.
Description	✓		ab	Comment text of the datapoint.
Interface	✓		12	ID (number) of the interface.
Data Type ID	✓		12	ID of the data type (depending on the interface).
Data Type	✗		ab	Plain text about the data type ID.
Node	✓		12	Note number (depending on the interface).
Address1	✓		12	Address1 (depending on the interface).
Address2	✓		ab	Address2 (depending on the interface).
Location ID	✓	+	12	ID of the location.
Location	✓	+	ab	List of individual location elements separated by comma.
Location1 - 8	✓	+	ab	Location element 1 - 8
Graphic1 - 5	✓	+	ab	Graphic definition 1 - 5 (path, name, parameter, etc.).
Text	✓	+	ab	Path and file name of a text module.
Text macros	✓	+	ab	Text macro definition (text or text module).
Width, Length, Height	✓	+	12	Coordinates of the datapoint or sensor for positioning in graphics. (only used in GIS graphics)
Prio Alarm, Prio pre-alarm, Prio warning, Prio Fault, Prio Event, Prio shut down, Prio maintenance, Prio active	✓		12	Priority of the respective events.
Notes	✗		ab	Instructional text of the datapoint.
State Type	✗		ab	Standard state text.
State Flags	✗	+	ab	State info as defined for example in the interface module. (in the form of [ALARM][FAULT] etc.)

State Text			ab	Specific state text (such as in datapoint explorer).
State Value			12	Value for analog datapoints.
State Unit			ab	Unit for analog datapoints.
Tag IDs			ab	List of tag IDs.
Tag Names			ab	List of tag names.
Segment ID			ab	GUID of the segment.
Segment Name			ab	Name of the segment.
Last Change				Date and time of last change of the definition.
Changed by			ab	ID of the user who made the last change.

▼ CSV Elements: Locations

Here is a list of CSV export/import elements available for locations. No additional filters for export are available.

Identifier	Info		Description
ID		12	Database ID of the location.
Location		ab	List of individual location elements separated by comma.
Location1 - 8		ab	Elements of the individual location names 1 - 8.
Description		ab	Description of the location.
Graphic		ab	Path, file name, and parameter of the location graphic.
Text		ab	Path and file name of the location module.
ExtRef		ab	External reference
Tag IDs		ab	List of tag IDs.
Tag Names		ab	List of tag names.
Segment ID		ab	GUID of the segment.
Segment Name		ab	Name of the segment.

▼ CSV Elements: Persons

Here is a list of CSV export/import elements available for persons. No additional filters for export are available.

Identifier	Info		Description
ID		12	Database ID of the person.
Representative ID		12	Database ID of the representative.
Represent		ab	ID of the type that the datapoint is assigned (1fire, etc.).
Company		ab	Name of company.
Last name		ab	Last name of person.

First name	✓	ab	First name of person.
Appellation	✓	ab	Appellation for person.
Department	✓	ab	Name of the department.
Function	✓	ab	Function of the person in the company.
Street	✓	ab	Name of the street.
ZIP	✓	ab	Zip code
City	✓	ab	Name of the city.
Telephone Company	✓	☎	Business telephone number
Telephone Personal	✓	☎	Personal telephone number.
Telephone Mobil	✓	☎	Mobile telephone number.
Pager	✓	☎	Pager number.
Fax	✓	☎	Fax number.
Email	✓	ab	Email address
Website	✓	ab	Internet address of company website.
Info	✓	ab	Additional text about the person.
Segment ID	✓	ab	GUID of the segment.
Segment Name	✗	ab	Name of the segment.
Last Change	✗	⊖	Date and time of the last change in definition.
Changed by	✗	ab	ID of the user who made the last change.

▼ CSV Elements: Sensor Types








Here is a list of CSV export/import elements available for sensor types. No additional filters for export are available.

Identifier	Info	Description
Category	✓ 12	ID of the datapoint category (1=fire, etc.)
Name	✓ ab	Name of the sensor type.
Display name	✓ ab	Display name (alias) of the sensor type.
Symbol file	✓ ab	Path and name of the symbol file (graphic).
Last Change	✗ ⊖	Date and time of the last change in definition.
Changed by	✗ ab	ID of the user who made the last change.

5.18.9.3 Data Supply (Export only)













This section describes the data supply sources that can have an export function, but not an import function. The tables below present an overview of the elements, depending on the respective source. You can find Information about sources that have both an export and import function in the section:

[Export and Import Elements](#) **Explanation of Symbols:**

-  These elements can also be imported.
-  These elements can only be exported.
-  Definition only possible for datapoints (also applies to sensors).
-  Separate definitions for datapoints and sensors possible.
-  These elements are numbers.
-  These elements are texts.
-  These elements contain a timestamp (date, time).



















▼ CSV Elements: Profile

Here is a list of CSV export elements for profiles. No additional filter for export is available, nor is the import of data.

Identifier	Info		Description
Id			GUID of the profile.
Profile type			Profile type (workstation profile / user profile).
Name			Name of the profile.
Description			Additional profile text.
Last change			Date and time the definition was last changed.
Changed by			User ID of the last change.

▼ CSV Elements: Interfaces

Below is a list of CSV export elements for interfaces. No additional filter is available, nor is the import of data.

Identifier	Info		Description
No.			Number of the interface.
Name			Name of the interface.
Description			Description of the interface.
Module			Name of the interface module.
Workstation			Number of the workstation on which the interface should be active.
Segment IDs			Segment IDs.
Segment names			Segment names.
Last change			Date and time the definition was last changed.
Changed by			User ID of the last change.

▼ **CSV Elements: Workstations**

Here is a list of CSV export elements for workstations. No additional filter for export is available, nor the is the import of data.

Identifier	Info		Description
ID	✗	12	GUID of the workstation.
Name	✗	ab	Name of the workstation.
Description	✗	ab	Description of the workstation.
Number	✗	ab	Number of the workstation.
Segment IDs	✗	ab	Segment IDs.
Segment names	✗	ab	Segment names.
Last change	✗	<input type="radio"/>	Date and time the definition was changed last.
Changed by	✗	ab	User ID of the last change.

▼ **CSV Elements: Printer Profiles**

Here is a list of CSV export elements for printer profiles. No additional filter for export is available, nor the is the import of data.

Identifier	Info		Description
Name	✗	ab	Name of printer profile.
Description	✗	ab	Additional text of printer profile.
Last Change	✗	<input type="radio"/>	Date and time definition was changed last.
Changed by	✗	ab	User ID of last change.

▼ **CSV Elements: Settings**




Here is a list of CSV export elements for settings. No additional filter for export is available, nor the is the import of data.

Identifier	Info		Description
ID	✗	ab	Database ID of the setting.
Name	✗	ab	Name of the setting.
Value	✗	ab	Definition of the setting.
Default Value	✗	ab	Default definition of the setting.
Help	✗	ab	Help text for the setting.

▼ **CSV Elements: Segments**

Here is a list of CSV export elements for the segments. No additional filter for export is available, nor the is the import of data.







Identifier	Info	Description
------------	------	-------------

ID		ab	GUID of the segment.
Name		ab	Name of the segment.
Description		ab	Description of the segment.

5.18.9.4 Archive and Log Data (Export only)


















This section describes the sources of archives and logs that allow an export. The tables below provide an overview of the elements, depending on the respective source. Information about data supply sources can be found under: [Data Supply \(Export and Import\)](#)^[378] and [Data Supply \(export only\)](#)^[381].

Explanation of Symbols:

-  These elements can also be imported.
-  These elements can only be exported.
-  Definition only possible for datapoints (also applies to sensors).
-  Separate definitions for datapoints and sensors possible.
-  These elements are numbers.
- ab|** These elements are texts.
-  These elements contain a timestamp (date, time).

▼ CSV Elements: Archive

Here is a list of CSV export elements for the archive. The data can be limited using filters (please see archive: [Filter View](#)^[307]). A data import is not possible here.

Identifier		Info	Description
HR-Id			Event Id (user readable)
Id		12	Event GUID
Category		ab	Datapoint category.
Name		ab	Name of the datapoint.
Sensor		ab	Sensor number (blank at the datapoint itself).
Sensor type		ab	Name of the type of sensor.
Location		ab	List of the individual location elements, separate by commas.
State type		ab	Standard state text (alarm, fault, etc.).
State text		ab	Specific state text (like in message list).
Begin			Time of event entry (system).
End			Time the event ended (system).
Accepted			Time of event acceptance (user).
Completed			Time of event completion (user).
Workstation		12	Number of the workstation that ended the event.

Accepted by	X	abl	ID of the user who accepted the event.
Completed by	X	abl	ID of the user who completed the event.
Priority	X	12	Priority of the event.
Interface	X	12	Number of the interface that generated the event.
Datatype	X	abl	Data type of the respective datapoint.
Node	X	12	Node number (depends on the interface).
Address1	X	12	Address1 of the respective datapoint.
Description	X	abl	Comments on the respective datapoint.
Input	X	abl	Information on completed entries.
Tags	X	abl	List of assigned tags
Group HR-Id	X	abl	Group Id (user readable)
Group Id	X	abl	Group Id
Grouped events	X	abl	List of grouped events

▼ CSV Elements: System Log

Here is a list of CSV export elements for the system log. The data can be limited using filters (please see system log: [Filter View](#)^[316]). A data import is not possible here.

Identifier	Info		Description
Time	X	<input type="radio"/>	Time of the event.
Workstation	X	12	Number of the workstation that generated the entry.
Module	X	12	Number of the triggering interface (optional).
Category	X	abl	Information about the category (system, event, etc.)
Incident	X	abl	Information about the event (login, entry, etc.)
Details	X	abl	Details about the event (fault, turn on by..., etc.)
Datapoint	X	abl	Datapoint category: datapoint name / sensor (optional)
User Id	X	abl	ID of the user logged into the workstation.

▼ CSV Elements: Interface Log

Here is a list of CSV export elements for the interface log. The data can be limited using filters (please see interface log: [Filter View](#)^[326]). Data import is not possible here.

Identifier	Info		Description
Time	X	<input type="radio"/>	Time of entry.
Workstation	X	12	Number of the workstation the interface was active.
Interface	X	12	Number of the respective interface.
Node	X	12	Number of the node (interface-specific / optional)

I/O		abl	Information about the event (start, command, etc.).
Incident		abl	Information about the event (fault, start-up of .., etc.)

▼ CSV Elements: State Log

Here is a list of CSV export elements for the state log. The data can be limited using filters (please see state log: [Filter View](#)^[321]). Data import is not possible here.

Identifier	Info	Description
Time	<input type="radio"/>	Time of entry.
Workstation	12	Number of the workstation that generated the entry.
Interface	12	Number of the triggering interface (optional).
Datapoint.Id	12	Database ID of the datapoint.
Datapoint.CategoryId	abl	ID of the category to which the datapoint is assigned (1=fire, etc.).
Datapoint.Category	abl	Plain text regarding category ID.
Datapoint.Name	abl	Name of the datapoint.
Datapoint.Sensor	12	Number of the sensor (blank or 0 for the datapoint itself).
State type	abl	Standard state text.
State flags	abl	State information as defined, for example, in the interface module. (in the form of [ALARM][FAULT] etc.)
State text	abl	Special state text (like in the datapoint explorer).
State value	abl	Value for analog datapoints.
State unit	abl	Unit for analog datapoints.

5.18.10 CSV Import

With CSV import, datasets from files in so-called CSV format in WinGuard can be imported. It is easiest to create and process CSV files with a spreadsheet program such as MS Excel.

One example of applying the CSV Import function is the reloading of datasets that were previously exported and externally processed using the [CSV Export](#)^[371] function. The function also allows you to use CSV files created in other programs to establish datasets. In this way, datasets from various applications can be imported.

Using a CSV editor is very helpful in projection, especially when a large number of datapoints are of the same type, or are to be linked to the same location or with the same graphic. In these instances, you do not have to access the [Form View](#)^[721] of each datapoint in WinGuard for processing. Instead, you can execute a [CSV Export](#)^[371], open the file in an appropriate editor, process the file, re-save it in CSV format, and then import it again (please also see: [Helpful hints about CSV Editors](#)^[1141]).

Importable Project Data:

- Datapoints
- Sensor Types
- Locations

- Persons

To execute a CSV import manually, select the menu command **System | Database | CSV Import**.

▼ Dialog: CSV Import

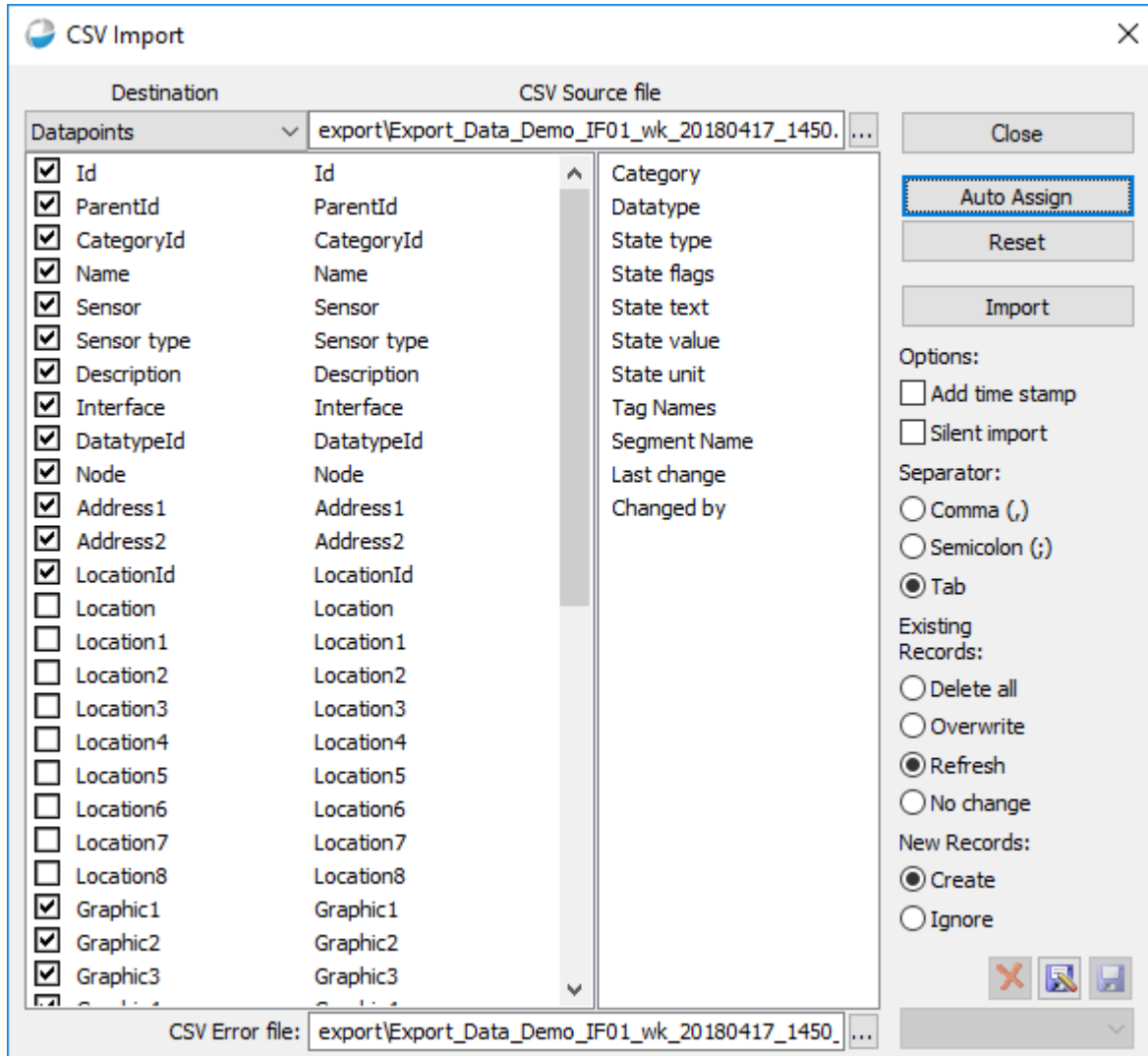


Figure 154: CSV Import

▼ Functions: CSV Import

Button **Close**

With this function you close the **CSV Import** window without executing any further actions.

Button **Auto Assign**

This function initiates a comparison between WinGuard terms and the column headings of the import file. Elements with the same name are automatically assigned to one another.

i *This function is active only after a file has been selected!*

Button

Reset

All assignments that have been completed from the two lists (WinGuard / import file) are removed.



This function is only active after a file has been selected!

Button

Import

With this function you start the **CSV Import** according to defined parameters.



This function is only active after a file has been selected!

**Delete**

If a definition has been selected, this definition is then deleted after confirmation.

**Save As**

This function allows you to save the current status of the user entries under a new name at any time. The dialog, **Export Definition**, opens so that you can enter the name of the file.

**Save**

Changes can be saved anytime using his function.



This function is active only when changes have been made and a file has been selected!

**(File Selection)**

By selecting the respective file, a saved definition can be retrieved.



If no respective file is available, the selection list is inactive!

▼ Data section: CSV Import

**Destination**

Here you select the data area that should be used for the data import.

Your selection includes: *datapoints*, *sensor types*, *locations*, *persons*.

CSV Source File

Path and name of the CSV file that should be used for the import.

Blank (default) - the import function is inactive.

File name - enter the desired file name.

**(File Selection)**

This functions opens the dialog, **Select File**, in which the path and name of the import file can be selected.

(Left list - available program elements)

This list contains three different columns. After the destination has been selected, check boxes appear in the first column, and all available program elements in the second column. Via the check boxes, you determine whether or not an element is incorporated in the import. The third column shows the assigned elements from the source file.

**(Right list - available import elements)**

After selection of the CSV source file, a list of all the column headings found appears. The individual elements can be assigned to those in the left list via drag & drop. This is how you determine which content during import from the source file is allocated to which definition in the program. With the function, **Auto Assign**, all identical elements can be assigned automatically.

**CSV Error File:**

Here you define the path and name of the error file to which any datasets not imported during import are transferred.

Import file_yyyyymmdd_smm (default) - name of the error file.

Enter a different name if applicable.



If no errors occur, the file remains empty (except for the column headings)!

**(File Selection)**

This function opens the dialog, **Select File**, in which the path and name of the error file can be selected or entered.

▼ Data section: Options

Here you can specify additional options for the import.

**Add Time Stamp**

This option determines if a time stamp is automatically added to the error file name (for example, Name_yyyyymmdd_smm.csv).

Active - a time stamp is added to the name of the error file.

Inactive (default) - the name of the destination file remains unchanged.



This option may be very helpful in preventing the overwriting of error files during automatic import!

**Silent import**

This option determines if information dialogs, etc. are displayed.

Active - Information dialogs, etc are **not** displayed.

Inactive (default) - Information dialogs, etc. are displayed.

▼ Data section: Separators

Here you specify the separator used between column elements in the CSV file.

**Comma (,)**

Active - a comma is used as separator.

**Semicolon (;)**

Active - a semicolon is used as separator.

**Tab**

Active (default) - a tab is used as separator.

▼ Data section: Existing Records

Here you define as to how to proceed with the existing program data during import. Only one option can be selected.

Delete all

Active - deletes all existing datasets in the selected data area and inserts the imported ones.

Overwrite

Active - Records that because of their ID, name, or category can be assigned to records in the import file, are deleted and replaced by the imported records. The ID remains unchanged.

Refresh

Active (default) - Records in the WinGuard database that because of their ID, name, or category can be assigned to a record in the import file are compared. Deviations are accepted from the import record.

No change

Active - no data from the import data is accepted. However, an error file is created that shows if there are errors in the import file.

▼ Data section: New Records

Here you define as to how to proceed with the existing program data during import. Only one option can be selected.

Create

Active - new datasets are inserted.

Ignore

Active - new datasets are ignored.



When using the options "Delete all" or "Overwrite", WinGuard records are deleted. This can lead to losses in the projection to date because not all possible properties, for example of a datapoint, can be displayed in the import file. Settings defined on action tabs, I/O, or cameras are irretrievably lost!

5.18.11 SQL Export

In WinGuard there is the possibility to export different data resp. information into an independent, user-defined SQL database by executing an SQL export. This export can be made either manually (**single export**) via the WinGuard user interface or initiated as an automatic export (**continuous export**) upon server start. In this way e.g. event information can be exported and made directly available for other programs so that the data can be further evaluated, e.g. for creation of statistics, reports etc. by the user.

As target systems, different SQL-capable database management systems such as e.g. Microsoft, SQL, MySQL, Oracle SQL, etc. can be used.

SQL (Structured Query Language) is a database language for definition of database structures in relational databases as well as for editing (Paste, Change, Delete) and querying of data sets that are

based on these structures.



Please note that the function SQL export depends on your license.

5.18.11.1 Installation

For using the SQL export in WinGuard, no additional installations are required, provided that the license supports this function. The database management systems used for export have to be installed and configured in advance and the target databases for the export have to be already created.

To be able to execute an SQL export, the required ODBC drivers (32/64 Bit) have to be installed and configured correctly at the corresponding WinGuard clients (server resp. clients), as the SQL export is always executed using the corresponding ODBC drivers. When using different operating systems, it is required to use corresponding DSN definitions since different names are used for the drivers!

The export itself is defined by corresponding configuration files (**.WSE**). A configuration file defines the table and data structure of the target database as well as the selection and format of the data to be exported. A configuration file always relates to just one (target) database of a database management system.

Example files for Microsoft SQL (**MSSQL.WSE**), MySQL (**MSSQL.WSE**), Oracle SQL (**ORACLE.WSE**) will be delivered that are, as a standard, stored in the program sub-directory **mod**. Similar to the INI files, the user-defined configuration data has to be stored in the project sub-directory **Data**.

For setup of used database systems as well as for creation or adaptation of the configuration files, SQL and/or database/administration knowledge is required.



*The configuration files (**.WSE**) are first searched in the **Data** sub-directory and afterwards in the **mod** sub-directory!*



A configuration file always relates to just one (target) database of a database management system.



All database management systems have to be installed and configured in advance.



Please install, dependent of your WinGuard installation, 32 or 64 Bit ODBC drivers!



If WinGuard is running as a service, please define the database connections as System-DSN and not as User-DSN (maybe unavailable)!



When using different operating systems, corresponding DSN definitions might be required as the names of the ODBC drivers might not be the same!

(Use e.g. C:\Windows\SysWOW64\odbcad32.exe for definition if applicable)

5.18.11.2 Settings

For **continuous** use of the data export, the desired configuration file has to be defined in the WinGuard settings. Please note that this setting can only be made globally and that this setting is only supported by the active server (Server resp. Standby-Server) or by a standalone system.

The selection of the respective configuration file is made in the dialogue **Settings** under **Global** in the section **Other**, subsection **SQL Export**. The dialogue can be selected via the menu command **System | Settings**.

i If the entry is empty, the function will not be active!

i In case of a Hot-Standby system, the Server and the Standby Server will use the same configuration file. Thus the SQL database should be installed independently of the WinGuard servers!

▼ Dialogue: Settings / Global / Other

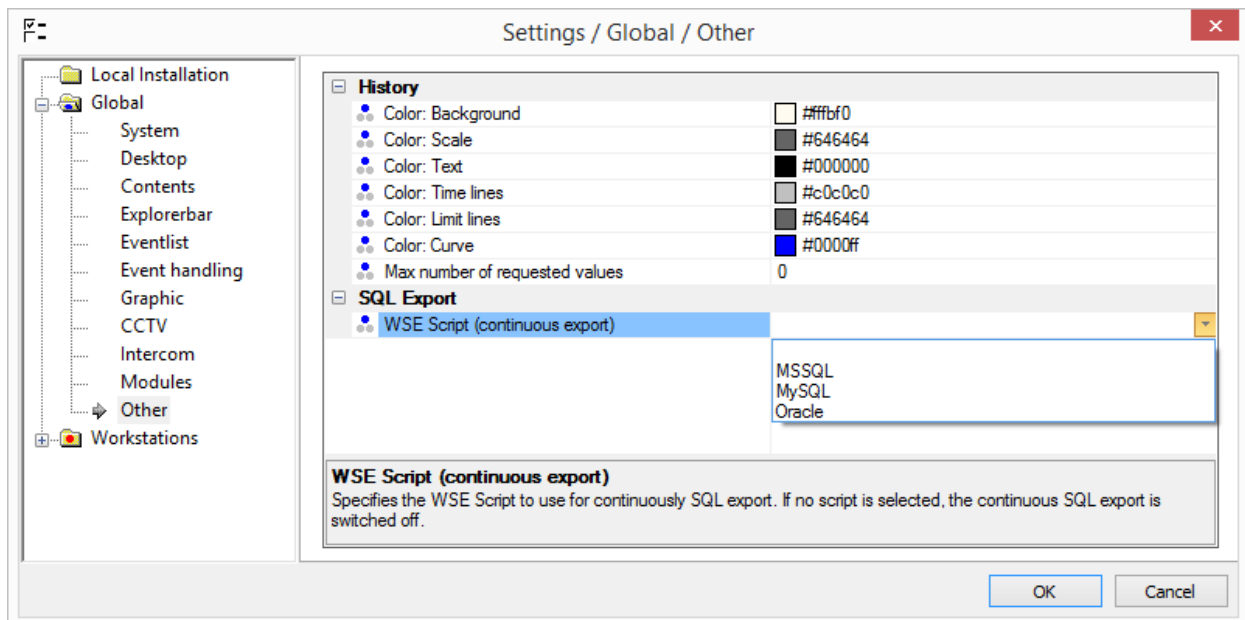


Figure 155: Settings / Global / Other

▼ Settings: SQL Export

▼ Standard Export file

The WSE file (script) for continuous data export is defined here.

The respective WSE files from the project sub-directory **Data** resp. from the program sub-directory **mod** are available.

empty (default) - the export is inactive.

... - if necessary, select the desired configuration file.

5.18.11.3 Operation

A manual data export can be made anytime, using the function **SQL Export**. In contrast to the continuous data export, this function is also available at the clients.

After opening of the dialogue, the user has the possibility to select a configuration file and the action to be executed and to start the export. In case of errors during export (e.g. no connection with the database etc.), these errors will be displayed by an additional error dialogue.

▼ Dialogue: SQL Export

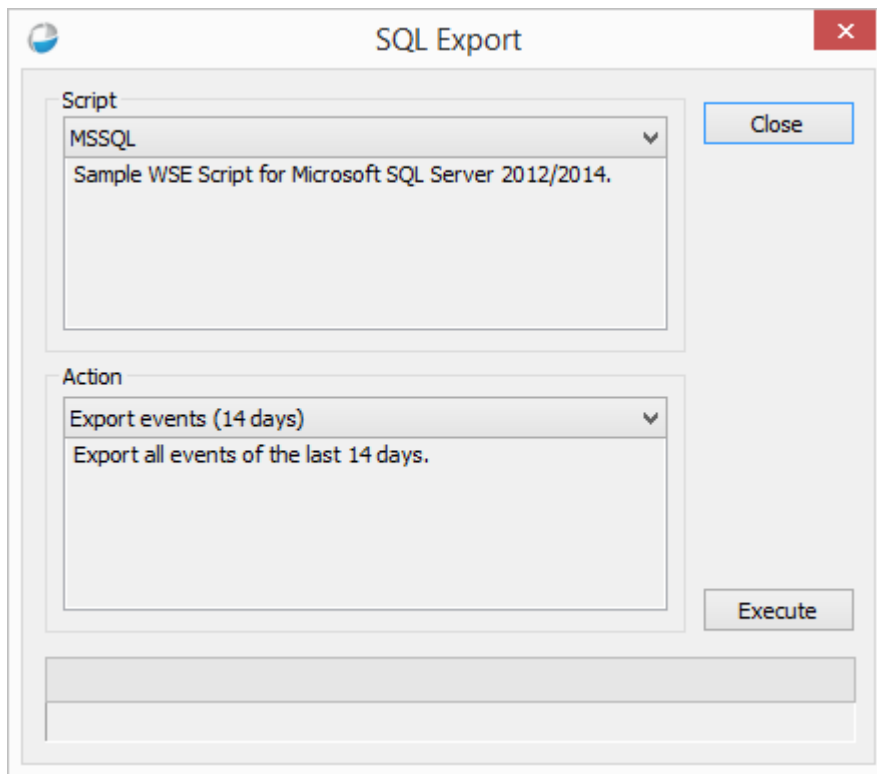


Figure 156: SQL Export

▼ Functions: SQL Export

Button **Close (Cancel)**

This function closes the dialogue without any further confirmation, provided that no action is currently executed. If there is an action that is currently executed, the cancellation of this action will be initialized and, after the executed cancellation, the dialogue will be closed automatically. No further action will be executed.

Button **Execute**

With this function, the export will be executed with the selected parameters. The progress display informs about the export status.

▼ **Script (WSE File)**

The configuration file has to be selected here.

The different WSE files from the project sub-directory **Files** resp. from the program sub-directory **mod** are available.

... - select the desired configuration file.

Action

The action for the export has to be selected here.

All actions of the currently selected export file that have been defined for the manual export are available.

... - select the desired function for export.

(Progress display)

The export progress will be displayed as a bar graph.

(Info)

Further information with regard to the current export status will be displayed.

5.18.11.4 WSE files

The WSE configuration files (**WinGuard Scripted/SQL Export**) serve as control of the SQL-Exports by WinGuard. Corresponding sample files might be contained in the program sub-directory **mod** or can be provided by Advancis on request.



The example configurations contain only parts of the possible definitions. Primary the MySQL file example is updated by expansions!

Available sample configurations:

- **MSSQL.WSE**
Sample file for Microsoft SQL Server 2012/2014.
- **MySQL.WSE**
Sample file für MySQL 5 / MySQL ODBC connector 5.3 UNICODE.
- **Oracle.WSE**
Sample file for Oracle 11g.

As a standard, the WSE files are separated in sections that are, similar to the INI files for the interfaces, defined in the format **[xxx]**. Comment lines will always be defined at the start of the line by **//**. At the start of the sample files, detailed information with regard to the single contents and usable keywords (Keys) is defined. As this information depends mainly on the used target system, only the general setup and the main sections are described.

WSE sections:

- **//**
Comment - must always be at the beginning of the line!
- **[info]**
General information with regard to database connection and to the WSE file.
- **[do ...]**
Manual export functions.
- **[on ...]**
Continuous export functions:
 - **[on init]** - setup of the table definition for the export database
 - **[on event.update]** - adding and updating of WinGuard events
 - **[on systemlogentry.add]** - insert system log entries
 - **[on datapoint.update]** - insert and update datapoints
 - **[on datapoint.delete]** - delete datapoints
 - **[on location.update]** - insert and update locations
 - **[on location.delete]** - delete locations
 - **[on station.update]** - insert and update workstations
 - **[on station.delete]** - delete workstations
 - **[on interface.update]** - insert and update interfaces
 - **[on interface.delete]** - delete interfaces

•
 ...

Each section of a WSE file can be referenced in other sections, no matter whether an action for continuous or manual export has been defined. A referencing leads to the execution of an action exactly at the referenced location with its current context. Only exception are actions with a FOREACH loop, these can only be referenced by actions without any FOREACH loop.

Localizer variables

If in WinGuard elements are defined by localizer variables, they must be translated when the data are exported. This can be done by defining appropriated parameters (see example file).

Example for an English location name: 'location_name' = '<event.location.name /lng=en /fmt=ui>'



WSE files (WinGuard Scripted/SQL Export) always have to be created for your project and the corresponding database!

Sample: MySQL.WSE

```

WinGuard WSE
WinGuard SQL Export Script
Sample file for MySQL 5 / MySQL ODBC connector 5.3 UNICODE

----- Event -----
Possible values for '<>' placeholders
-----
| Name | Type | Ui | Lng | Flags | Filter | Description
-----
// event_id | GUID | | | | | (Global) Event Id: Guid
// event_hrid | STRING | | | | | (Global) Event Id: Human Readable Format <Station><Number>
// event_hrid.int32 | UINT32 | | | | | (Global) Event Id: 8 Bit Station - 24 Bit Number
// event_hrid.int32.src | UINT8 | | | | | (Global) Event Id: 8 Bit Station
// event_hrid.int32.num | UINT24 | | | | | (Global) Event Id: 24 Bit Number
// event_hrid.int64 | UINT64 | | | | | (Global) Event Id: 16 Bit Station - 48 Bit Number
// event_hrid.int64.src | UINT16 | | | | | (Global) Event Id: 16 Bit Station
// event_hrid.int64.num | UINT48 | | | | | (Global) Event Id: 48 Bit Number
// event_type | UINT16 | X | X | X | | Type of the event, see below for the constants
// event_type.simulation | BOOL | | X | | | True if the event is of type "simulation"
// event_type.revalarm | BOOL | | X | | | True if the event is of type "revision alarm"
// event_type.revfault | BOOL | | X | | | True if the event is of type "revision fault"
// event_type.revmsg | BOOL | | X | | | True if the event is of type "revision message"
// event_type.rev | BOOL | | X | | | True if the event is of type "revision"
// event_type.prealarm | BOOL | | X | | | True if the event is of type "prealarm"
// event_type.alarm | BOOL | | X | | | True if the event is of type "alarm"
// event_type.fault | BOOL | | X | | | True if the event is of type "fault"
// event_type.warning | BOOL | | X | | | True if the event is of type "warning"
// event_type.msg | BOOL | | X | | | True if the event is of type "message"
// event_type.off | BOOL | | X | | | True if the event is of type "off"
// event_type.active | BOOL | | X | | | True if the event is of type "active"
// event_type.disarmed | BOOL | | X | | | True if the event is of type "disarmed"
// event_type.armed | BOOL | | X | | | True if the event is of type "armed"
// event_type.lock | BOOL | | X | | | True if the event is of type "lock"
// event_name | STRING | X | | | | -
// event_text | STRING | X | | | | -
// event_priority | INT16 | | | | | -
// event_remark | STRING | X | | | | -
// event_desc | STRING | X | | | | -
// event_station_id | STRING | | | | | Id of the station this event originated from
// event_user_code | STRING | | | | | User code of the active user when the event was created
// event_status | UINT16 | X | X | | | Status of the event (bitmask), see below for the constants
// event_status.accepted | BOOL | | X | | | True if the event is in "accepted" state
// event_status.deferred | BOOL | | X | | | True if the event is in "deferred" state
// event_status.ended | BOOL | | X | | | True if the event is in "ended" state
// event_status.completed | BOOL | | X | | | True if the event is in "completed" state
// event_status.locked | BOOL | | X | | | True if the event is in "locked" state
// event_location_id | GUID | | | | | The id of the location the event originated from
// event_location_name | STRING | X | | | | The name of the location the event originated from
// event_datapoint_id | GUID | | | | | The id of the datapoint the event is created for (if any, 0 otherwise)
// event_datapoint_type | UINT16 | | | | | The type of the datapoint the event is created for (if any, empty otherwise), see below for constants
// event_sensornum | UINT16 | | | | | The sensor the event is created for (in combination with the datapoint id, 0 if no sensor)
// event_sensortype | STRING | X | | | | The type of the sensor the event is created for, can be empty
// event_interface_num | UINT16 | | | | | -
// event_begin_time | TIMESTAMP | X | | | | =>,>,<,<,<,< The date and time the event was created (Unix timestamp)
// event_accepted_time | TIMESTAMP | X | | | | The date and time the event was accepted (Unix timestamp)
// event_completed_time | TIMESTAMP | X | | | | The date and time the event was completed (Unix timestamp)
// event_completed_user_code | STRING | | | | | The user who completed the event
// event_end_time | TIMESTAMP | X | | | | The date and time the event ended (Unix timestamp)
// event_input_name | STRING | | X | | | Value of the corresponding input which is specified by "name" ( e.g. event.input.reason_alarm )
// event_group_id | UINT32 | | | | | Group id (i.e. the group parent's event id)
// event_groupcount | UINT32 | | | | | Number of group members (only used for group parents and excluding the parent itself)
-----
// Certain ids can be formatted, like setting the output language or changing the representation of the value, using the following syntax:
// Format id: [id] [/param=value /param2=value /...]
// Example: event_type -> 1
// event_type /fmt=flags -> [ALARM]
// event_type /fmt=ui -> Alarm
// event_type /lng=de /fmt=ui -> Alarm
// event_type /lng="de" /fmt="ui" -> Alarm
// event_type.alarm -> 1/0
// event_type.armed -> 1/0
// event_type.armed /lng=en /fmt=ui -> True / False
//
// Possible values for event_type
-----
| Value | Type
-----
// 1 | Alarm
// 2 | Fault
// 4 | Message
// 8 | Warning
// 16 | Prealarm
// 32 | Revision Alarm
// 64 | Revision Fault
// 128 | Revision Message
// 256 | Active
// 512 | Disarmed
// 1024 | Locked
// 2048 | Off
// 8192 | Armed
// 16384 | Revision
// 32769 | Alarm (Simulation)
// 32770 | Fault (Simulation)
// 32772 | Message (Simulation)
// 32776 | Warning (Simulation)
// 32784 | Prealarm (Simulation)
// 32800 | Revision Alarm (Simulation)
    
```

```

// 32832 | Revision Fault (Simulation) |
// 32896 | Revision Message (Simulation) |
// 33024 | Active (Simulation) |
// 33280 | Disarmed (Simulation) |
// 33792 | Lock (Simulation) |
// 34816 | Off (Simulation) |
// 40960 | Armed (Simulation) |
// 49152 | Revision (Simulation) |
//
//
// Bitmask for event.status
//-----+-----
// Bit | Status |
//-----+-----
// 0x01 | accepted |
// 0x04 | deferred |
// 0x08 | completed |
// 0x10 | ended |
// 0x20 | locked |
//-----+-----
//
// Possible values for event.datapoint.type
//-----+-----
// Value | Type |
//-----+-----
// 1 | Fire |
// 2 | Intrusion |
// 3 | Technical |
// 4 | Interface |
// 5 | Control |
// 6 | Panic |
// 7 | Tamper |
// 8 | Emergency |
// 9 | Other |
// 10 | Camera |
// 11 | Monitor |
// 12 | Intercom |
// 13 | Light |
// 14 | Door |
// 15 | Lock |
// 16 | Value |
// 17 | Audio-In |
// 18 | Audio-Out |
// 1000 | Group |
//-----+-----
//
//-----+-----
// Log
//-----+-----
// Possible values for '<>' placeholders
//-----+-----
// Name | Type | UI | Lng | Filter | Description |
//-----+-----
// logentry.id | GUID | | | =, >, <, <> | Database id of interface |
// logentry.time | TIME | | | =, >, <, <> | Time of the event |
// logentry.station | UINT16 | | | = | Number of the workstation that generated the entry |
// logentry.interface | UINT16 | | | = | Number of the triggering interface |
// logentry.class | STRING | X | | = | Information about the class (warning, info, etc.) of the log entry |
// logentry.category | UINT32 | X | | = | Information about the category (system, event, etc.) of the log entry |
// logentry.incident | STRING | X | X | | Information about the event (login, entry, etc.) of the log entry |
// logentry.details1 | STRING | X | | | Details1 about the event (fault, turn on by..., etc.) |
// logentry.details2 | STRING | X | | | Details2 about the event (fault, turn on by..., etc.) |
// logentry.usercode | STRING | | | | Code of the user logged into the workstation |
// logentry.datapointid | GUID | | | | Database id of the datapoint that is assigned to the log entry |
// logentry.eventid | GUID | | | | Database id of the event that is assigned to the log entry |
// logentry.edittime | TIME | | | | Date and time of last change of the definition |
// logentry.edittuser | STRING | | | | User code who made the last change |
//-----+-----
//
//-----+-----
// Datapoint
//-----+-----
// Possible values for '<>' placeholders
//-----+-----
// Name | Type | UI | Lng | Index | Filter | Description |
//-----+-----
// datapoint.id | GUID | | | =, >, <, <> | Database id of datapoint |
// datapoint.parentid | GUID | | | =, >, <, <> | Database id of datapoint parent |
// datapoint.segmentid | GUID | | | = | Database id of datapoint segment |
// datapoint.segment.name | STRING | | | | Name of the segment |
// datapoint.category | UINT16 | | | = | Type/category id of datapoint (1=fire, etc.) |
// datapoint.name | STRING | X | | | - |
// datapoint.desc | STRING | X | | | - |
// datapoint.tags | STRING | X | | | List of tag names |
// datapoint.locationid | GUID | | | = | Database id of datapoint location |
// datapoint.location.name | STRING | X | | | Name of datapoint location |
// datapoint.interface | UINT16 | | | = | Num of datapoint interface |
// datapoint.interface.name | STRING | X | | | Name of datapoint interface |
// datapoint.datatype | UINT16 | | | | Id of the data type (depending on the interface) |
// datapoint.node | UINT16 | | | | Note number (depending on the interface) |
// datapoint.address | STRING | | | | Address1 (depending on the interface) |
// datapoint.straddress | STRING | | | | Address2 (depending on the interface) |
// datapoint.latitude | DOUBLE | | | | Coordinates of the datapoint or sensor for positioning in graphics (only used in GIS graphics) |
// datapoint.longitude | DOUBLE | | | | Coordinates of the datapoint or sensor for positioning in graphics (only used in GIS graphics) |
// datapoint.altitude | DOUBLE | | | | Coordinates of the datapoint or sensor for positioning in graphics (only used in GIS graphics) |
// datapoint.sensortype | STRING | X | | | Name of the sensor type |
// datapoint.text | STRING | | | | Text or text module |
// datapoint.textmacro | STRING | X | X | | Text macro definition (text or text module) |
// datapoint.graphic | STRING | X | X | | Graphic definition |
// datapoint.notes | STRING | X | | | Instructional text of the datapoint |
// datapoint.edittime | TIME | | | | Date and time of last change of the definition |
// datapoint.edittuser | STRING | | | | User code who made the last change |
//-----+-----
//
//-----+-----
// Location
//-----+-----
// Possible values for '<>' placeholders
//-----+-----
// Name | Type | UI | Lng | Filter | Description |
//-----+-----
// location.id | GUID | | | =, >, <, <> | Database id of location |
// location.parentid | GUID | | | =, >, <, <> | Database id of location parent |
// location.segmentid | GUID | | | = | Database id of location segment |
// location.segment.name | STRING | | | | Name of location segment |
// location.name | STRING | X | | | - |
// location.desc | STRING | X | | | - |
// location.tags | STRING | X | | | List of tag names |
// location.graphic | STRING | | | | Path, file name, and parameter of location graphic |
// location.text | STRING | | | | Path and file name of location |
// location.extref | STRING | X | | | - |
// location.edittime | TIME | | | | Date and time of last change of the definition |
// location.edittuser | STRING | | | | User code who made the last change |
//-----+-----
//
//-----+-----
// Station
//-----+-----
// Possible values for '<>' placeholders
//-----+-----
// Name | Type | UI | Lng | Filter | Description |
//-----+-----
// station.id | GUID | | | =, >, <, <> | Database id of station |
// station.num | UINT16 | | | | - |
// station.name | STRING | X | | | - |
// station.desc | STRING | X | | | - |
// station.locationid | GUID | | | | Database id of station location |
// station.location.name | STRING | | | | Name of station location |
// station.edittime | TIME | | | | Date and time of last change of the definition |
// station.edittuser | STRING | | | | User code who made the last change |
//-----+-----
//
//-----+-----
// Interface
//-----+-----
// Possible values for '<>' placeholders
//-----+-----
// Name | Type | UI | Lng | Filter | Description |
//-----+-----
// interface.id | GUID | | | =, >, <, <> | Database id of interface |
// interface.segmentid | GUID | | | = | Database id of interface segment |
// interface.segment.name | STRING | | | | Name of interface segment |
// interface.num | UINT16 | | | | - |
// interface.name | STRING | X | | | - |
// interface.desc | STRING | X | | | - |
// interface.module | STRING | X | | | Name of the interface module |
// interface.edittime | TIME | | | | Date and time of last change of the definition |
// interface.edittuser | STRING | | | | User code who made the last change |
//-----+-----
//
// [info]
// The connection string to use, this depends on the ODBC connector used. Instead of a full connection string
// you can set up a Windows ODBC source and specify the DSN name here (Connection=DSN=MyDSNName).
// Connection-Driver=(MySql ODBC 5.3 Unicode Driver);Server=localhost;Database=WinGuard;User=root;option=3;
// The connection timeout to use to connect to the database in seconds. Default is 5 seconds.
// ConnectionTimeout = 5
    
```

```
// The delay to use between unsuccessful connection attempts.
// If no connection could have been established the system will the set amount of seconds between attempting
// to connect again. Default: is 2 seconds.
#ReconnectDelay = 2
#COMMENT="Sample WSE Script for MySQL 5 databases."
#COMMENT_ID="Beispiel WSE-Skript für MySQL 5 Datenbanken."
// Don't change this value
// Version1: Field value definition changed. Only string values are enclosed within either single quote (') or double quote (") characters.
#Version=2
--
```

5.18.11.5 Notes

Here you will find some important information.



Please note that the function SQL export depends on your license.



All database management systems have to be installed and configured in advance.



*The configuration files (.WSE) are first searched in the **Data** directory and afterwards in the **mod** directory!*



A configuration file always relates to just one (target) database of a database management system.



In case of a Hot-Standby system, the Server and the Standby Server will use the same configuration file. Thus the SQL database should be installed independently of the WinGuard servers!



Please install, dependent of your WinGuard installation, 32 or 64 Bit ODBC drivers!



If WinGuard is running as a service, please define the database connections as System-DSN and not as User-DSN (maybe unavailable)!



When using different operating systems, corresponding DSN definitions might be required as the names of the ODBC drivers might not be the same!



During migration from X3 to X4 some data formats have been changed. This elements must be adapted!

5.19 Dead man's control

With the help of the dead man's handle function, it can be checked whether a user registered at the client is really present and capable of acting. A time window can be defined during which the user has to perform an action, otherwise an alarm message will be issued. Activation and setup of the function is made via the settings, optionally in connection with a time schedule so that the monitoring can be limited to specific clients, profiles and times. The information with regard to the settings can be found under **Settings / Global / Other** ⁵¹⁷ in the section **Deadman's control**.

5.19.1 User interface

For the deadman's functionality, no separate control panel is available. Operation can be made via the following functions:

- Menu command.
- Status field in the status bar.
- Note or warning dialog.
- Alarm message.

Deadman's dialog

The deadman's dialog will be automatically opened if the time for **note** or **warning** has been reached, however it can also be opened manually via the context menu of the status field in the status bar. Only content of the dialog is the deadman button via which the time window (countdown) can be reset. The remaining time will be displayed on the button (in case of warning in red).

The dialog's size can be adapted and it can be moved. After start of the program, it is displayed centered on the main screen and, upon re-opening, it will always be displayed at its last position and in the last selected size, however it might be moved so that it is fully visible.

Upon reset of the time window, the dialog is automatically closed. If it is closed manually whilst note or warning are still active, it will be re-opened (in case of note after 15 seconds, in case of warning after 5 seconds).

Example: Deadman's dialog (Warning)

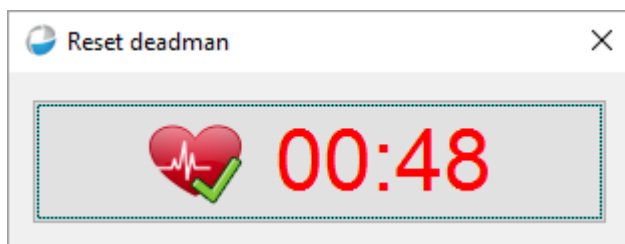


Figure 157: Deadman's dialog

Menu command

Via the menu command **Reset deadman**, a function for reset can be entered directly into the menu or toolbar. In the standard menu or the standard toolbar, this command is however not available. The button in the toolbar will not be animated and also not display the remaining time. Via the menu command, the reset as action (execute menu command) can also be used e.g. out of graphics or text.

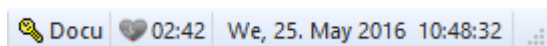
Deadman status field

In case of active monitoring, the deadman status field is displayed in the status bar between user and time. The field contains an icon that is at first grey and will become red, starting at the bottom, as time passes by. The remaining time will be displayed in the format minute:seconds on the icon. If the warning is active, the time will be displayed in red, otherwise in the same way as all other texts of the status bar.

Upon clicking left on the status field, the context menu opens, offering the functions for opening/closing of the deadman dialog (in case the dialog is open, the entry is marked) and for resetting the time window.

▼ Example: Deadman status field

Display if active:



Display in case of warning:

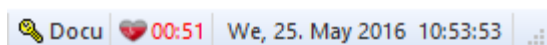


Figure 158: Deadman status field

5.19.2 Functionality

The total functionality is only executed and operated locally at a client. The function is independent of server connection and Hot-Standby switch and generally only monitors the registered user and not the client. The definitions are made in the settings under ... | **system** | **Other**⁵¹⁷ in the section **Dead man's control** globally for all, profiles (user / workstation) or each workstation.

If the deadman's control is active for a user, the time window (countdown) for monitoring will be started after registration or after reaching the active time period (timetable), if the time has been expired, a deadman's alarm message will be triggered. The function stops automatically if the user logs off or if the end of the active monitoring time period (timetable) has been reached.

In case of changing the user, the function is reset accordingly and re-started if necessary. However, profile changes will only have an impact on the function provided that the deadman settings will change due to them. The changes of the settings (locally or remote) will be monitored, i.e. if one of these settings changes, the monitoring will be re-set and re-started.

Actions to reset the time window (Countdown):

- Activity (Keyboard, mouse click) by user (if this option is active).
- Execution of the corresponding menu command.
- Execution of the corresponding command in the context menu of the status bar field.
- Clicking of the button in the note dialog.
- Upon reset of the time window.
- If the deadman dialog is closed.
- If the possibly issued warning sound is terminated.
- If the possibly existing deadman's alarm message is terminated.
- If the active time window of the timetable is quit.
- If the user logs off or switches the user profile.
- If the deadman's parameters or the timetable (active section) are changed.

Schedule

The optionally adjustable schedule can limit monitoring with regard to time. Monitoring is only active if **another section apart from section 1** of the schedule is active. Control by the schedule will behave in the same way as if the total function would have been manually activated or deactivated. If the indicated schedule has not been found, behaviour will correspond to the one without indicated schedule, i.e. monitoring will always be active. Any changes of the currently used schedule (locally or remote) will be monitored but only have an impact if the currently valid time period has been changed.

Activity extends time

Activities leading to extension or reset of the time window in case of a corresponding setting are keyboard entries and left mouseclicks in any WinGuardwindow.

Note before expiry

A note in form of a popup on the main window of WinGuard can be issued at a defined time before expiry of the time window. In case of an active note, the deadman's dialog will be opened with the button for re-set of the time window. If the dialog is closed without pressing the button, it will always be re-opened again after 15 seconds.

Warning before expiry

A warning provided in form of a popup on the main window of WinGuard can be issued at a defined time before expiry of the time window. In case of an active warning, the deadman's dialog will be opened with the button for re-set of the time window. If the dialog is closed without pressing the button, it will always be re-opened again after 5 seconds. In addition, the possibly defined sound defined for this case will be issued and the time indications in the status bar and the deadman's dialog will be displayed in red. Re-set of the time window will also terminate the sound.

Deadman's alarm message

The alarm message is triggered upon expiry of the time window with the status **Alarm** and the status text **Deadman's alarm**. As datapoint, the client datapoint (SST: internal, address = client number) will be used. If this datapoint is not existing, the message will be triggered without datapoint, just with the datapoint name **Client #**. The message will be triggered locally from the client and pass through event distribution normally. The message will only be terminated upon explicit re-set of the time window (also locally at the client). In case of switching or log-off of the user, the message will not be terminated as the time window is only implicitly re-set in this case.

5.20 Other

In this section, you will find additional and helpful WinGuard functions such as the display of analog values in the form of line diagrams.

5.20.1 Print Function

The content displayed in most windows can be printed out at any time. For this function, WinGuard uses the traditional Windows® print mechanism that you are familiar with through other applications.

The menu command, **System | Printer Setup...** opens the dialog **Printer Setup** which is available in every Windows application. In this dialog, you can change the defaults for the printer, select paper size and format, and open the dialog for the drivers with additional setup options.

i The name of the currently selected printer is displayed in the status bar next to the symbol. By clicking on this field, a pop-up menu opens through which you can also change the printer defaults.

The menu command **System | Print...** opens the dialog **Print**, in which you can select the printer and the respective dialog of the driver. Here you can determine the print area and the number of copies. By clicking on the **OK** button, the print is then started. Additionally, there is the command **Direct Print**, with which you can start the printing process without further confirmation using the printer defaults. This command can be accessed via [Execute Menu Command](#)^[987] or with a user-defined menu or toolbar. This is the same print command that can be found in the standard toolbar.

i These functions are only available if a corresponding display area as been selected beforehand!

5.20.2 Screen Keyboard

If WinGuard is to be used via a touchscreen and typing entries is required, the standard screen keyboard of your operating system can also be used (for example, for login).

▼ Dialog: Screen Keyboard

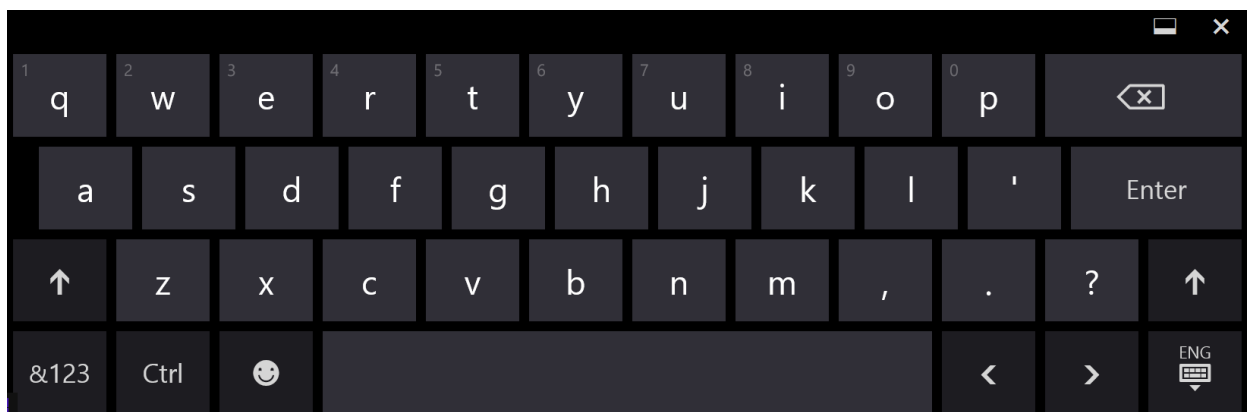


Figure 159: Screen Keyboard

6 Settings

When you retrieve the menu item **System | Settings**, you will see the dialog, **Settings**, which allows you to determine numerous system settings. The settings areas that need to be edited can be selected using the explorer on the left side of the dialog. In order to edit settings, the corresponding rights are required.

Explorer Elements in the Dialog, **Settings**:



Local Installation

Here is where you determine the settings for the local workstation.



Global

Here is where you can define global, system-wide presets.



Workstation Profile

In this section, you can define special settings for workstation profiles. Global presets can be customized for individual workstation profiles here.



This folder is only displayed if you have already established a workstation profile!



Workstations

In this section you can define special settings for individual workstations. Global settings can be customized here for individual workstations.



User Profiles

In this section you can define special settings for individual user profiles. Global or workstation-dependent settings can be modified here for individual user profiles.

The respective settings can be defined on the right side. Some of the definitions require a manual entry. For those that are not entered manually, you can access a selection field by clicking in the respective field or activate the selection with a button. If you double-click in a **selection list**, the next value in the list is entered. For fields that are determined via a dialog, a double-click opens the dialog.

Below the settings area is an information field which displays additional information regarding the selected entry.

Settings:

▼ Dialog: Settings / Global / System

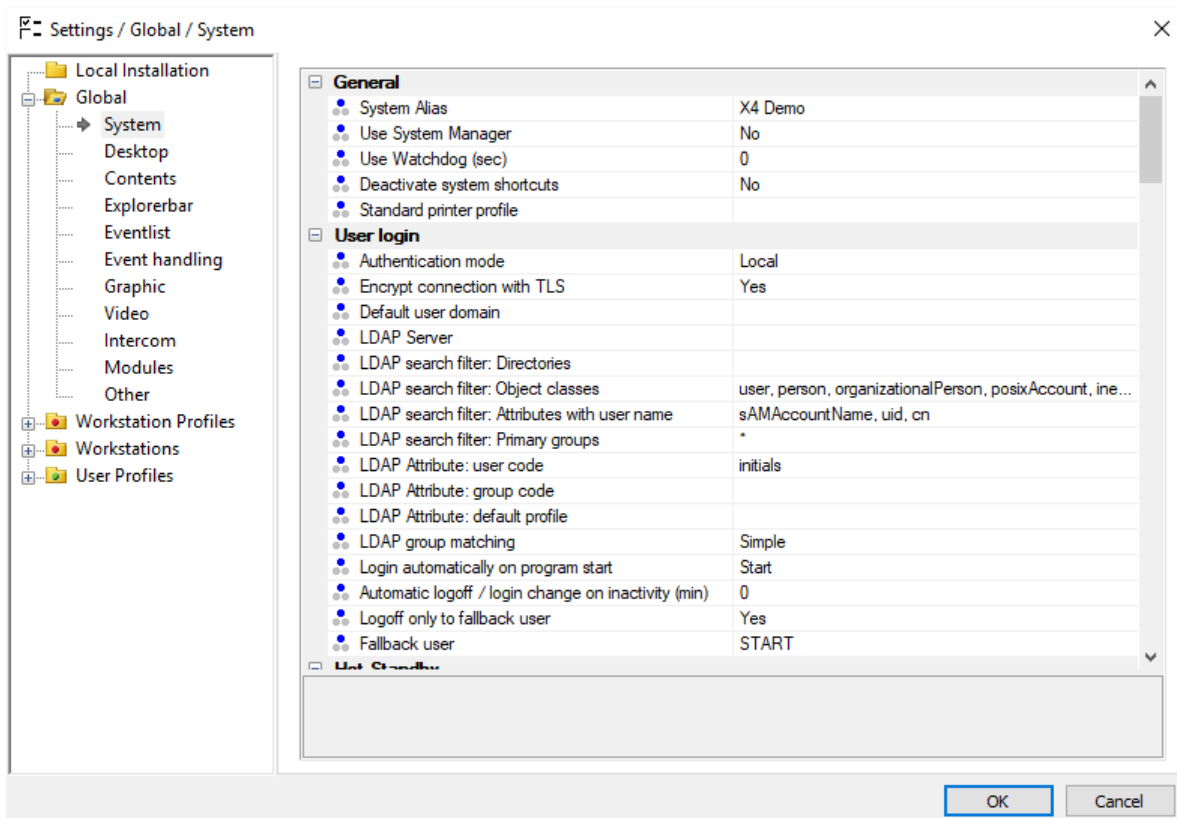


Figure 160: Settings / Global / System

▼ Functions: General

Button OK

The changes are accepted and the dialog is closed. Many of the settings are effective immediately (exception: local installation) on the various workstations and profiles without users having to log in again or restarting the workstation.

Button Cancel

The editing of settings is canceled, the dialog is closed without further confirmation, and all current changes are discarded.

In order to change an entry for a workstation or profile, you must first select the entry, and then, via the context menu (right mouse key), go to **Overwrite here**. You can then make the desired change. You can also do this process in reverse: via the context menu and the function **Remove definition here**, a customized setting can be reverted to the global setting or superordinated preset.

Color Code:

- Global (blue)
- Workstation Profiles and Workstations (red)
- User Profiles (green)

With the help of the color code, you can recognize immediately where customized settings have been defined. Using the context function **Go to >**, you can switch directly to the respective entry.

Settings:

The changes you have made are only accepted after you have closed the dialog by activating the **OK** button.



After changing a local setting, it is generally necessary to restart the workstation!



Required rights:

Object type: Settings, Function Group: Edit; Function=All



*Many of the changes for/under **Global** are effective immediately on workstations or profiles without the user having to log in again or restarting the workstation.*

*If a **restart** of the workstation is required in order for the changes to be effective, you will find respective instructions in the documentation!*

6.1 Local Installation

In the folder, **Local Installation**, the general settings for the local workstation can be made. In the respective subheadings, you can find the settings for the **system**, **network**, **database**, and defined **printer profiles**.

It is here that the type and the name of the workstation are defined. In a system with server and clients, the connections to the server or the fallback entities are defined. Enter the name of the computer or its respective IP address as the address for the connections.

In the section, **System**, you can set up the folder for the project data (**Current Project Folder**). If this entry remains blank, the data is stored in the Program Folder (please see: [Directories and Data Storage](#) ⁵⁸)!

Definitions:

- **System**
Local, workstation-related settings.
- **Network**
Network settings for servers, clients, displays, etc.
- **Database**
Settings for the local database.
- **Security**
Security settings such as message, data and file encryption.
- **Printer profiles**
Settings for the local printer definitions.



These settings have to be made separately on each workstation (server and clients)!



After changes to these settings have been made, the workstation has to be re-started!

6.1.1 System

In this section, the local, workstation-specific settings such as the current project folder are defined.

▼ Dialog: Settings / Local Installation / System

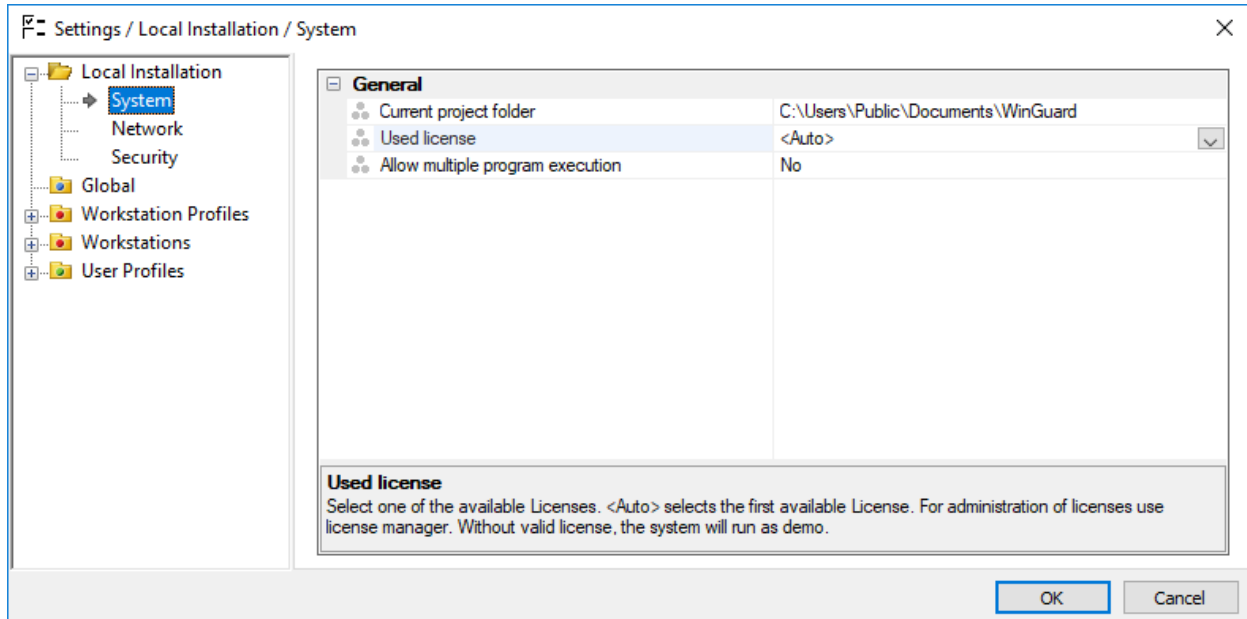


Figure 161: Settings / Local Installation / System

▼ Local Installation: System - General



Current project folder

Here you can define the folder that contains the data of the currently used project.
Blank (default) - the project data is in the program folder.
... - define the folder for the project data if applicable.



Used license

Here you determine the license that should be used for this workstation.
<Auto> (default) - selects the initially-found license - this could also be a temporary service license.
... - select the license that should be used (for example, DE-0000-1234 # 1).



Allow multiple program execution

This setting defines if WinGuard can be executed multiple times on one workstations simultaneously. This function may be necessary for using the system manager.
No (default) - multiple program execution is deactivated.
Yes - multiple program execution is allowed.



Please ensure that different program and project folders are used here!



These settings have to be made separately on each workstation (server and clients)!



After changes to these settings have been made, the workstation has to be re-started!

6.1.2 Network

In this section, the local network settings like workstation type, network addresses, and such are defined. You can find additional information and examples for the configuration of individual workstation types in the section, [Network Installation](#)³⁴. The communication between the workstations (Server / Clients) can be encrypted (AES 256), the key can be defined by your self in the settings dialog.

▼ **Dialog: Settings / Local Installation / Network**

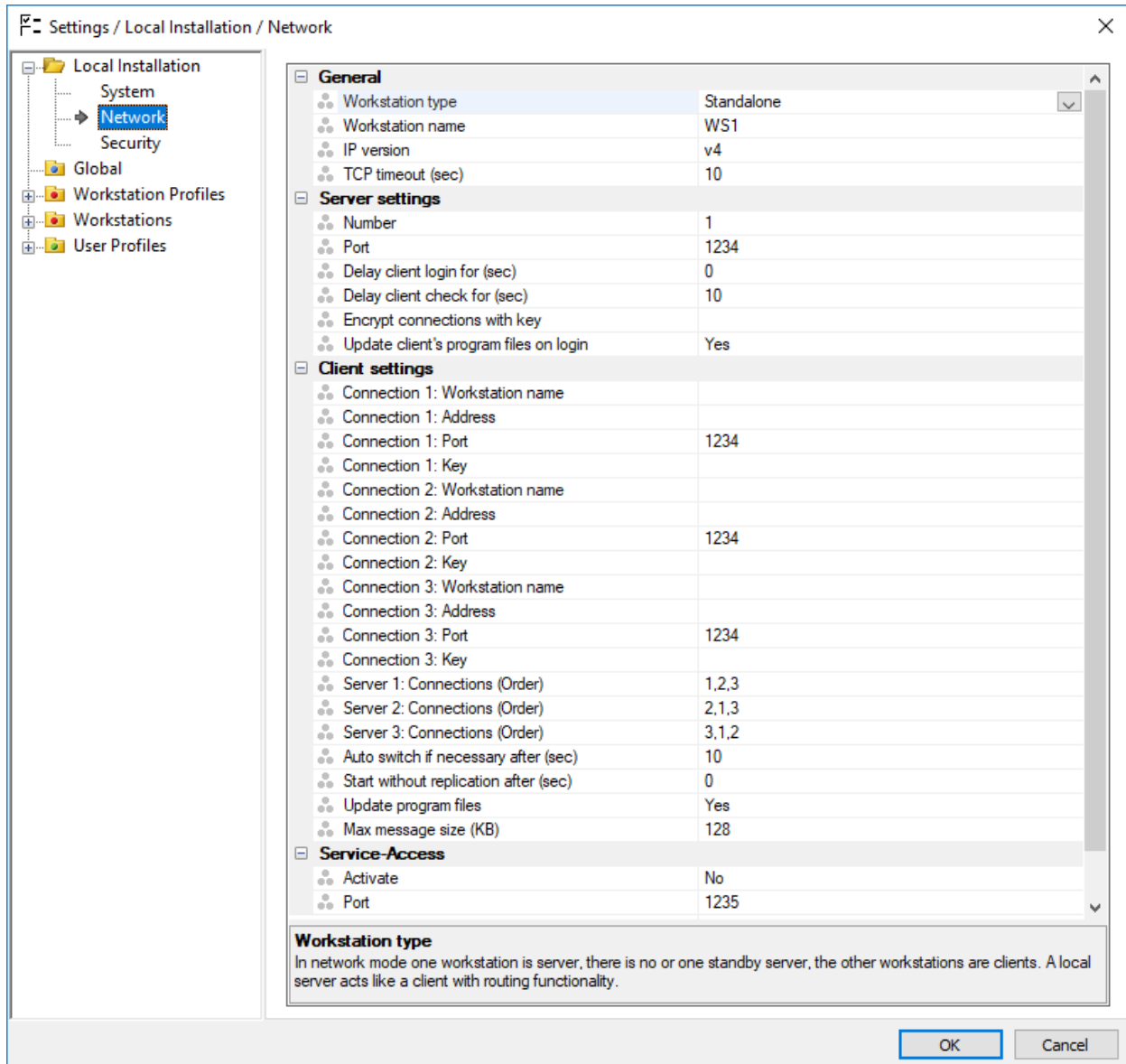


Figure 162: Settings / Local Installation / Network

▼ Local Installation: Network - General

▼ Workstation Type

Here is where you determine the type of workstation. Please select the appropriate type.

Server - server for network operation

Client - simple client

Client (with local server function) - client with function: location server

Client (with interface-server) - client with function: interface server

Display - workstation is used as VideoDisplay

Standalone (default) - single workstation without a network

Workstation Name

Here you determine the name of the workstation that the client will use. The name must be established when defining a workstation.

Blank (default) - enter the name of your workstation - in this case that of the client.

i *If no name or an undefined name is entered, the name of the computer and the workstation number 1 is used!*

▼ IP Version

The IP version of the network to be used is entered here.

The following can be selected: **v4, v6, v4 + v6**.

v4 (default) - if required, select the version to be used.

▼ Local Installation: Network - Server Settings

These definitions are relevant for all servers and workstations of the type, client (with local server function). In most cases, you can accept the preset values.

▼ Number

The number of the Server has to be defined here. The server having the number 1 usually also represents the standard server. The Standby Servers will receive the numbers 2 or 3.

The following numbers can be selected: **1, 2, 3**.

1 (default) - if required, select the number to be used.

Port

Local IP ports opened by the server, standby server or client (with local server function) for data exchange.

1234 (default) - enter the port that should be used if applicable.

i *For servers, generally the same IP port is used, but this is not required!*

Delay client login for (sec)

Here you can define the time that should elapse before the port opens for client login after startup. This may be helpful for speeding up the start of the interfaces.

0 (default) - the opening of the port starts directly without delay.

... - modify the time to meet your requirements.

Delay client check for (sec)

If a disconnection with a client takes longer than the time indicated here, a respective message is displayed. This setting allows you to prevent message alerts for short disconnections.

0 - this function is inactive, the respective messages are immediately displayed.


10 (default) - modify the time to meet your requirements.

 Encrypt connections with key

Here you can define a text (key) that is used for data encryption during transmission. This text must be identically defined for all workstations that use this connection.

Blank (default) - no encryption.

... - data is encrypted with the indicated key.

 *A secure key should consist of at least 10 characters!*

 Update client's program files on login

Depending on this setting, the program files are automatically updated when logging in on the server, if newer files are available on the server.

Yes (default) - update is active.

No - update is **not** active.


▼ Local Installation: Network - Client Settings

Settings in the following section are required for all clients. However, which connections you have to define depends on your system configuration. For a simple configuration with a server, only the settings for **Connection 1** need to be defined. If a standby server or client with local server function is used, settings for **Connection 2** and **3** may also be required.

 Connection 1: Workstation name

Here you can define the workstation name of the uplink partner for connection 1. So it is ensured that the connection is made with the defined workstation (name and address must be right).


Blank (default) - enter the workstation name if required.

 *The name is only with TLS encryption used (recommended but not required)!*

 Connection 1: Address

Here the address of the uplink partner for connection 1 of the client is determined. This can be the server, standby server, or a client with server function. Enter the IP address or the computer name here.

Blank (default) - IP address or name **must** be defined here.

 *In a simple server-client system, enter the server here.*

 Connection 1: Port

IP port made available by the uplink partner 1.

1234 (default) - enter the port defined on the partner here.

Connection 1: Key

Here you have to enter the key that is defined for data encryption on partner 1.

Blank (default) - No encryption during data transfer.

Not blank - key for encryption.

Connection 2: Workstation name

Here you can define the workstation name of the uplink partner for connection 2. So it is ensured that the connection is made with the defined workstation (name and address must be right).

Blank (default) - enter the workstation name if required.



The name is only with TLS encryption used (recommended but not required)!

Connection 2: Address

Here the address of the uplink partner for connection 2 of the client is determined. This can be the server, standby server, or a client with server function. Enter the IP address or computer name here.

Blank (default) - no fallback partner is defined.

Not blank - IP address or name of the first fallback partner.



In a simple server-client system, this entry remains blank.

Connection 2: Port

IP port that is made available by the uplink partner 2.

1234 (default) - enter the port defined at the partner if necessary.

Connection 2: Key

Here you must enter the key that is defined for data encryption on partner 2.

Blank (default) - no encryption during data transfer.

Not blank - key for encryption.

Connection 3: Workstation name

Here you can define the workstation name of the uplink partner for connection 3. So it is ensured that the connection is made with the defined workstation (name and address must be right).

Blank (default) - enter the workstation name if required.



The name is only with TLS encryption used (recommended but not required)!

Connection 3: Address

Here the address of the uplink partner for connection 2 of the client is determined. This can be the server, standby server, or a client with server function. Enter the IP address or computer name here.

Blank (default) - no additional fallback partner defined.

Not blank - IP address or name of the second fallback partner.



In a simple sever-client system, this entry remains blank.

Connection 3: Port

IP port that is made available by the uplink partner 2.

1234 (default) - enter the port defined at the partner if necessary.

Connection 3: Key

Here you have to enter the key that is defined for data encryption on partner 3.

Blank (default) - no encryption during data transfer.

Not blank - key for encryption.

Server 1: Connections (Order)

The order of connections (fallback) of the client is defined here in case Server 1 is the active server. If a connection to the partner defined first is impossible, it will be tried to establish a connection with the secondly defined partner, etc.

1,2,3 (default) - only change this order if required.

Server 2: Connections (Order)

The order of connections (fallback) of the client is defined here in case Server 2 is the active Server. If a connection to the partner defined first is impossible, it will be tried to establish a connection with the secondly defined partner, etc.

2,1,3 (default) - only change this order if required.

Server 3: Connections (Order)

The order of connections (fallback) of the client is defined here in case Server 3 is the active Server. If a connection to the partner defined first is impossible, it will be tried to establish a connection with the secondly defined partner, etc.

3,1,2 (default) - only change this order if required.

Auto switch if necessary after (sec)

If, following a disconnect, a connection with a higher priority partner can again be established, the switch to this partner takes place after the time determined here has elapsed (avoids "reducing the uplink priority").

10 (default) - modify the time until the switch if necessary.



This applies only to standby servers or clients with server function!

Start without replication after (sec)

Here you define the time that should elapse before a client starts (offline mode) even when it cannot establish a connection to one of the defined partners.

0 (default) - waits for logon - no offline start.

> 0 - client starts (in offline mode) after this amount of time has elapsed in the event no logon to one of the defined partners could be accomplished. As soon as one of the partners is available again, the connection is established automatically followed by program and data replication.

**Replicate program files**

If there are new program files on the uplink partner, then these are optionally accepted after start.

Yes (default) - program files are accepted if necessary.

No - program files are not accepted.

Maximum Message Size (KB)

Definition of the maximum package size for message transmission (only needs to be modified/reduced with extremely slow connections, for example ISDN).

128 (default) - modify the required max. package size here if necessary.

▼ Local Installation: Network - Service-Access

These settings are required only if this workstation was started as a service and the ServicePanel is to be used here. These settings can be made at all workstation types.

 Activate

Here you determine if service access should be activated for this workstation.

No (default) - service access is inactive.

Yes - service access is activated at program start.

 Port

Local IP port provided for service access.

1235 (default) - modify the port for service access if applicable.



These settings have to be made separately on each workstation (server and clients)!



After changes to these settings have been made, the workstation has to be re-started!



The section "Network - Client Settings" is described here only in general terms. You can find additional information under [Network Installation](#) ³⁴.

6.1.3 Security

This section defines the local, workstation-related security settings such as message, data and file encryption. Encryption via AES256 with PSK will be supported as before, alternatively to the new **TLS encryption** (see: [Network](#)^[409]).

Encryption is realized according to TLS 1.2. Server and client certificates are required for operation. Without a client certificate (each workstation has its own certificate), it is not possible to establish a secured connection.

The required certificates will only be saved in the **Windows Certificate Store** and managed there. For customers without a **PKI** (Private Key Infrastructure), there is the possibility that WinGuard can also create these workstation certificates independently (self-signed certificates). However, these created certificates are not reliable. In order to attain an adequate security level, these certificates should be pinned and unknown certificates should not be accepted (see: [Encryption](#)^[1137], [Certificate](#)^[1138]).



Certificates for file encryption should always be saved additionally as a backup at a secret place!

▼ Dialog: Settings / Local Installation / Security

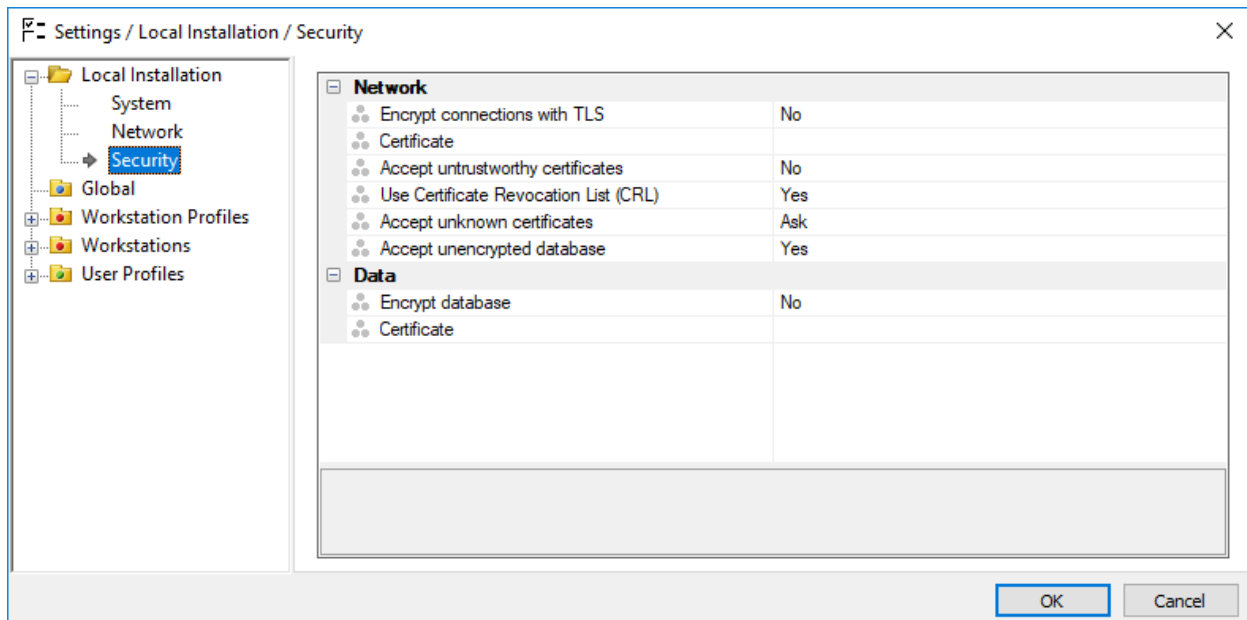


Figure 163: Settings / Local Installation / Security

▼ Local Installation: Security - Network



Encryption connection with TLS

It can be defined here whether the connection between the workstations shall be encrypted using certificates (TLS - Transport Layer Security). In this case, a possibly activated AES256 encryption will not be used (temporarily deactivated).

No (default) - the connections are not encrypted with TLS.


Yes - the connections are encrypted with TLS, AES256 is deactivated if required.

Certificate

A certificate can be selected using a corresponding dialog.
 ... - if required, select the certificate to be used.



*For the customer certificate, a corresponding **adv.ip** entry always has to exist under **OU!***

*For the customer certificate, a corresponding **adv.fs** entry is used for the name of the workstation under **CN** (common name) (see: [certificate](#) )!*

Accept untrustworthy certificates

This option defines whether only reliable certificates will be accepted.

No (default) - non-reliable certificates will not be accepted.

Yes - non-reliable certificates will also be accepted.

Use Certificate Revocation List (CLR)

This option defines whether a certificate check using the certificate blocking list shall be executed.

No - no check will be executed.

Yes (default) - a corresponding check will be executed.



*Yes is only sensible if **Accept untrustworthy certificates** is set to **Yes** as well!*

Accept unknown certificates

This option defines the proceeding for selection of unknown certificates. After equal confirmation the certificate can be added to the list of the known certificates.

Yes - unknown certificates will be accepted without any further confirmation required.

No - unknown certificates will not be accepted.

Question (default) - in case of unknown certificates, there will be a confirmation required for use.

Once, then question - an unknown certificate can be used once, afterwards a confirmation will be required before use.

Once, then No - an unknown certificate can be used once, afterwards the use will not be possible anymore.

Accept unencrypted database

This option defines if all databases (server and clients) must be encrypted or that some clients can login to the server with a not encrypted database.

Non (default) - some client databases can be not encrypted.

Yes - alle databases (server and clients) must be encrypted.

Local Installation: Security - Data**Encryption database**

It is defined here whether the database shall be encrypted using certificates (TLS - Transport Layer Security).

No (default) - the database is not encrypted.

Yes - the database will be encrypted.

...

Certificate

A certificate can be selected using a corresponding dialog.
... - if required, select the certificate to be used.



For the customer certificate, a corresponding **adv.fs** entry always has to exist under **OU** (see: [Certificate](#) ¹¹³⁸)!

Dialog: Settings / Local Installation / Security - Select certificate

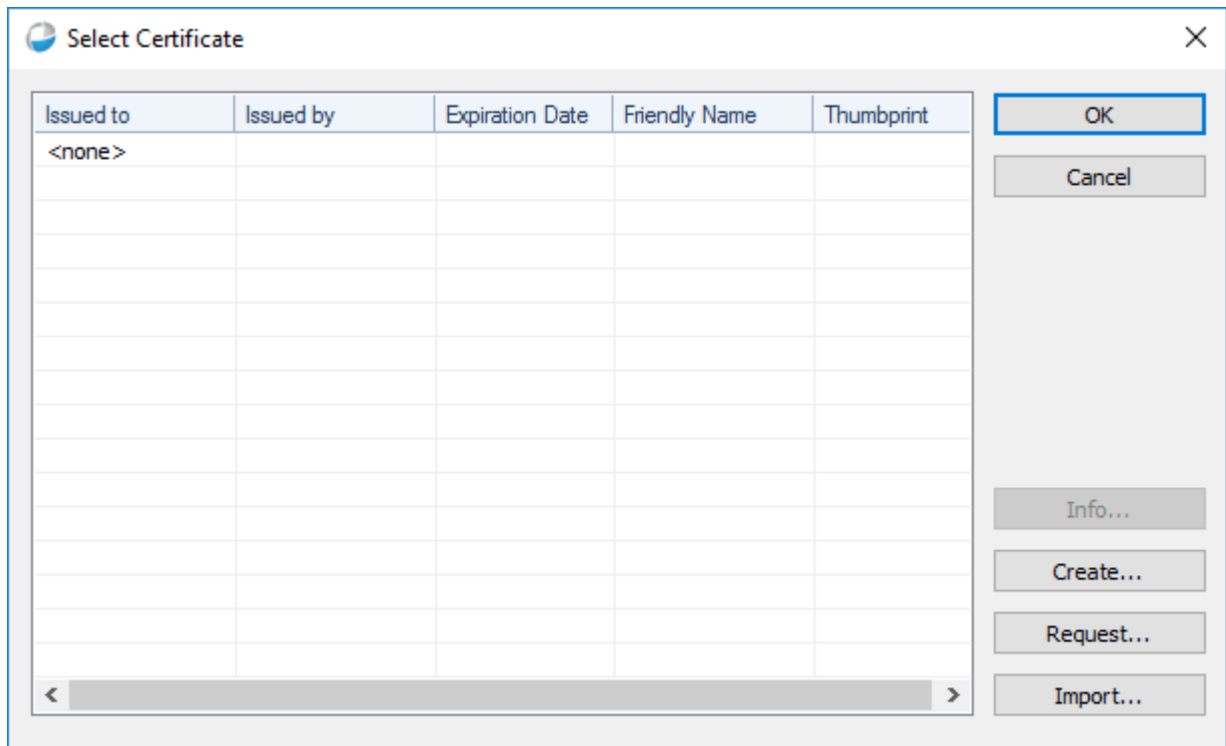


Figure 164: Settings / Local Installation / Security - select certificate

Dialog: Settings / Local Installation / Security - Create certificate

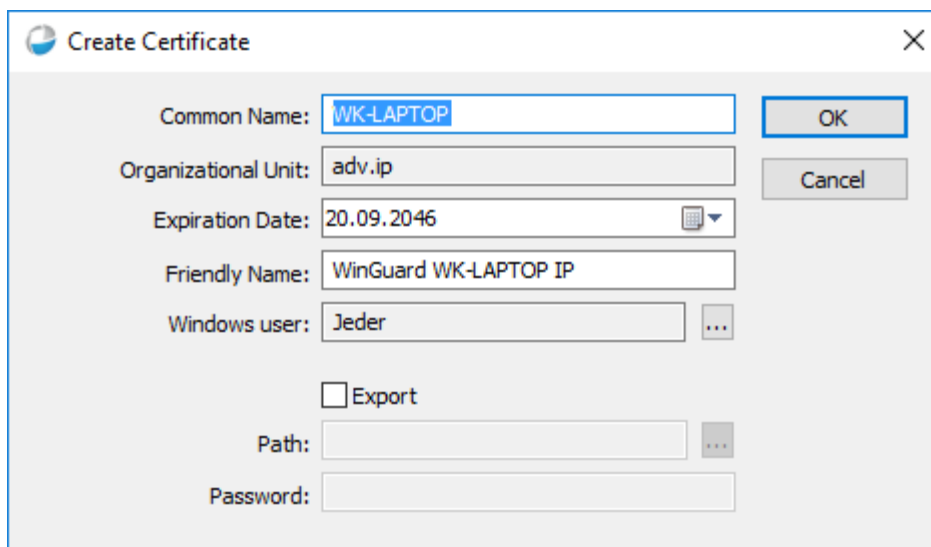


Figure 165: Settings / Local Installation / Security - Create certificate



These settings have to be made separately on each workstation (server and clients)!



After changes to these settings have been made, the workstation has to be re-started!

6.1.4 Printer Profiles

This section is only available if printer profiles have been established in your system (please see: [Printer Profiles](#)). Here the local printers of your workstation are assigned to the WinGuard printer profiles.

▼ Dialog: Settings / Local Installation / Printer Profiles

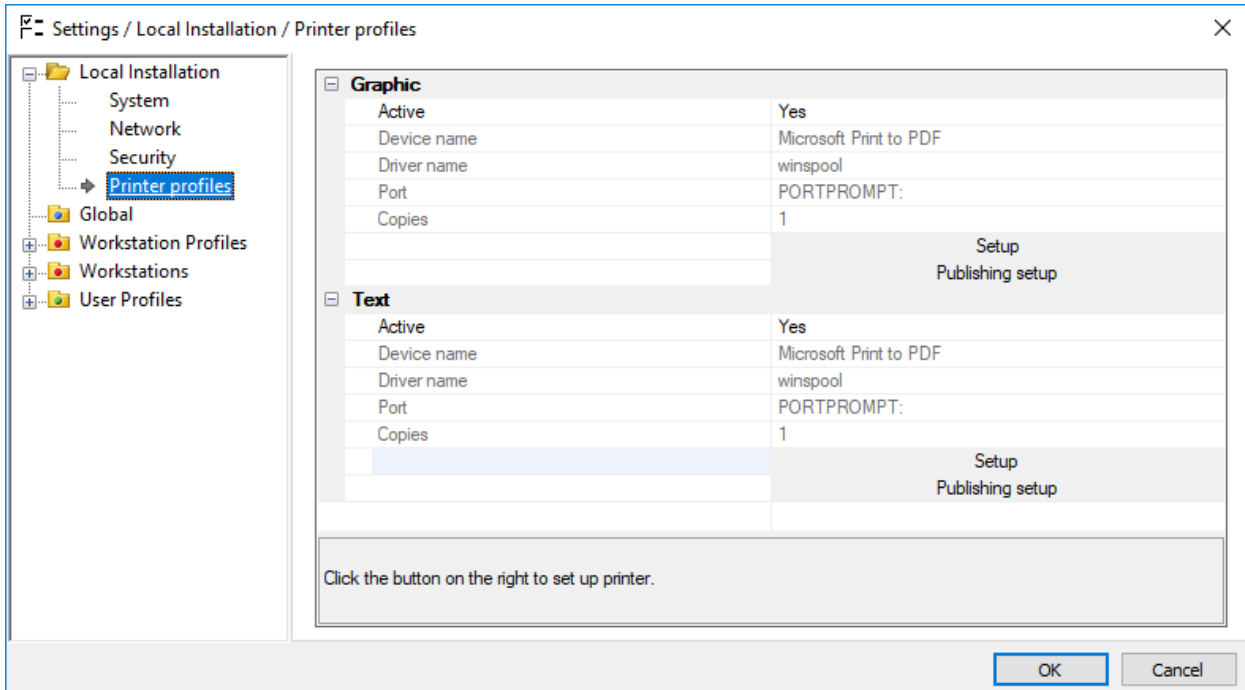


Figure 166: Settings / Local Installation / Printer Profiles

With the functions **Setup** or **Publishing Setup** you can open the respective Windows® system dialogs for the definition or selection of the printers.

▼ Printer Profiles - Printer Definition

Active

This option determines if printing on the assigned printer is active or not.

No (default) - printing via this printer profile is deactivated.

Yes- printing via this printer profile is active.

Device name, Driver name, Port, Copies

Here the respective printer data is displayed.

Setup

Opens the system dialog, **Print Setup**.

Publishing Setup

Opens the dialog **Publishing**.

▼ **Dialog: Printer profile - Publishing**

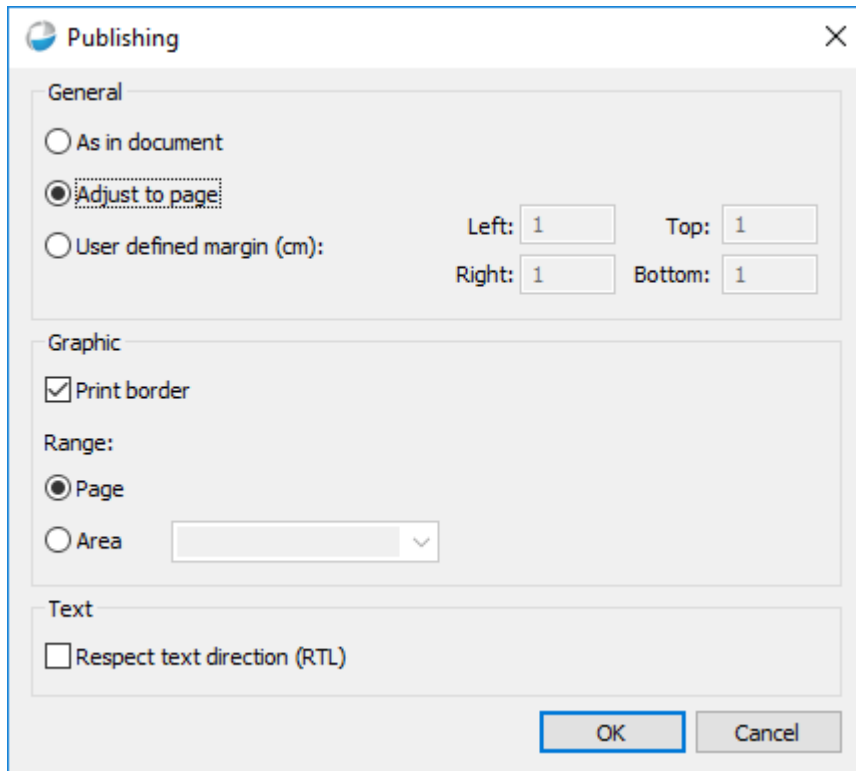


Figure 167: Printer profile - Publishing

▼ **Publishing - General**

(Page adjustment)

This option determines how the document is printed.

- **As in document**

Active - printing is using the documents size (1:1 - multiple pages are possible).

- **Adjust to page**

Active (default) - the document is rescaled to fit into the page (proportional scaling).

- **User defined margin (cm):**

Active - the document is rescaled to fit into the page using the defined margins.

1 (default) - modify the margins to meet your requirements.

▼ **Publishing - Graphic**

Print border

This option determines if the graphics border will be printed.

Range:

This option determines which part of the graphic will be printed.

- **Page**

Active - only the page area (e.g. A4) of the graphic will be printed.

**- Area**

Active - the selected graphic area of the graphic will be printed (e.g. Default).

Blank (default) - select an area.



If the area is not found the Default area is used!

▼ Publishing - Text**Respect text direction (RTL)**

This option determines the text direction while printing texts.

Inactive (default) - normal output (formatting left to right).

Active - output is formatted from right to left.



These settings have to be made separately on each workstation (server and clients)!

6.2 Global

Here is where you can define the global system presets for all workstations as well as workstation and user profiles. Most of these settings can be customized for individual workstations and profiles. If special definitions (overwrites) have been completed on individual profiles or workstations, these have priority over the global definitions.

Priority Rankings of the Settings:

1 User Profile

The definitions of the user profile have the highest priority. This means that if a setting is overwritten in a user profile, the overwrite or customized definition is used by the system.

2 Workstations

Workstation definitions have the second highest priority. This means that only the definition of a user profile can override/overwrite the respective definition of a workstation.

3 Workstation Profile

Workstation profiles have the third highest priority. This means that only global settings can be overwritten here. However, the workstation profiles can be overwritten by settings of individual workstations or user profiles.

4 Global

System presets - these settings take effect if no overwrites were entered in the profiles or for the workstations.



There are individual settings that are not global, but can be used only for individual workstations (for example, the backup setting)!

Definition Sections:

- **System**
General system settings such as automatic login, confirmation, subdirectories, sounds, etc.
- **Desktop**
Settings for the user interface/desktop, screen configuration, language, menu, tool, and status bars, shortcut keys, etc.
- **Contents**
Definition of the windows and area contents.
- **Explorerbar**
Settings for the Explorerbar including visibility, active windows, colors, sum counter, etc.
- **Eventlist**
Settings for the event list including visibility, display, lists, filters, functions, etc.
- **Event Handling**
Settings for events, such as event display, attachments, reports, acoustics, etc.

- **Graphic**
Settings for display, editor presets, default animation, CAD support, etc.
- **CCTV**
Settings for the control panel, VideoManager window, VideoDisplays, local cameras, etc.
- **Intercom**
Settings for local intercoms, control panel, and intercom graphic.
- **Modules**
Assignment of interfaces for system functions such as SMS, fax, voice, e-mail, etc.
- **Other**
Additional system settings such as colors for the history display.

6.2.1 System

In this section, the basic system settings are defined.

▼ Dialog: Settings / Global / System

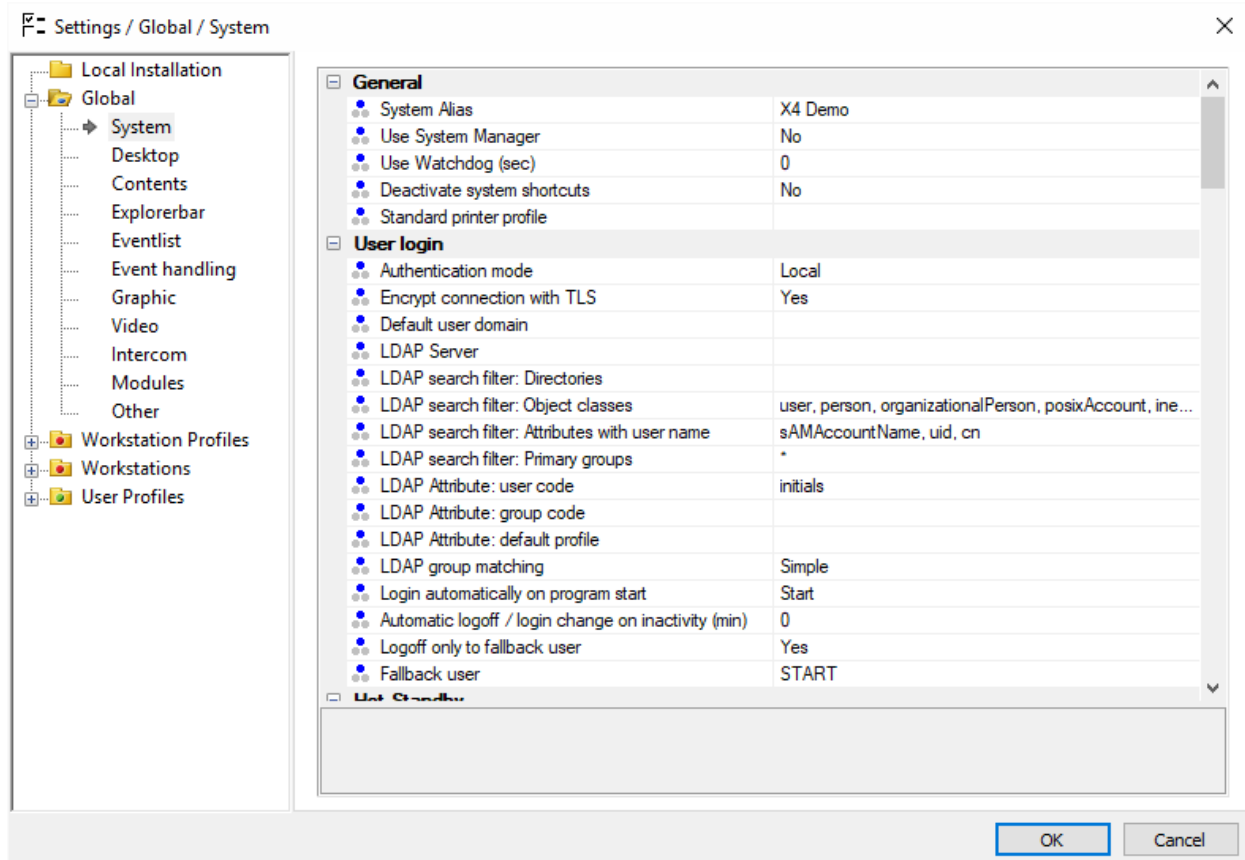


Figure 168: Settings / Global / System

▼ System - General

In the **General** section, general system settings that primarily affect the interaction with additional tools or Windows are defined.

System Alias

This text is displayed in the titlebar of the program. It is also required in connection with the system manager.

Blank (default) - no system name is defined.

... - define the system name.

Use System Manager

Definition of the WinGuard release for incorporating the supplementary tool, **System Manager**.

No (default) - the function is inactive.

Yes - communication for the System Manager is activated.

i *The availability of the function depends on the license!*

Use Watchdog (sec)

This option determines if WinGuard is to be monitored by **Watchdog**. The timing can be different depending if the program is running as an **application** or a **service**.

- Normal mode (application):
The supplementary tool **Watchdog** must be active (min. time 30 sec.).
- Service mode:
An internal monitoring mechanism is used (time is directly used).

0 (default) - monitoring is inactive.

> 0 - if a disconnection between WinGuard and Watchdog lasts longer than the time defined here, Watchdog ends the %WINGUARD% program and restarts it.

Deactivate system shortcuts

This function deactivates the following Windows shortcuts:

<Ctrl>+<Esc>, **<Alt>+<Tab>**, **<Alt>+<Esc>**, **<Alt>+<F4>**, **<Windows Key>**

No (default) - the respective shortcuts are **not** deactivated.

Yes - the respective shortcuts are deactivated.

Standard printer profile

Here you can select a WinGuard printer profile. The printer assigned here to the workstation is then used by the program as default printer (please also see section: [Printer Profiles](#)⁴¹⁹).

Blank (default) - the Windows default printer is used.

... - select a printer profile if applicable.

System - User Login

In this section, you can define the settings for WinGuard login.

Authentication mode

Here you can define the Authentication mode for user access. You can find additional information regarding authentication method in the section [Login with Active Directory \(LDAP\)](#)⁶⁸⁵.

Local (default) - local access definition without LDAP.

Active Directory (only authentication) -

Active Directory (authentication + profile assignment) -

Active Directory (authentication + excl. profile assignment) - using this option, undefined users will be allocated automatically (refer: [LDAP Logins](#)⁵³⁹).



In WinGuard you also have the option of defining a user without a domain entry and to use the domain entry without having to use the Active Directory!



The availability of the function depends on the license!

Encrypt connection with TLS

Using this option, the support of encrypted LDAP connections upon user authentication via TLS/SSL can be activated. If possible, TLS v1.2 will be used, otherwise also older (more insecure) protocols will be used according to the available system/server protocols.

If TLS is active, a connection to port 636 will be established, otherwise the connection will be established to port 389 (previous behaviour). It is also possible to indicate the port explicitly via indication of the LDAP server in the characteristics (format: Servername:Port).

Yes (default) - Encryption is active.


No - Encryption is not active.

 Default user domain

With a respective entry, users are managed entirely or in part via the Active Directory. The domain can be entered as a NetBIOS name or DNS.

Blank (default) - no domain is selected.

... - select the name of the domain if applicable.


 *This entry is only required if you select **Active Directory** ... !*

 LDAP Server

Here the name of the LDAP server for access to the Active Directory can be optionally entered. If no entry is made, an implicit connection is made via the respective user domain. If necessary, the port number can be added separated by ":" . The default port is LDAP_SSL_PORT **636**.

Blank (default) - no server is defined.

... - enter the server name if applicable.


 *This entry is only required if you select **Active Directory** ... !*

 LDAP search filter: Directories

Name of the Organizational Unit entries at which to start LDAP search requests. The input is a comma-separated list of search paths in dot notation e.g. **de.advancis, us.advancis**. The search tries one path after another. If all fails, or no path is specified, whole Active Directory is included in the search.

Blank (default) - the whole Active Directory is included in the search.

... - enter the search filter if applicable.

 *This entry is only required if you select **Active Directory** ... !*


 LDAP search filter: Object classes

The filter specifies which Active Directory types are considered when searching for users. The input is a comma-separated list of possible user types e.g. **user, person**. The fewer attributes are specified the faster login and search will be via LDAP.

user, person, organizationalPerson, posixAccount, inetOrgPerson (default) -

List of the defined object classes.

... - enter the search filter if applicable.


 *This entry is only required if you select **Active Directory** ... !*

LDAP search filter: Attributes with user name

The filter specifies which Active Directory attribute fields are considered when searching for the user. The input is a comma-separated list of possible attribute fields e.g. **sAMAccountName, uid, cn**. The fewer attributes are specified the faster login and search will be via LDAP.

sAMAccountName, uid, cn (default) - List of used attributes.

... - enter the search filter if applicable.


 *This entry is only required if you select **Active Directory ...** !*

 LDAP search filter: Primary groups

Optionally a filter for searching the primary groups during the profile assignment can be defined here. This filter defines which primary groups exist in the Active Directory, thus these do not need to be automatically determined (on larger Active Directories very time-consuming). The list contains comma separated items of group names (CN-Attribute of the primary groups), e.g. **Domain Users, Accounts**. If this field is left blank no primary groups will be assigned to the profiles. If the special character * is used for this filter, primary groups will automatically be searched for. (This setting is only recommended for small Active Directories.)

*** (default)** - automatic search is active.

... - enter the search filter if applicable.


 *This entry is only required if you select **Active Directory ...** !*

 LDAP Attribute: User code

Here the user ID/code (for example, **initials, employee ID**) is defined. If no entry is made, the code is generated from the first and last name.

Blank - the ID/code is generated from the first and last names.


Initials (default) - enter the user ID/code if applicable.

 *This entry is only required if you select **Active Directory ...** !*

 LDAP Attribute: default profile

Here information regarding the establishment of the **default profile** (for example, description) is defined. This requires entry of the LDAP name of the respective profile.

Blank (default) - enter the name of the profile if applicable.


 *This entry is only required if you select **Active Directory ...** !*


 LDAP group matching

Here you can define if for the profile assignment of the LDAP login nested groups and cross domain group relationships should be considered.

Simple (default) - no nested groups and only groups from the same domain as the user are considered.

Extended - nested groups and cross domain group dependences are taken into account.

 *This setting takes only effect if one of the authentication modes (authentication + profile assignment or authentication + excl. profile assignment) are selected!*

 *This entry is only required if you select **Active Directory ...** !*

Login automatically on program start

Here you can define a user who is automatically logged in at start-up of the workstation using the default profile and without requiring manual password entry.

Blank (default) - please see item "Design Start Screen".

... - select the user for automatic login if applicable.

 Automatic logoff/login change on inactivity (min)

With this option, a user that is logged in is automatically logged off after the period of inactivity defined here. If a fallback user is defined, the fallback user is automatically logged in.

0 (default) - the function is inactive.

> 0 - enter the time that should elapse before automatic logoff.

 Logoff only to fallback user

If the logoff function is activated, or after the defined period of inactivity has elapsed, the fallback user will automatically be logged in if a fallback user has been determined. If no fallback user is defined, a **normal** automatic logoff will be realized.

No (default) - normal automatic logoff.

Yes - logoff via login of fallback user - provided a fallback user is defined.

 Fallback user

Here you can define the user that logs in automatically, without manual password entry and using a default profile, following an automatic or manual logoff.

Blank (default) - at logoff, the **Design Start Screen** is displayed.

... - select the fallback user if applicable.

▼ System - Hot Standby

The section, **Hot Standby**, is only relevant if WinGuard is used in a network and a server as well as Hot-Standby server(s) are set up.

 Number of Servers

The number of used servers can be defined and the operation is controlled correspondingly. The following can be selected: From **Licence, 1, 2, 3**.

From Licence = default - adapt the number to your system.

 Auto switch (sec)

Here you specify the time before an auto switch in the operating mode is initiated between server and standby server (and vice versa) following a connection interruption between server and standby server.

0 = default - modify the time to meet your requirements.



If the value remains 0, no auto switch will occur - the function is not active!



Upon operation with two Standby Servers, the system will decide automatically which server will take the role of the active server - this is not adjustable!

▼ System - State Log

The state log, which changes records into datapoint states and is accessible via the menu item **Functions|State Log...**, can save a snapshot of overall states at regular intervals. The time interval and exact time can be determined in the section **State Log**.

Save complete state additionally

This option determines if the state of all datapoints shall be saved at a certain time point in addition to the state changes that are logged.

You can select from: *never, daily, Mondays, ..., Sundays, monthly on the 1st, monthly on the 15th.*

Daily (default) - modify the selection to meet your requirements.

Time

Point in time at which the additional storage of all states shall be executed

06:00 (default) - modify the time to meet your requirements.

▼ System - Automatic Maintenance

In the section **Automatic Maintenance**, various processes for system maintenance can be automated (refer also to: [Maintenance](#) ¹¹³⁶ in section Tips and Help resolving Problems).



The function is independently and separately executed on each active workstation at the specified time, if the function is active!



WinGuard uses SQLite databases as a standard. Using the maintenance function, databases can be compressed and non-used space is released - performance improvement!

Execution

Here you can determine if and when automatic maintenance shall be performed on the individual workstations.

You can select from: *Never, Daily, Mondays, ..., Sundays, Monthly on the 1st, Monthly on the 15th.*

Monthly on the 15th (default) - modify the selection to meet your requirements.

Time

Time at which maintenance should be executed.

12:00 (default) - modify the time to meet your requirements.

Compact: Local.db

This option determines if the local database has to be compressed.

Yes - compression of database is active.

No (default) - no action.

Compact: Core.db

This option determines if the project database has to be compressed.

Yes - compression of database is active.

No (default) - no action.

- Compact: Files.db**
This option determines if the file database has to be compressed.
Yes - compression of database is active.
No (default) - no action.
- Compact: Media.db**
Compress media database
This option determines if the media database has to be compressed.
Yes (default) - compression of database is active.
No - no action.
- Compact: Event.db**
Compress event database
This option determines if the event database has to be compressed.
Yes (default) - compression of database is active.
No - no action.
- Compact: EventArchiv.db**
Compress event archive database
This option determines if the event archive database has to be compressed.
Yes (default) - compression of database is active.
No - no action.
- Compact: SystemLog.db**
Compress system log database
This option determines if the system log database has to be compressed.
Yes (default) - compression of database is active.
No - no action.
- Compact: DeviceLog.db**
Compress device log database
This option determines if the device log database has to be compressed.
Yes (default) - compression of database is active.
No - no action.
- Compact: StateLog.db**
Compress state log database
This option determines if the state log database has to be compressed.
Yes (default) - compression of database is active.
No - no action.

Remove: Undefined tags

This option decides whether the tags from the project database (datapoints and locations) shall be removed if they are not longer defined in the tag database.

Yes (default) - undefined tags will be removed.

No - undefined tags are **not** removed.

Remove: Clips with expired retention time

This option decides whether clips for which the storage time has elapsed shall be deleted automatically.

Yes (default) - the corresponding clips will be deleted automatically.

No - the corresponding clips will **not** be deleted automatically.

Remove bookmarks older than (days)

It can be defined whether bookmarks that are older than the indicated time period shall be deleted.

30 (default) - if required, adapt the time after which the bookmarks that are older than indicated here shall be deleted.

Blank / 0 - no action.

Remove: Cops older than (days)

Here you can define if records in the cop database that are older than the number of days defined here shall be removed.

360 (default) - cop definitions older than the number of days indicated here are deleted.

Modify the time period to meet your requirements.

Blank / 0 - no action.

Remove: Archive entries older than (days)

Here you can define if records in the event archive that are older than the number of days defined here shall be removed.

360 (default) - archive entries older than the number of days indicated here are deleted.

Modify the time period to meet your requirements.

Blank / 0 - no action.

Remove: System log entries older than (days)

Here you can define if system log entries that are older than the period defined here should be removed.

90 (default) - system log files older than the number of days indicated here are deleted.

Modify the time period to meet your requirements.

Blank / 0 - no action.

Remove: Interface log entries older than (days)

Here you can define if interface log entries that are older than the time indicated here should be removed.

90 (default) - interface logs older than the number of days indicated here are deleted.

Modify the time period to meet your requirements.

Blank / 0 - no action.

Remove: State log entries older than (days)

Here you can define if state log files that are older than the time indicated here are removed.

90 (default) - state logs older than the number of days indicated here are deleted. Modify the time period to meet your requirements.

Blank / 0 - no action.

 Remove: Users with info entry inactive since (days)

It can be defined whether users having an info entry (only LDAP login) might be removed if their last login is older than the time period indicated here.

360 (default) - if required, adapt the time for removal of the corresponding users.

Blank / 0 - no action.

i *If a user has been removed as last member of a group, the group will remain!*

 Disable: Users with info entry inactive since (days)

It can be defined whether users having an info entry (only LDAP login) might be disabled in case their last login is older than the time period indicated here.

180 (default) - if required, adapt the time for disabling of the corresponding users.

Blank / 0 - no action.

i *Users having an **Info entry** are usually users that have been created automatically upon login via **LDAP** (for better traceability). The inactivity relates to the last login time. If a user did not log in upon time of the maintenance, the last change time will be used!*

▼ System - Backup / Data Packages

In this section, the system settings for the automatic backup function of the workstations can be pre-defined. Individual options for data selection that should be integrated into the backups are available. If an automatic backup is executed, the **Backup** dialog is opened and shows the progress of the backup process. Scheme of automatic backup names:

auto_<SystemName>_backup_<year><month><day>_<hour><minute>.zip

 Automatic backup

The time for execution of automatic backups at the assigned clients is pre-set here. This setting can also be defined or adapted directly at the client.

Never (default) - the function is not active.

Daily - a daily backup is made.

Monday ... Sunday - a backup is made on the selected weekday.

Monthly on the 1st - a backup is made on every first day of the month.

Monthly on the 15th - a backup is made on every 15th day of the month.

 Time

The time for execution of the backup is defined here (depending on the option selected under **Automatic backup**).

12:00 (default) - indicate the desired time, if necessary.

Maximum number of automatic backups

This option defines the max. number of available automatic backups. The oldest backup will be automatically deleted if this number is exceeded upon execution of a new backup.

3 (default) - indicate the desired number of available backups, if necessary.

Destination folder

The directory in which the backup files shall be stored is defined here. If the entry is Blank, the standard backup directory will be used.

backup (default) - the standard backup directory will be used.

... - select the desired directory, if necessary.

Content

Using the dialog **Add** you can select the data for the automatic backup.

Selectable are (see: [Backups](#)^[353]):

Local Settings, Objects, Files, Video Archive, Events, Logs

Blank (default) - select the backup data if applicable.

Password

The password used to encrypt the backup.

Blank (default) - define a password if applicable.



Events, media data and logs are only available for backup on workstation type server or standalone!



Generally, it makes sense only to set up automatic backups on a server or a standalone system, since it is only there that the event archive and all log data is available for backup!

System - Sounds

Events can be signaled differently, depending on whether or not they are displayed. If (based on settings established in [Event Handling](#)^[475]) an event is not automatically displayed and the setting **Play continuous tone on event receipt** is not active, assignments of the type **Notice** take effect.

Via the definitions in the section **Sounds** you can assign respective sound files used by WinGuard to signal the various types of events. These files are located in the project subfolder, **Sounds**, and are of the type **.WAV**.



If no sound file is entered or it is not found, no acoustic signal can occur!

The file names entered in the tables correspond to the default settings.

For all definitions:

Blank - no respective acoustic signal.

... - select the sound file (.WAV) or enter it directly.

Event: Alarm ... Revision

The definitions of the type **Event** are used in automatic alerts.

- **Alarm** **Horn.wav**
- **Prealarm** **Horn.wav**

▪ Warning	<i>Horn.wav</i>
▪ Active	<i>Bell.wav</i>
▪ Message	<i>Bell.wav</i>
▪ Fault	<i>Bell.wav</i>
▪ Armed	<i>Bell.wav</i>
▪ Disarmed	<i>Bell.wav</i>
▪ Off	<i>Bell.wav</i>
▪ Revision	<i>Bell.wav</i>

Hint: Alarm ... Revision

The definitions of the type **Notice** are used for events/messages that are not automatically displayed.

▪ Alarm	<i>Message.wav</i>
▪ Prealarm	<i>Message.wav</i>
▪ Warning	<i>Message.wav</i>
▪ Active	<i>Message.wav</i>
▪ Message	<i>Message.wav</i>
▪ Fault	<i>Message.wav</i>
▪ Armed	<i>Message.wav</i>
▪ Disarmed	<i>Message.wav</i>
▪ Off	<i>Message.wav</i>
▪ Revision	<i>Message.wav</i>

Hint

The sound file defined here is used to acoustically signal the receipt of messages/events from other workstations that can be routed among workstations in a multi-client system. (for example Menu: **View | Control Panels | Message Control Panel**).

Execute scheduled command

The sound file defined here is used for acoustically signaling the start of automatic actions with confirmation. (Menu: **Functions | Automatic Actions...**).

Connection loss with server

The sound file defined here is used to acoustically signal a disruption/fault in the connection to the server.

Free Sound 1 ... 10

The sound files defined below are used to acoustically signal the application of the action [Define Sound](#)^[964] if, in the action dialog in the field **Sound**, the respective value (**1...10**) is entered.

▼ System - Names of Global Commands

Regarding global command names, we refer to commands that are available for so-called datapoint groups (such as via the context menu of a datapoint group in the explorer or via the action [Control Datapoint](#)^[970]). The default name can be changed freely.

 On ... local Alarm Off

Definitions of the type **Notice** are used for events that are not automatically displayed.

▪ On	<i>Blank</i>
▪ Off	<i>Blank</i>
▪ Revision On	<i>Blank</i>
▪ Revision Off	<i>Blank</i>
▪ ext. Arm	<i>Blank</i>
▪ int. Arm	<i>Blank</i>
▪ Disarm	<i>Blank</i>
▪ Activate	<i>Blank</i>
▪ Deactivate	<i>Blank</i>
▪ Lock	<i>Blank</i>
▪ Unlock	<i>Blank</i>
▪ Reset	<i>Blank</i>
▪ Reset All	<i>Blank</i>
▪ Buzzer Off	<i>Blank</i>
▪ Explore	<i>Blank</i>
▪ Local Alarm On	<i>Blank</i>
▪ Local Alarm Off	<i>Blank</i>

Blank (default) - use of system name.

... - enter the desired name for the commands if applicable.



Changes of the names of the global commands will only be taken over after re-start!

▼ System - Queries

In the section **Queries**, you can define whether various menu items shall be executed immediately or only after confirmation.

Logoff user

This option determines if a confirmation dialog is displayed when the logoff function is activated.

Yes (default) - a dialog for the respective confirmation is displayed.

No - logoff is executed without confirmation.

 Quit system

This option determines if a confirmation dialog is displayed when the end program function is activated (workstation).

Yes (default) - a respective confirmation dialog is displayed.

No - the end program/system function is executed without confirmation.

 Complete unended events

This option determines if a confirmation dialog is displayed if the function complete unended events is activated (**End** column in the event list is empty)

Yes (default) - a respective dialog is displayed.

No - unended events are completed without confirmation.

 Log data changes

This option determines if the dialog **Change in Project Data** is opened when saving a change to a text or graphics file. Here you have the option of entering a note that saving should only be executed after a corresponding confirmation has been given. The confirmation is also recorded in the system log.

Yes - a dialog with the corresponding confirmation is displayed.

No (default) - file changes are completed without confirmation.

▼ System - Diagnostics

In the section **Diagnostics**, you will find the setting options for the crash handler, **Inspector**. When WinGuard has been properly installed via the setup routine (please see section: [Setup Programs](#)^[24]), the Inspector starts automatically in the event of a program crash and saves relevant information such as a core image. You can access the respective crash reports via the menu under **System | Inspector** after restarting the program.

For additional operational security, the program **Watchdog**, located in the program subfolder "Tools", is also available. This program monitors WinGuard and, in the event of an abnormal termination or if the program stops responding, can close WinGuard or restart it.



In contrast to the Inspector, Watchdog is not automatically started by WinGuard, but has to be either started manually or, preferably, automatically (for example via an entry in the Windows autostart menu)!

The Watchdog program can intervene provided that it is already running when WinGuard starts and that it has the same system rights as WinGuard, meaning that, preferably, it was started under the same Windows user account. Furthermore, in the section **General**, a value for **Use Watchdog (sec)** **>0** must be entered.

Display error dialog

If the Inspector is installed, it can display an error dialog following a program crash so that the user can enter information regarding the problem (for example, which action was executed prior to the crash).

Yes (default) - an error dialog is displayed in the event of a program crash.


No - the error dialog is not displayed.

 Automatically close error dialog (sec)

If, after the opening of the error dialog, the period defined here has elapsed without user action, the dialog is automatically closed. Otherwise it remains open until completion of the user entry.

15 (default) - enter the desired display time of the error dialog if applicable.

Blank/0 - the error dialog remains open until closed/quit by the user.

 **A WinGuard restart is delayed accordingly!**

 Automatic Restart

This option determines if the program restarts automatically (after the error dialog is closed, if applicable).

Yes (default) - the Inspector restarts WinGuard following a crash.

No - no automatic restart occurs.

 User may decide whether to restart

This option determines if the user can decide to restart the program following a crash.

Yes - following a crash, a confirmation box is displayed asking if WinGuard should be restarted.


No (default) - no confirmation.

 Generate full crashdump

This option determines if a large core image should be established in the event of a crash.

Yes - a detailed core image is generated in the event of a crash.

No (default) - no core image is generated in the event of a crash.


 **A large core image can be significantly larger than one GB, but provides better analysis options than a smaller one (often less than one MB)!**

 Log execution times

This option defines whether program-internal execution times or diagnosis times for program analysis shall be included in the log.

Yes - the execution times are logged.

No (default) - the execution times are **not** logged.

 **By activation of this option, a large number of entries can be created in the system log - thus please only use it selectively and restrictedly!**

▼ System - Performance tracking

This section contains the setting possibilities for tracking and logging of performance data which will primarily be used only for test purposes (load tests). Logging will be realized via a CSV file. Additional test parameters can be defined via a special INI file (see also: [Performance Analyse](#)⁶⁸⁷).



*This function may only be used temporarily for special analysis of performance data and should **not** be active during normal operation!*

Active

This option decides whether performance tracking shall be activated.

Yes - Performance tracking active

No(default) - Performance tracking inactive.

Values

The values to be monitored are defined in the form **<Key>#<Fct>:Sec**. If no additional parameters have been indicated behind the key, the ones preset in the system will be used.

<Key> - available keys:

ip.clients - Number of existing client connections

ip.clients.active - number of clients that are actively connected

ip.clients.ready - number of clients that are actively connected and synchronized

ip.task.snd - number of messages left to be processed

ip.task.rcv - number of messages to be sent

log.tasks - number of log tasks left to be processed (Syslog+Statelog+Devlog)

log.tasks.syslog - number of Syslog tasks left to be processed

log.tasks.statelog - number of statelog tasks left to be processed

log.tasks.devlog - number of devicelog tasks left to be processed

log.delay - delay of last log entry (writing time-entry time)

event.delay - delay of last event (writing time-event time)

state.delay - delay of last state (writing time-state time)

<Fct> - available functions:

avg - average of last # seconds (default = 30)

min - minimum of last # seconds (default = 30)

max - maximum of last # seconds (default = 30)

Sec - time in seconds:

... - indication of seconds (separated by :, behind the function)

Example: **state.delay#max:2**

... - if necessary, adapt the values to your requirements.

Update Interval (sec)

Here, the time interval (seconds) for updating the values is defined.

1 (default) - if required, indicate the desired update interval.

Keep values (min)

The time interval (minutes) for availability of the values in the log file is defined here, i.e. older data will be automatically deleted from the file.

60 (default) - if required, indicate the desired time period.

Output file (CSV)

The output file for the log data is defined here. As a standard, the file is directly located in the project directory.

Trace.csv (default) - if required, enter the name of the file.

Testscript

The name of the file of the testscript is defined here. Via the definitions in this file, processes for performance tracking can be defined or automatized. As a standard, the file is located directly in the project directory.

Test.ini (default) - if required, enter the name of the file.

▼ System - Formats

Here you can determine the various formats for the display or output of date and time. Modify the formats to meet your requirements if applicable.

Time (short)

HH:mm (default) - display of the hour and minutes (for example, 08:23).

Time (long)

HH:mm:ss (default) - display of the hour, minutes, and seconds (for example, 08:23:05).

Date (short)

DD.MM.YY (default) - display of day, month, and year (for example, 05.02.15).

Date (long)

DD.MM.YYYY (default) - display of day, month, and year (for example, 05.02.2015).

Date (detailed)

DDD,DD.MMM.YYYY (default) - display of day of the week, day, month, and year (for example, Mon, 05.Jan 2015).

▼ **Show sensor number > 255 in two parts**

This option determines if sensor numbers greater than 255 should be shown (modulo 255) (for example: 312 => 1-56 (1*255+56=312))

Yes - sensor numbers > 255 are shown in two parts.

No (default) - sensor numbers > 255 are **not** shown in two parts.

The formatting of the time and date display is established via a format string. The following formats are used:

Formats		Description
YYYY	2012	Year including century
YYY	2012	Year with century without leading zero (at present practically like YYYY)
YY	00 - 99	Two-digit year without century
Y	0 - 99	One-digit year without leading zero. (at present practically like YY)
MMMM	January - December	Month written out

MMM	Jan - Dec	Name of month abbreviated
MM	01	Month as a number (two-digit)
M	1	Month as a number without leading zero
DDDD	Sunday - Saturday	Weekday written out
DDD	Sun - Sat	Weekday abbreviated
DD	01 - 31	Day of the month as a number
D	1 - 31	Day of the month without leading zero
HH	00 - 24	Hour (24h) two-digit
H	0 - 24	Hour (24h) without leading zero
hh	00 - 12	Hour (12h) two-digit
h	0 - 12	Hour (12h) without leading zero
mm	00 - 59	Two-digit minute
m	0 - 59	Minute without leading zero
ss	00 - 59	Two-digit second
s	0 - 59	Second without leading zero
xx	AM / PM	Display AM (0-12), PM (12-24)

Format Examples	Display / Output
DDD, D. MMM YYYY	Sun, 1. Jan 2012
DDDD, DD. MMMM YYYY	Sunday, 01. January 2012
MM/DD/YY	01/01/12
HH:mm:ss	15:05:02
h:mm xx	3:05 PM

System - Other

Use server time

This option determines if clients adopt the time indicated by the server and, if necessary, adjust their computer time settings.

Yes (default) - the time indicated by the server is accepted and the Windows time settings established.

No - no automatic time adjustment.

 **Setting the time for Windows requires corresponding rights!**

Compliance with special Austrian Norm

This option defines the settings to ensure compliance with the current standards for FAS Management Systems in Austria.

Yes - compliance with Austrian Standard is active.

No (default) - compliance with Austrian Standard is inactive.

Use control management

This option determines if control commands for datapoints can be made from just one workstation or workstations that are assigned to the same location.

Yes - exclusive control is active.

No (default) - function is inactive.



This function is only applied to Austrian Standard mode!

 List column separator

Here you can define a separator for separating columns in lists. You can choose from: **comma (,)**, **semicolon (;)**, **tab**, and **slash (/)**.

Comma (,) (default) - select the desired separator if applicable.

 Activation server

This is optional information (license server address) for online activation and updating of licenses. A port number can be added separated by (:), if necessary.

lic.advancis.de (default) - Advancis License Server.

 Update server

This is an optional information (update server address) for online update using the Update Manager. If required, a port number can be attached, separated by (:).

update.advancis.de (default) - Advancis Update server.

 Max number of net monitor entries

This option sets the max. number of entries saved in the net monitors (disregarding filters).

If the limit is reached and new entries are added, the oldest entries will be deleted automatically.

50000 (default) - adjust the number if required.

 Use segmentation

This option determines if segmentation function is activated (consider license).

Yes - segmentation is active.

No (default) - function is inactive.



If the segmentation is switched on or off, a data replication must be initiated for all workstations (system restart) to synchronize the data!

 SegmentView: Server address

Here you can define the address of a server to handle the SegmentView data.

leer (default) - define the address if applicable.



Depending of the installation the view of segment information can be done by an appropriated Cesium® server!

6.2.2 Desktop

In this section, settings that determine the appearance and functions of the **user interface** can be made. The settings for the content of the individual elements are discussed in the section, [Contents](#)⁴⁵⁰. Many of these settings can be customized for individual workstations, workstation profiles, and even user profiles.

▼ Dialog: Settings / Global / Desktop

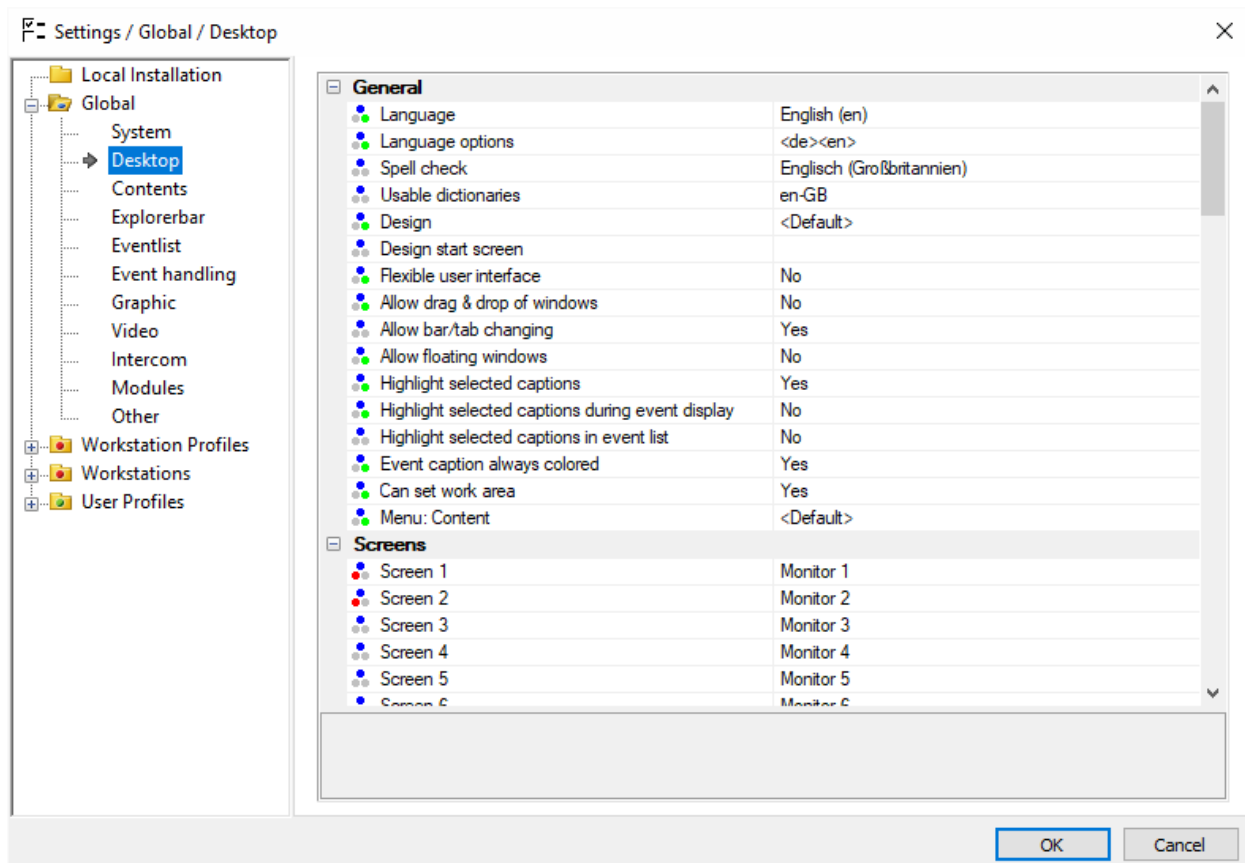


Figure 169: Settings / Global / Desktop

▼ Desktop - General

In the **General** section, various properties of the workstation such as appearance of the start window and user interface functions are defined.

▼ Language

Here you can determine the language for the respective workstation. The selection includes all WinGuard-supported languages.

Blank (default) - the language of the operating system is used.

... - select a language if applicable.

Language options

Here you select from the available languages by entering a language code in the form of **<de><en><es>** etc. A user can then only select from the languages defined here.

+ (default) - all available languages are accessible for selection.

... - enter the desired languages if applicable.

Spell check

Here you define the default dictionary to be used for spell checking. If this definition is blank the spell check function is disabled.

... - select the desired language if applicable.

Usable dictionaries

Here you can define/select via a dialog the dictionaries for spell checking.

... - select the desired dictionaries if applicable.

Design

Here is where you determine the user interface design.

You can select from: **<Standard>**, **blue**, **silver**, **arctic**, **blue**, and **gray**.

<Standard> (default) - this design is defined by Windows.

... - select the desired design if applicable.



Additional designs can be established (customizing) depending on licensing!

Design start screen

With this setting, the look of the program user interface is determined if no other user is logged in at the workstation. In other words, the appearance directly following program start as long as no automatic login is defined.

Blank (default) - the start screen predefined in the system appears.

... - the home screen of the selected profile is displayed.

Flexible user interface

With this option, you can activate the dynamic user interface design. This option allows for drag & drop of windows, display content (tabs, bars), pop-up windows, and contents.

Yes (default) - the flexible user interface is active.

No - the flexible user interface is **not** active.

Allow drag & drop of windows

This option determines if the drag & drop of windows is fundamentally allowed.

Yes (default) - drag & drop of windows is allowed.

No - drag & drop of windows is **not** allowed.



Using the <Ctrl> key, floating windows can be reintegrated into displays!

Allow bar/tab changing

This option determines if the changing from tabs into bars or bars into tabs is fundamentally allowed.

Yes (default) - the respective change is allowed.

No - the respective change is **not** allowed.

Allow floating windows

This option determines if display contents (tabs/bars) can be detached from the user interface as separate windows.

Yes (default) - floating windows are allowed.

No - floating windows are **not** allowed.

- Highlight selected captions**
- This option determines if the currently selected element (tab, bar, popup, separate window) is highlighted in sleep mode.
- Yes (default)** - the selected captions are highlighted.
- No** - the selected captions are **not** highlighted.
- Highlight selected captions during event display**
- Here is where you can determine if a currently selected element (tab, bar, popup, separate window) is highlighted during event display.
- Yes** - selected captions are highlighted during event display.
- No (default)** - selected captions are **not** highlighted in event display.
- Highlight selected captions in event list**
- Here is where you can determine if a currently selected tab is highlighted in the event list.
- Yes** - selected tab in the event list is always highlighted.
- No (default)** - selected tab in the event list is **not** highlighted.
- Event captions always colored**
- In event mode, the captions are highlighted in the color of the event.
- Yes (default)** - event captions are always displayed in color.
- No** - event captions are **not** shown in color.
- Can set work area**
- The default work area is Display 1 and, if this option is set up, it can be moved to one of the other displays.
- Yes (default)** - work area can be set.
- No** - work area **cannot** be set.
- Menu: Content**
- Here a user-defined menu can be selected which is then available as a sub menu in the context menu for captions in bars, tabs, and popups.
- <Standard> (default)** - the standard menu of the elements is used.
- ...** - select the desired menu if applicable.

▼ Desktop - Screens

What we refer to as a screen is the area of the Windows® desktop that serves as the destination for the placement of windows. In this section, we explain the assignment of the screens (consecutively) used by WinGuard and the respective monitors.



For this definition WinGuard is using the settings from the graphic board and not the definitions from Windows®!

- Screen 1 ... Screen 8**
- Assignment of a WinGuard screens to a physical monitor of a workstation. The monitors listed in the table correspond to the default settings.
- **Screen 1** **Monitor 1 (default)**
 - **Screen 2** **Monitor 2 (default)**

- **Screen 3** *Monitor 3 (default)*
- **Screen 4** *Monitor 4 (default)*
- **Screen 5** *Monitor 5 (default)*
- **Screen 6** *Monitor 6 (default)*
- **Screen 7** *Monitor 7 (default)*
- **Screen 8** *Monitor 8 (default)*

... - enter the desired assignment if applicable.

▼ Desktop - Display 1 (main window) ... Display 4


In this section, you can determine the basic settings for the display of the individual windows, such as position, size, caption, frame, etc. Menu and status bar settings, as well as several settings for the toolbar, are only available for Display 1. The function **window opened at start** can only be defined for Displays 2-4.

▼ Window initially opened

Here you can determine if a window should be opened at start-up or login.

Yes - the window is opened at start-up or login.

No (default) - the window is not opened.

 *This option can only be defined for Displays 2 - 4!*

▼ Screen

Here you determine on which screen this display should be shown. Currently, a maximum of 8 screens are supported (Screens 1 - 8).

1 (default) - the window is opened on Screen 1.

... - select the desired screen (Screens 1 - 8) if applicable.


▼ Position

Here, the position of the window for display is defined.

You can select from: *<Standard>*, *top/left*, *top/middle*, *top/right*, *centered*, *bottom/left*, *bottom/middle*, and *bottom/right*.

<Standard> (default) - currently corresponds to a centered display.

... - select the desired position if applicable.

 *The standard position indicated as <Standard> may change in future versions!*

Offset (x,y)

Here you can define an offset relative to the position selected under **Position**. With the values **x** (pixel on the x-axis from the left) and **y** (pixel on the y-axis from the top), the move is determined from the position of the window at the top left.

Blank (default) - no offset is defined.

... - enter the desired offset (x, y) to the position.

Size (cx,cy)

This is where you can determine the width and height of the window with the values **cx** (pixel on the x-axis) and **cy** (pixel of the y-axis).

Blank (default) - the internal preset (3/4 of the screen size) is used.

... - enter the desired size (cx, cy) of the window if applicable.

Maximized

This option determines if the window is shown maximized on the monitor.

Yes (default) - the window is maximized.

No - the window is **not** maximized.



*If this option is activated, the entries for **Position**, **Offset**, and **Size** are ignored!*

Title

Here you can define additional text for the window caption. This text is then added to the information in the title bar.

<StationName> (default) - the workstation name is used.

... - enter the desired title if applicable.

Caption

Here you can determine if the title bar of the window should be displayed. The title bar contains information regarding the system, license, and, if applicable, the title defined above. The title bar also contains window functions such as close, minimize, etc. and this functions should be disabled for direct access. Only the size can be changed if applicable.

Yes (default) - the title bar is displayed

No - the title bar is **not** displayed.



If the title bar is faded out, the window functions are only accessible via the respective function keys!

Frame

This option determines if the window frame is active or not.

Yes (default) - the window frame is displayed and active.

No - the window frame is displayed but **not** active.



*The functions **Can move** and **Can size** may not be available!*

Can close

This option determines if the user is allowed to close the window.

Yes (default) - the user is allowed to close the window.

No - the user is **not** allowed to close the window.

Can maximize

This option determines if the user is allowed to minimize or maximize the window.

Yes (default) - the user is allowed to minimize or maximize the window.

No - the user is **not** allowed to minimize or maximize the window.

Can move

This option determines if the user is allowed to move the window.

Yes (default) - the user is allowed to move the window.

No - the user is **not** allowed to move the window.

 Can size

This option determines if the user is allowed to to change the size of the window.

Yes (default) - the user is allowed to change the size of the window.


No - the user is **not** allowed to change the size of the window.

 Menu: Visible

Here you can define if the menu (menu bar) is visible to the user following login and thus directly accessible.

Yes (default) - the menu is visible.

No - the menu is **not** visible.


 *This option is only available for Display 1!*

 Menu: File

Here you can assign a menu to a window. Your selection includes the standard menu and user-defined menus (please see: [Edit Menus](#)⁶⁵⁰).

<Standard> (default) - the standard menu is used.

... - select the desired menu if applicable.

 *This option is only available for Display 1!*

 Toolbar: Visible

Here you can determine if the toolbar is visible to the user following login and thus directly accessible.

Yes (default) - the toolbar is visible.

No - the toolbar is **not** visible.

 Toolbar: File

Here a toolbar is assigned to a window. Your selection includes the standard toolbar and user-defined toolbars (please see: [Edit Toolbars](#)⁶⁵⁴).

<Standard> (default) - the standard toolbar is used.


... - select the desired toolbar if applicable.

 Toolbar: Position

Here the position of the toolbar in the main window can be defined.

Top (default) - the toolbar is positioned at the top of the main window.

Bottom - the toolbar is positioned at the bottom of the main window.

 *This option is only available for Display 1!*

 Toolbar: Bitmap

You can define the symbol size of the respective toolbar here.

Large (default) - large bitmaps (24x24 pixel) are used.

Small - small bitmaps (16x16 pixel) are used.

▼ **Toolbar: Text**

You can define the text position of the symbols in the respective toolbar here.

Without (default) - no text is displayed for the symbols.

Bottom - the symbol text is displayed below the symbols.


Right - the symbol text is displayed to the right of the symbols.

▼ **Toolbar: Show Logo**

Here you can define if the logo should be faded in or out on the left side of the toolbar.

Yes (default) - the logo is faded into the toolbar.

No - the logo is **not** visible in the toolbar.


 *This option is only available for Display 1!*

▼ **Statusbar: Visible**

Here you can determine if the toolbar should be visible to the user after login and thus directly accessible.

Yes (default) - the toolbar is visible.

No - the toolbar is **not** visible.


 *This option is only available for Display 1!*

▼ **Statusbar: Interfaces**

This option determines how the interface symbols are displayed with name and state in the status bar of the main window. As soon as an interface registers a disturbance, the summation status field is changed accordingly. When using the summation status field, the list of individual interface status fields can be opened by clicking on the symbol.

Summation status field for all interfaces - one symbol is displayed in the status bar for all interfaces.

Individual status field for every interface (default) - an individual symbol with name is displayed in the status bar for every interface.

 *This option is only available for Display 1!*

▼ **Statusbar: Workstations**

This option determines how the workstation symbols with name and state are displayed in the status bar of the main window. As soon as a workstation registers a fault, the symbol of the summation status field is changed accordingly. When using a summation status field, the list of individual status fields can be displayed by clicking on the symbol.

Summation status field for all workstation - one symbol is displayed in the status bar for all workstations.

Individual status field for every workstation (default) - an individual symbol with name is displayed for every workstation.

 *This option is only available for Display 1 and in a multi-client system!*

▼ **Desktop - Shortcuts**

You can also use **shortcut keys** to work with the program. These can be assigned in the following section.

File

Here the defined shortcut keys are assigned via a file. You can choose between the standard or the user-defined shortcut keys (please see section: [Shortcut Keys](#)⁶⁵⁸).

<Standard> (default) - the standard shortcut keys are used.

... - select the desired shortcut file if applicable.

Desktop - Tooltips

Here additional display options can be defined.

 Show datapoint tooltips

With this option, the display of tooltips for datapoints can be set up.

Yes (default) - the tooltip display for datapoints is active.

No - the tooltip display for datapoints is deactivated.

 Datapoint-tooltips template

Here you can enter a WinGuard text file (.WGT) whose content is displayed as a tooltip. In the user-defined text, variables may also be used for display. As a standard, **name**, **sensor type**, **location**, and **description** are displayed as a tooltip.

Blank (default) - the standard tooltip is displayed.

... -select the desired tooltip file if applicable.

 Delay show (ms)

The tooltip is displayed only when the mouse pointer stays longer than the time indicated here on a datapoint.

200 (default) - define the desired time of delay if applicable.

 Delay hide (ms)

After leaving an object, the tooltip display ends only after the time indicated here has elapsed.

0 (default) - enter the desired time of delay if applicable.

i *Any changes made in this section take effect after restarting the program!*

6.2.3 Contents

This section covers the settings for **user interface/desktop** contents in normal operation and event display. Many of these settings can be customized for individual workstations, workstation profiles, and even user profiles.

▼ Dialog: Settings / Global / Contents

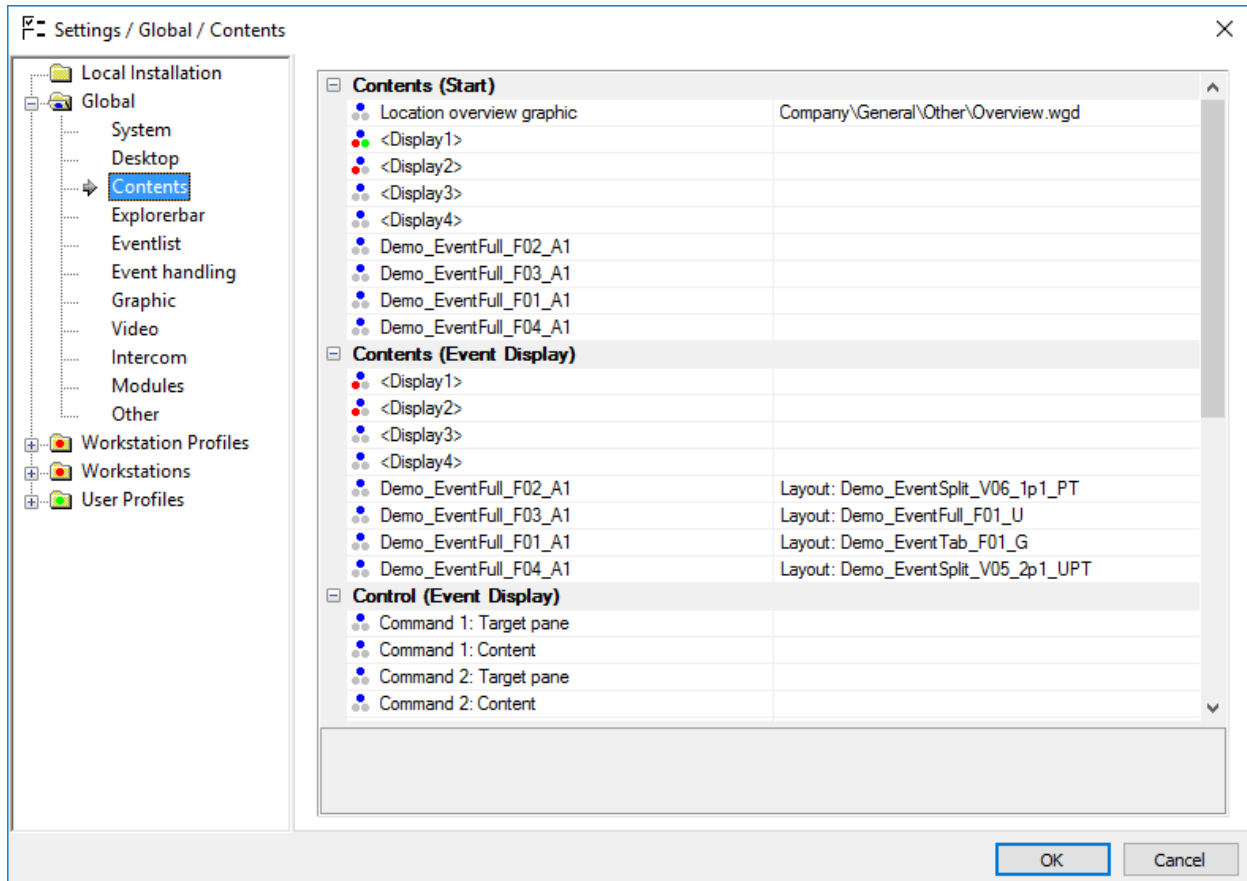


Figure 170: Settings / Global / Contents

▼ Contents - Contents (Start)

In the section **Contents (Start)**, areas for content display are assigned. If these areas are visible following start-up or login, then the respective contents are directly displayed. Areas assigned to display content that appears later, for example through execution of an action, show the last content that was assigned.

Location Overview Graphic

Here you can define the location overview graphic for locations. By clicking the left mouse key in explorer (Locations), the graphic filed here will be displayed on **All**. The display may also depend on additional settings of the **target panes** described below.

Blank (default) - no display of a location overview graphic.

... - select the appropriate graphic for the location overview graphic.

Display 1 ... 4

Here you can assign content for the main display areas (up to four) of the program windows. After start-up or login, these are displayed accordingly, as long as the individual windows or areas are visible.

You have a selection of the following types: *layout*, *application window*, *gadget*, *graphic*, *text*, *system log*, *video*, *history*, *performance monitor*, *attachments*, *document*, and *website*.

Blank (default) - empty display.

... - select the desired element if applicable.

... (User-defined display areas)

Here you can assign content to user-defined display areas. After start-up or login, these are displayed accordingly, as long as the individual windows or areas are visible.

You can select from the following types: *layout*, *application window*, *gadget*, *graphic*, *text*, *system log*, *video*, *history*, *performance monitor*, *attachments*, *document*, and *website*.

Blank (default) - empty display.

... - select the desired element if applicable.



*For areas visible here, the option **Content configurable via settings** must be active in the area definitions!*

▼ Contents - Contents (Event Display)

In the section **Contents (Event Display)**, content can be assigned to areas for display. However, the display of these areas occurs only within the context of an event display. This means that the content shown currently is replaced with the respective content of the event display. After the event display is closed, the original content is shown again.

Display 1 ... 4

Here you can assign content to the main display areas (up to four) of the program windows. These are shown accordingly during event displays as long as the individual windows/areas are visible.

You can select from the following types: *layout*, *application window*, *gadget*, *graphic*, *text*, *system log*, *video*, *history*, *performance monitor*, *attachments*, *document*, and *website*.

Blank (default) - empty display.

... - select the desired element if applicable.

... (User-defined display areas)

Here you can assign content to user-defined display areas. These contents are shown accordingly during event displays as long as the individual areas are visible.

You can select from the following types: *layout*, *application window*, *gadget*, *graphic*, *text*, *system log*, *video*, *history*, *performance monitor*, *attachments*, *document*, and *website*.

Blank (default) - empty display.

... - select the desired element if applicable.



*For areas visible here, the option **Content configurable via settings** must be active in the area definitions!*

▼ Contents - Control (Event Display)

In the section **Control (Event Display)**, you can assign content specifically within the context of an event display to an area. The display of these areas only occurs within the context of an event display. This means that currently shown content is replaced with the respective content of an event display. After an event display has been closed, the original content is shown again.

Command 1 ... 4: Target Pane

Here you can manually select or directly indicate target panes (up to four) that are shown during event display with their assigned content (as long as they are visible). This allows you to use panes that are not directly defined in the area definitions. If you indicate panes that are already being used under **Contents (Event Display)**, then their content is replaced with the content defined here.

You can select from: *<Display1...4>*, *History1...4*, and *all user-defined areas/panes*.

Blank (default) - no function.

... - select or define the desired target pane if applicable.

Command 1 ... 4: Content

Here you can assign content to the respective target panes. These contents are shown accordingly during event display, as long as these individual panes are visible or exist.

You can select from the following types: *layout*, *application window*, *gadget*, *graphic*, *text*, *system log*, *video*, *history*, *attachments*, *document*, and *website*.

Blank (default) - empty display.

... - select the desired element if applicable.



The contents defined here can void content assignments defined under *Contents (Event Display)* and *Control (Event Display)*, for example in the same target panes!

Script: Event Display

Here you can enter a WinGuard text file (.WGT) that contains commands for event control. You can also use this script to define requirements for display control.

Blank - no function.

EventDisplay.wgt (default) - enter the name of the control file if applicable.



This file is executed during every event display and is located, as a standard, in the sub folder, **Actions**, of the Text Folder!



The contents defined here can void content assignments defined under *Contents (Event Display)* and *Control (Event Display)*, for example in the same target panes!

Script: Event Display End

Here you can enter a WinGuard text file (.WGT) that contains commands which are executed at each end of an event display. You can also use this script to define requirements for display control.

Blank - no function.

EventDisplayEnd.wgt (default) - enter the name of the control file if applicable.



This file is executed at each event display end and is located, as a standard, in the sub folder, **Actions**, of the Text Folder!

▼ Contents - Target Panes

In the section **Control (Event Display)**, you can assign content specifically within the context of an event display to panes. The display of these panes only occurs within the context of an event display. This means that currently shown content is replaced with the respective content of an event display. After an event display has been closed, the original content is shown again.



... Show: Location

Here you can manually select or directly indicate target panes (up to four) that are shown during event display with their assigned content (as long as they are visible). This allows you to use panes that are not directly defined in the area definitions. If you indicate panes that are already being used under **Contents (Event Display)**, then their content is replaced with the content defined here.

You can select from: *<Display1...4>*, *History1...4*, and *all user-defined areas/panes*.

/tab=Location (default) - during display, location graphics are inserted as a new tab into the current work area.

... - select or define the desired target pane if applicable.



... Show: Intercom

Here you can define the display for intercom graphics. Graphic1 of the respective intercom datapoint is used as as graphic.

You can select from: *<Display1...4>*, *History1...4*, and *all user-defined areas/panes*.

/tab=Intercom (default) - during display, intercom graphics are inserted as a new tab in the current work area.

... - select or define the desired target pane if applicable.



... Show: Preview

Here you can define the display of the preview for various objects, for example graphics, texts, etc.

You can select from: *<Display1...4>*, *History1...4*, and *all user-defined areas/panes*.

/tab=Preview (default) - during preview, graphics, texts, etc. are inserted as a new tab into the current work area.

... - select or define the desired target pane if applicable.



... Show: Attachment

Here you can define the display of attachments.

You can select from: *<Display1...4>*, *History1...4*, and *all user-defined areas/panes*.

/wnd=Attachment (default) - during display, attachments are shown in a separate, new window.

... - select or define the desired target pane if applicable.



... Show: Control Operations

Here you can define the display of control operations.

You can select from: *<Display1...4>*, *History1...4* and *all user-defined areas/panes*.

/wnd=ControlOperations (default) - during display, control operations are shown in a separate, new window.

... - select or define the desired target pane if applicable.



...

Show: Data Packages

Here you can define the display of data packages.

You can select from: *<Display1...4>*, *History1...4* and *all user-defined areas/panes*.

/wnd /size=50%,50% (default) - during display, data packages are shown in a separate, new window with the defined size.

... - select or define the desired target pane if applicable.



...

Show: Event History

Here you can define the display of the event history.

You can select from: *<Display1...4>*, *History1...4* and *all user-defined areas/panes*.

/tab (default) - during display, the event history is opened in a new tab.

... - select or define the desired target pane if applicable.



...

Show: Event History (Event Display)

Here you can define the display of the event history in the event context.

You can select from: *<Display1...4>*, *History1...4* and *all user-defined areas/panes*.

/tab (default) - during display in the event context, the event history is opened in a new tab.

... - select or define the desired target pane if applicable.

6.2.4 Explorerbar

In this section, settings to determine the look and actions of the Explorerbar or individual explorers are defined. Here you can determine, for example, if the Explorerbar should be visible after login and/or which individual explorers should be opened. The settings are applied at login, profile change, or return to the home screen.

In addition to the individual explorers, the explorer area also contains so called state counters. These are basically lists of datapoints with similarities, for example, the same state. Using filters, settings for the maximum of 12 state counters can be made. You can also define so called sub counters within the state counters. These allow you to subdivide the content of the state counters even further.

▼ Dialog: Settings / Global / Explorerbar / General

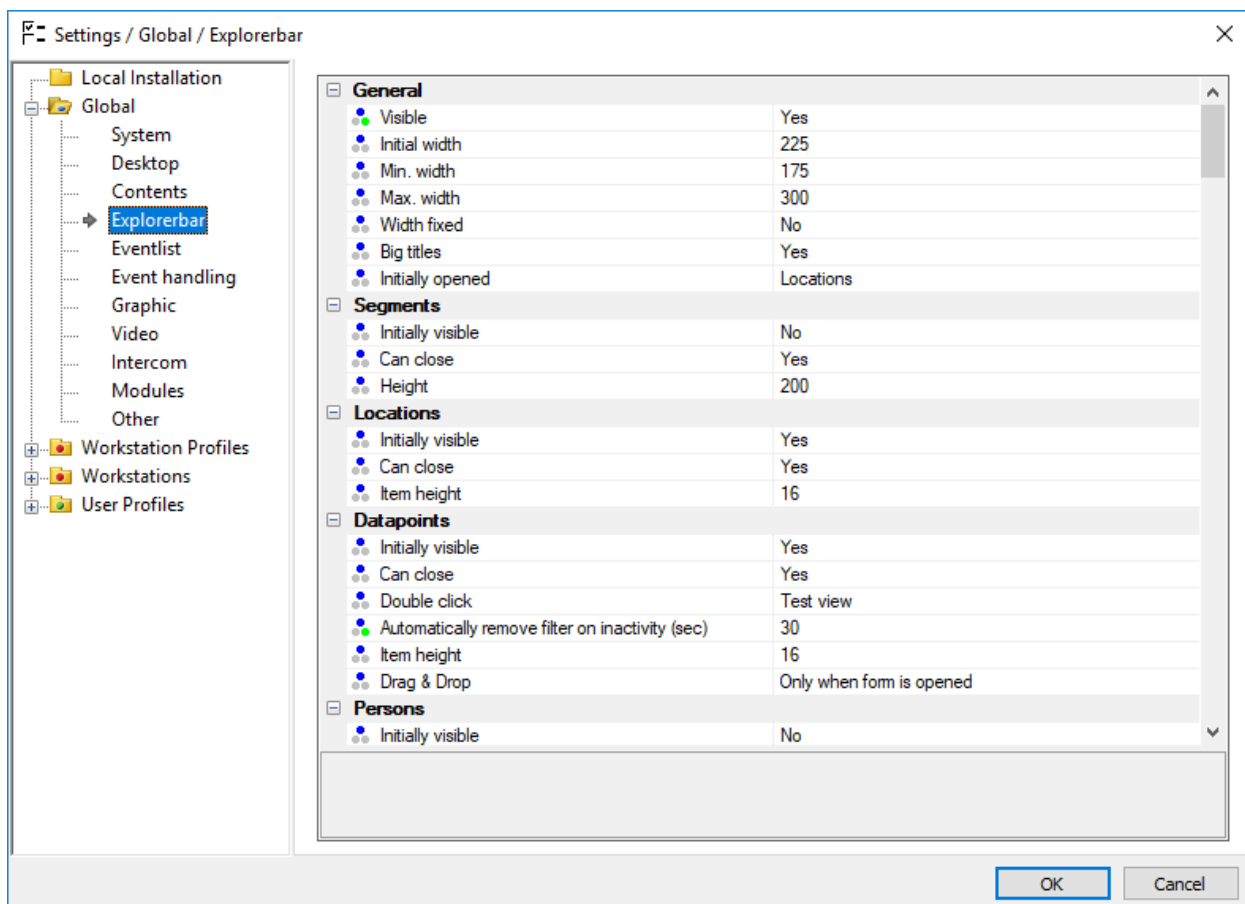


Figure 171: Settings / Global / Explorerbar / General

▼ Explorerbar - General

In this section you can determine general settings for the visibility and size of the entire Explorerbar.

Visible

This definition determines the standard visibility of the Explorerbar.

Yes (default) - the Explorerbar is visible.

No - the Explorerbar is faded out.

Initial width

This definition defines the width (pixel) of the Explorerbar.

175 (default) - modify the width of the Explorerbar if applicable.

Min. width

Here the minimum width (pixel) of the Explorerbar for manual adjustments is defined.
175 (default) - modify the minimum width of the Explorerbar if applicable.

Max. width

Here the maximum width (pixel) of the Explorerbar for manual adjustments is defined.
300 (default) - modify the maximum width of the Explorerbar if applicable.

Width fixed

This option can prevent the manual modification of the Explorerbar width.

Yes - the width of the Explorerbar cannot be modified.

No (default) - the width of the Explorerbar can be modified within the defined limits of min./max. width.

Big titles

With this option, the size of the caption of the individual explorers can be defined.

Yes (default) - the titles of the explorers are large.

No - the titles of the explorers are small.

Initially opened

Here you can define the explorer that should be opened as a standard - provided that the Explorerbar is visible.

You can select from: **locations**, **datapoints**, **persons**, **user profiles**, **graphics**, **symbols**, and **texts**.

Locations (default) - the location explorer is opened on a standard basis. Select the desired explorer, if applicable.



*This entry may override the setting **Initially visible** for the definition of the respective explorer!*

Explorerbar - Segments

In this section, the specific settings for the segment explorer are defined.

Initially visible

This option determines the standard visibility of the segment explorer.

Yes (default) - the explorer is visible on a standard basis.

No - the explorer is faded out on a standard basis.

Can close

This option determines if closing the segment explorer is allowed.

Yes (default) - the explorer can be closed.

No - the explorer **cannot** be closed.

Height

This option determines the reserved height (pixel) of the explorer list.

200 (default) - modify the height if applicable.

▼ Explorerbar - Locations

In this section, the specific settings for the location explorer are defined.

▼ Initially visible

This option determines the standard visibility of the location explorer.

Yes (default) - the explorer is visible on a standard basis.

No - the explorer is faded out on a standard basis.

▼ Can close

This option determines if closing the location explorer is allowed.

Yes (default) - the explorer can be closed.

No - the explorer **cannot** be closed.

Item height

This option determines the reserved height (pixel) of the individual explorer items (there is no modification in font size).

16 (default) - modify the height if applicable.

▼ Explorerbar - Datapoints

In this section, the specific settings for the datapoint explorer are defined.

▼ Initially visible

This option defines the standard visibility of the datapoint explorer.

Yes (default) - the explorer is visible on a standard basis.

No - the explorer is faded out on a standard basis.

▼ Can close

This option determines if the datapoint explorer can be closed.

Yes (default) - the explorer can be closed.

No - the explorer **cannot** be closed.

▼ Double click

Here you can define which function is executed by double-clicking on a datapoint.

You can select from: **edit** and **test view**.

Edit - opens the form to edit the datapoint.

Test view (default) - displays the test view of the datapoint.

Automatically remove filter on inactivity (sec)

This parameter defines the time that should elapse (sec) before a selected filter is removed, given that the explorer was not actively used.

10 (default) - modify the time if applicable.

0 - the function is deactivated, the filter is **not** automatically removed.

Item height

This option defines the reserved height (pixel) of the individual explorer items (there is no modification of font size).

16 (default) - modify the height if applicable.

 Drag & Drop

With this option you can modify the application of the drag & drop function.

You can choose from: **Always** and **Only with opened form**.

Always - drag & drop is always available.

Only with opened form (default) - drag & drop is only available when a form is opened.

▼ Explorerbar - Persons

In this section the specific settings for the persons explorer are defined.

 Initially visible

This option determines the standard visibility of the explorer for persons.

Yes (default) - the explorer is visible on a standard basis.

No - the explorer is faded out on a standard basis.

▼ Explorerbar - Graphics

In this section the specific settings for the graphics explorer are defined.

 Initially visible

This option defines the standard visibility of the explorer for graphics.

Yes (default) - the explorer is visible on a standard basis.

No - the explorer is faded out on a standard basis.

▼ Explorerbar - Symbols

In this section the specific settings for the symbol explorer are defined.

 Initially visible

This option defines the standard visibility of the explorer for symbols.

Yes (default) - the explorer is visible on a standard basis.

No - the explorer is faded out on a standard basis.

▼ Explorerbar - Texts

In this section the specific settings for the text explorer are defined.

 Initially visible

This option determines the standard visibility of the explorer for texts.

Yes (default) - the explorer is visible on a standard basis.

No - the explorer is faded out on a standard basis.

▼ Dialog: Settings / Global / Explorerbar / State Counter

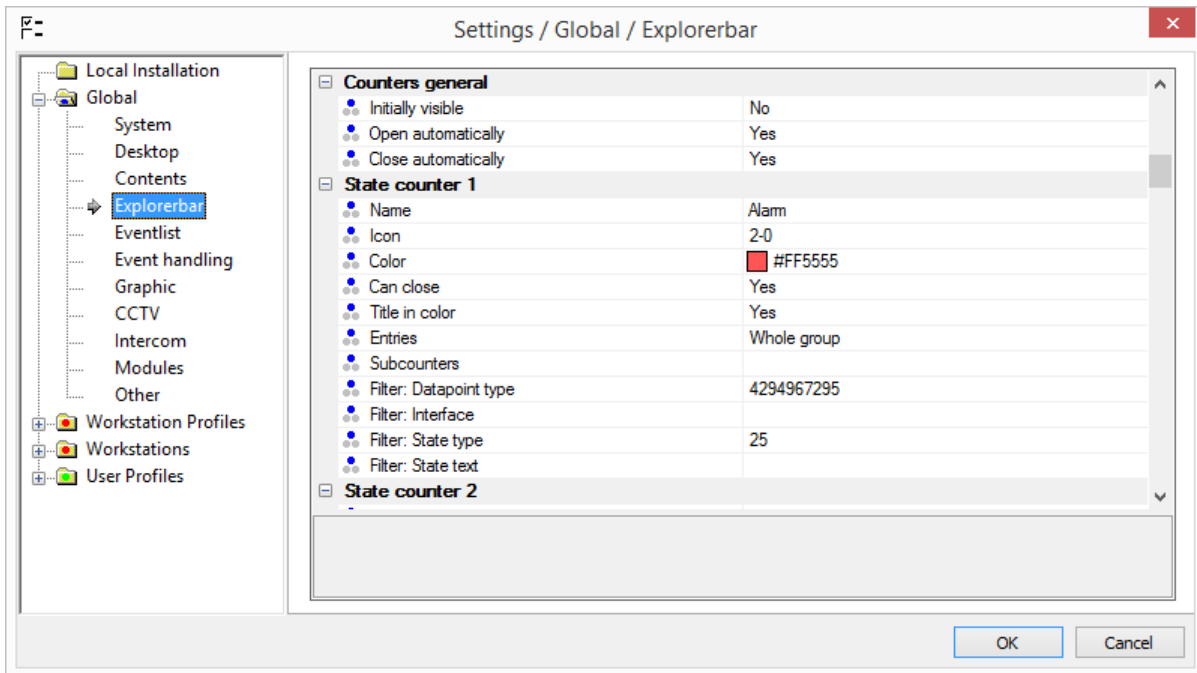


Figure 172: Settings / Global / Explorerbar / State Counter

▼ Explorerbar - State Counter General

In this section superordinated settings regarding the visibility and actions of the state counters are defined.

▼ **Initially visible**

This option defines the standard visibility of all state counter explorers.

Yes (default) - the explorers are visible on a standard basis.

No - the explorers are faded out on a standard basis.

▼ **Open automatically**

This option defines if individual state counters are automatically displayed, provided they are not empty / contain datapoints in the respective states. With this option, as soon as a datapoint changes into such a respective state, this counter is then automatically faded in.

Yes (default) - state counters are automatically faded in.

No - state counters are **not** automatically faded in.

▼ **Close automatically**

This option determines if individual state counters are closed automatically when they no longer contain datapoints in the respective states.

Yes (default) - the state counters are automatically closed (if no datapoints in respective states).

No - the state counters are **not** automatically closed, even if there are no datapoints in the respective states.

▼ Explorerbar - State counter 1 ... 12

In this section the individual settings for the status counters are explained. A maximum of 12 state

counters are available. Since the set-up options are identical for all, only one description is presented here.

Name

Here a name for the respective state counter is defined, which also serves as the title in the explorer. If no name is entered, the respective state counter is not displayed - it is then inactive.

Name... (default) - enter the desired name if applicable.

Blank - the respective state counter is **not** displayed (inactive).

...

Icon

Here you can select an icon that will be displayed in the title bar of the state counter.

Icon-ID - modify the selection if applicable.

v

Color

Here you can define the color in which the title bar of the state counter should be displayed. You can also choose default as a color. If you choose default, the state with the highest priority determines the color (for example, alarm has precedence over fault, etc.). The color for the state display is determined by the color definition of the subcounters.

... - modify the color if applicable.

(RGB value: 3 hexadecimal values, each between 00 and ff - e.g. #B2B2B2)

v

Can close

This option determines if closing the respective state counter is allowed.

Yes (default) - the respective state counter can be closed.

No - the respective state counter **cannot** be closed.

v

Title in color

This option determines if the title bar is displayed in the color selected above or if the color is fundamentally determined by the color scheme of the system.

Yes (default) - the title bar is displayed in the color selected above.

No - the color of the title bar is determined by the color scheme of the system.

v

Entries

With this option the type of display can be defined. You can differentiate between the whole group or individual sensors. This setting only applies to datapoints with sensors.

Whole group (default) - the entire group of a triggered sensor is displayed and can be opened.

Individual elements - only the respectively triggered sensors are displayed.

...

Subcounters

Using this function, various subcounters can be defined for a state counter. After opening the dialog, **Subcounter**, the list of subcounters with respective settings can be created / edited there. For the subcounter itself, there is only one filter for the state. Additionally, the filter settings of the state counter also apply.

Blank (default) - subcounters are not displayed.

... - the defined subcounters are displayed in the state counter.

Filter: Datapoint category

With this filter the datapoint categories that should be included here can be defined. Via this function a respective dialog is opened for their selection (the presented number corresponds to the internal coding of the filter).

You can select from: *all* and the *individual datapoint categories*.

4294967295 (default) - all datapoint categories are selected.

... - select the desired datapoint category if applicable.

 Filter: Interface

With this filter the interfaces that should be included here can be defined. Via this function a respective dialog is opened for their selection (the presented number corresponds to the internal coding of the filter).

You can select from: *all* and *the individual interfaces*.

Blank (default) - the filter is inactive.

... - select the desired interfaces if applicable.

 Filter: State type

With this filter the state types that should be included here can be defined. Via this function a respective dialog is opened for their selection (the presented number corresponds to the internal coding of the filter).

You can select from: *all* and *the individual state types*.

... (default) - select the desired state types if applicable.



If you filter exclusively by the state, Unknown, a maximum of 100 datapoints are displayed in the explorer view. If more than 100 datapoints are in the "unknown" state, the explorer remains empty and only the counter is visible in the title bar!

 Filter: State text

Here you can define a text as a filter for the display. Depending on the interface, there is an option to display a text describing the state to the right of the datapoint.

Blank (default) - the filter is inactive.

... - enter the desired text if applicable.

▼ Dialog: Settings / Global / Explorerbar / Subcounter Colors

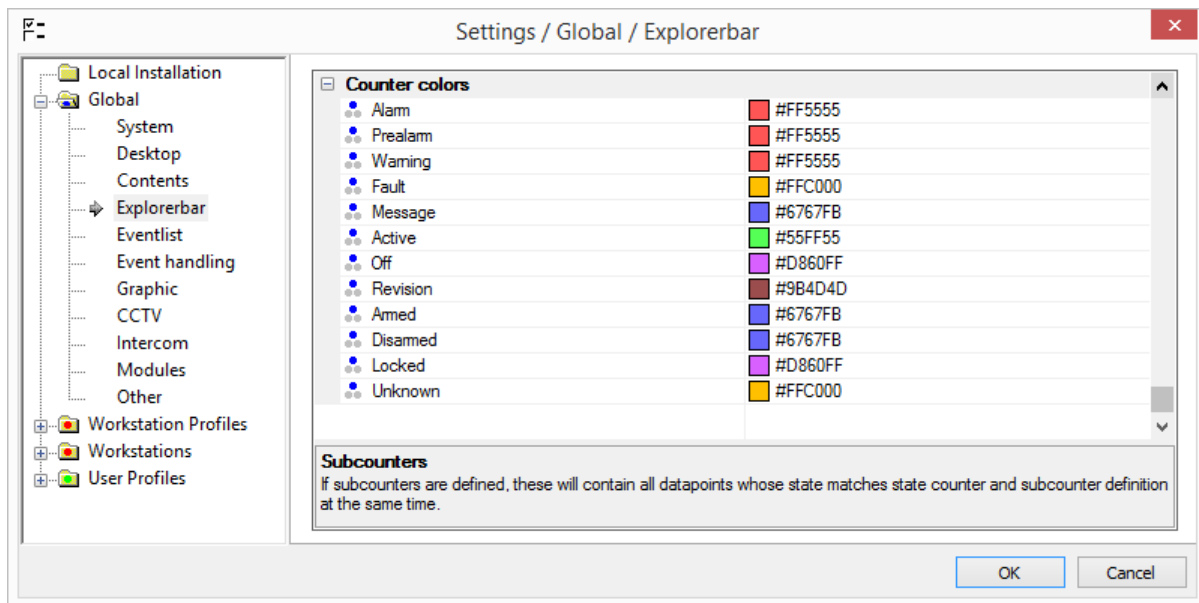


Figure 173: Settings / Global / Explorerbar / Subcounter Colors

▼ Explorerbar - Subcounter colors

Provided that you have defined subcounters within the state counters, you can determine the color for these subcounters depending on the the state type here.



Alarm ... Unknown

Here you can define the display color for the state type of the subcounters.

... - select the color for the respective state type if applicable.

(RGB value: 3 hexadecimal values, each between 00 and ff - e.g. #B2B2B2)

Definitions can be made for the following state types:

State type	Text color
Alarm	<i>#ff5555</i>
Prealarm	<i>#ff5555</i>
Warning	<i>#ff5555</i>
Fault	<i>#ffc71d</i>
Message	<i>#6767fb</i>
Active	<i>#55ff55</i>
Off	<i>#d860ff</i>
Revision	<i>#9b4d4d</i>
Armed	<i>#6767fb</i>
Disarmed	<i>#6767fb</i>
Locked	<i>#d860ff</i>
Unknown	<i>#ffc71d</i>

(RGB value: 3 hexadecimal values, each between 00 and ff - e.g. #B2B2B2)

▼ Dialog: Subcounters

From the definition of the state counter, you can open the dialog for the definition of the subcounters via the item **Subcounter**. Here the list of subcounters with the respective settings can be created or edited.

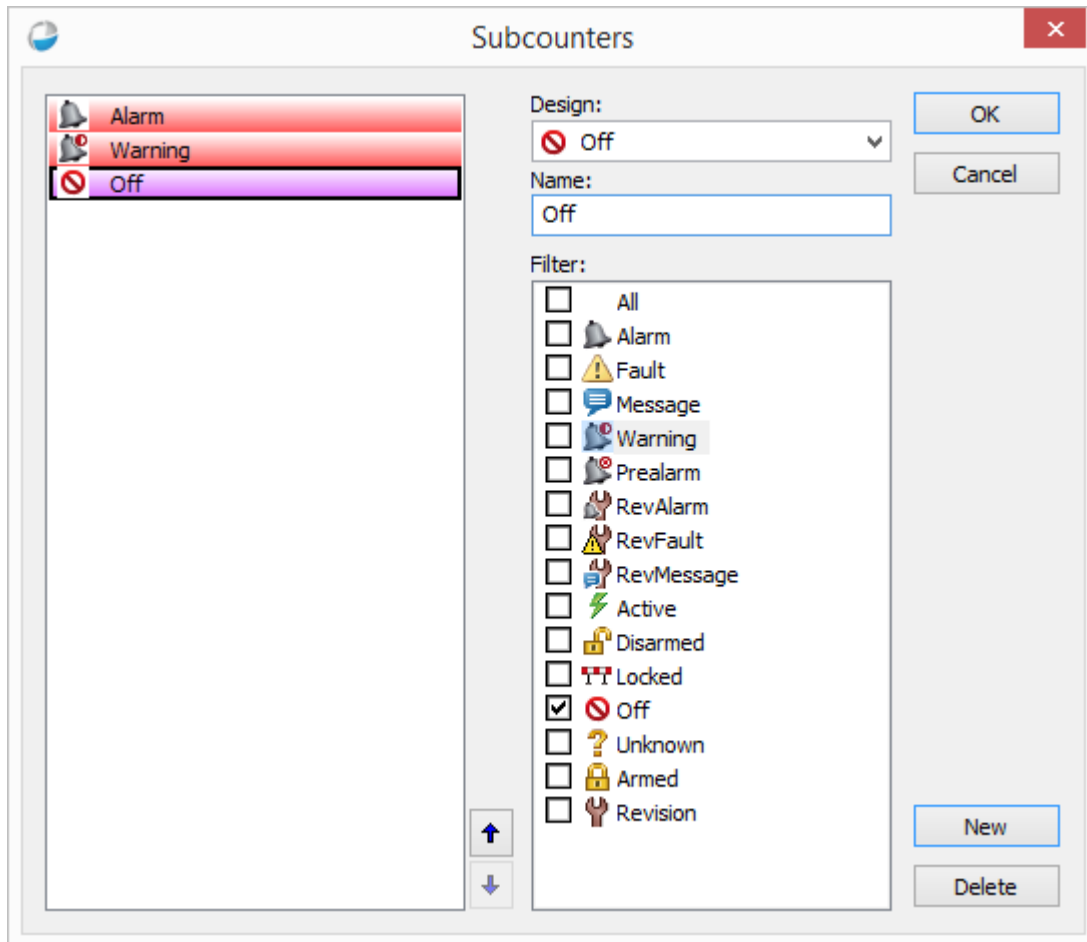


Figure 174: Dialog - Subcounter

▼ Functions: Dialog - Subcounter

Here the functions for the dialog, **Subcounter**, are described.

(List of subcounters)

In this field the list of defined subcounters is shown.
... - select the subcounter for editing.

(Change position)

Using these two buttons, the selected subcounter can be moved or its position changed.

Design

Via this selection, the design of the subcounter can be determined. You can select from all the designs of the state types.
... - select the desired design for the subcounter.

Name

Here you can define a name for the subcounter. If this field remains blank, the name of the state type, selected under "Design", is applied.

Blank (default) - the name of the state type is applied as a name.

... - enter the desired name for the subcounter.

**Filter**

In the list of filter definitions, you can select the state types that should be used for the subcounter.

... - select the desired state types for the subcounter.

OK

The settings are accepted and the dialog is closed.

Cancel

The dialog is closed without further confirmation. The settings are **not** accepted.

New

A new subcounter is inserted into the list of subcounters.

Delete

The selected subcounter is deleted from the list.

6.2.5 Event List

In this section the settings for the event list, how it shall look like and its function, are determined. For example, you can determine here whether the event list is visible or opened upon login. The settings are applied upon login, profile change, or return to the home screen.

▼ Dialog: Settings / Global / Event list / General

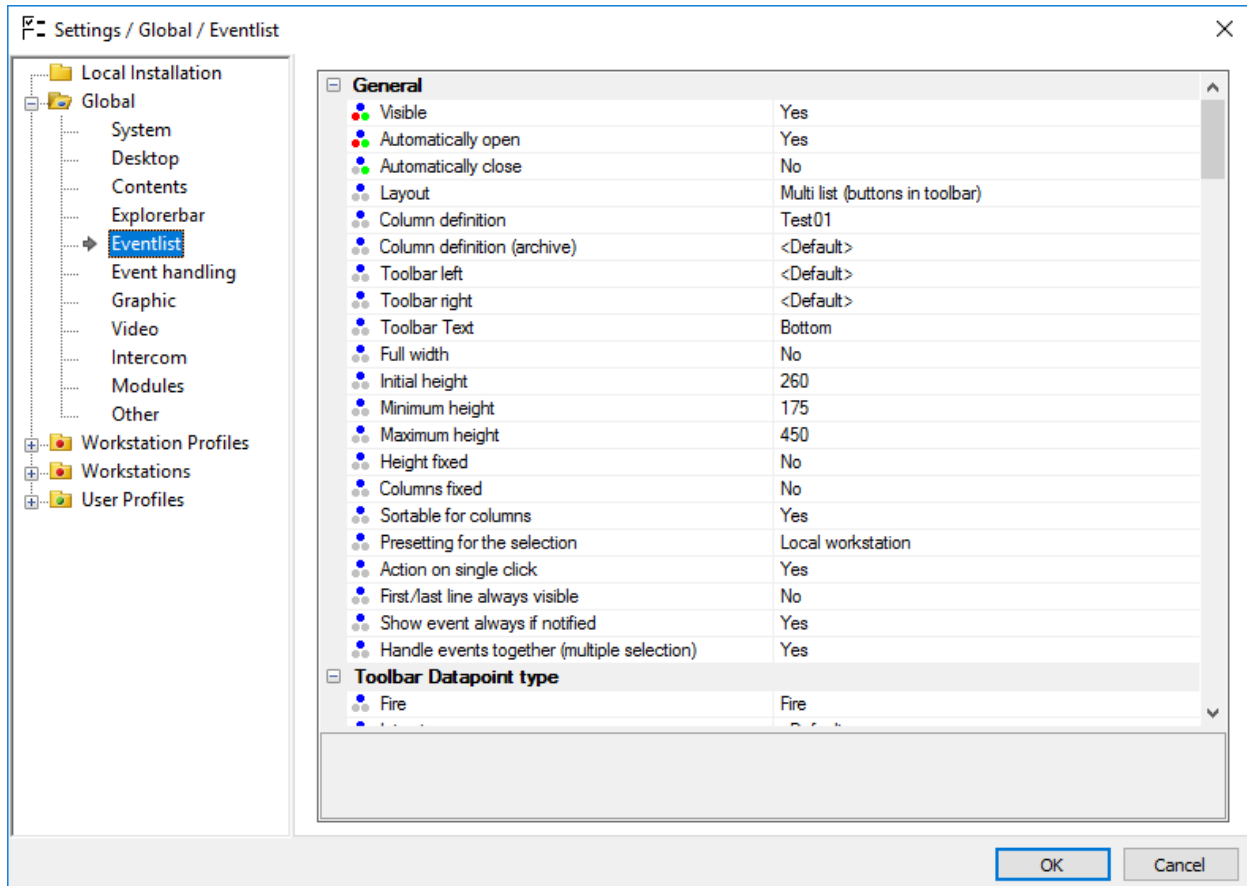


Figure 175: Settings / Global / Event list / General

▼ Event list - General

In this section, general settings for the event list are defined.

Visible

This definition determines the standard visibility of the event list.

Yes (default) - the event list is visible.

No - the event list is faded out.

Automatically open

This option determines if the event list opens automatically upon receipt of a new event (if closed).

Yes (default) - the event list opens automatically.

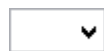
No - the event list does **not** open automatically.

**Automatically close**

This option determines if the event list is automatically closed following completion of all events (if open).

Yes (default) - the event list closes automatically.

No - the event list remains open.

**Layout**

This setting determines the look of the event list, in particular the order and/or accessibility of the functions.

Classic - buttons on the left, but no filter and no toolbar.

Multi-list (buttons left) - with filter option for lists 1-12

Multi-list (with toolbar) (default) - with filter option for lists 1-12, the buttons are located in a toolbar.

Multi-list (without buttons) - with filter option for lists 1-12, but no buttons.

Intercom - list without filter option or buttons, but with control panel for intercom calls and announcements.

**Column definition**

The event list for column definition can be selected here so that the columns and their order can be adapted (see: [Columns](#)^[642]).

<Standard> (default) - Use of standard column definition.

... - if required, select the desired column definition.

**Column definition (archive)**

Here is possible to select a column definition for display of the event archive here so that the columns and their order can be adapted (see: [Columns](#)^[642]).

<Standard> (default) - Use of standard column definition.

... - if required, select the desired column definition.

**Toolbar left**

Here is where you can define the left toolbar that shall be used for the event list. You can replace the left part of the toolbar by selecting a user-defined toolbar (please see: [Edit Toolbar](#)^[654]).

<Standard> (default) - the standard toolbar is used (left).

... - select the desired toolbar if applicable.

**Toolbar right**

Here is where you can define the right toolbar that shall be used for the event list. You can replace the right part of the toolbar by selecting a user-defined toolbar (please see: [Edit Toolbar](#)^[654]).

<Standard> (default) - the standard toolbar is used (right).

... - select the desired toolbar if applicable.

**Toolbar Text**

Here you can determine where texts for symbols shall be placed in the toolbar or if these shall be faded out.

Without - no text is displayed with the symbols.

Bottom (default) - text is displayed below the symbols.

Right - text is displayed to the right of the symbols.

Full width

This definition determines the width of the event list. At full width, the width of the event list corresponds to the width of the program window. Otherwise the event list extends to the explorer on the left - provided that it is visible.

Yes - the event list spreads over the entire width of the program window.

No (default) - the width of the event list corresponds to the width of the display area.

Initial height

This definition determines the height (pixel) of the event list.

225 (default) - modify the height of the event list if applicable.

Minimum height

Here you can define the minimum height (pixel) of the event list for manual adjusting.

175 (default) - modify the minimum height of the event list, if applicable.

Maximum height

Here you can define the maximum height (pixel) of the event list for manual adjusting.

300 (default) - modify the maximum height of the event list if applicable.

Height fixed

This option prevents manual adjustment of the event list height.

Yes - the height of the event list cannot be changed.

No (default) - the height of the event list can be changed within the defined limits of minimum and maximum heights.

Columns fixed

With this option, the manual changing of individual column widths in the event list can be prevented.

Yes - column widths in the event list cannot be changed.

No (default) - the columns widths in the event list can be changed.

Sortable by columns

This option determines if column-related sorting of event list contents is allowed. The sorting can then be executed by clicking on the header of the respective column, if applicable.

Yes (default) - contents of the event list can be sorted by columns.

No - the preset sorting of the event list cannot be changed.

Preset for event list sorting

This option determines the preset for the sorting of event list contents.

Time (ascending) (default) - sorting by occurrence time (ascending).

Priority (ascending) - sorting by event priority (ascending).

Priority (descending) - sorting by event priority (descending).

**Preset for selection**

Here you can determine if the event list shall display all events from all workstations or only those of the local workstation.

Local workstation (default) - only events assigned to that workstation are displayed.

All workstations - events from all workstations are displayed.



*This setting may be overwritten via the option **Always display events upon alarm!***

**Action on single click**

This option determines if the function **display** is executed directly by a single click on an event.

Yes (default) - the function display is executed by just a single click on an event.

No - the function display requires a double-click on an event.

**First/last line always visible**

This option determines if the event list is displayed normally, or if the first and last lines are always displayed. In the latter case, the first and last line remain visible even when scrolling.

Yes - the first and last lines are always visible.

No (default) - normally sorted display.

**Always show event if notified**

With this setting, the display function for workstations in local display mode can be changed. If a workstation is additionally and explicitly notified, then it can display an event even if the event display setting is set to **local**.

Requirement:

The function **Notify workstation** was defined for the respective workstation in event routing and filter settings of the eventlist allow the display of the message.

Yes (default) - the respective events are also displayed in local mode.

No - only events of the local workstation are displayed in local mode.

**Handle events together (multiple selection)**

This option determines if events can only be handled individually or also together. If handling events together is allowed, the respective functions can be executed using the context menu. The handling of individual events is independent of this option.

Yes (default) - handling messages together is allowed.

No - handling events together is **not** allowed.

▼ Event list - Toolbar Datapoint Category

Depending on the datapoint category that initiated an event, you can assign a user-defined [toolbar](#)⁶⁵⁴ in the section **Toolbar Datapoint Category**. The respective toolbar is then displayed according to the event that is selected in the list.

**Fire ... value**

With this setting, respective toolbars for display in the event list can be assigned for the various datapoint categories.

<Standard> (default) - display of the preset toolbar.

... - select the desired toolbar for the datapoint category, if applicable.

▼ Event list - Presentation

In this section you define the settings for the appearance of the event list.

Item height

Here you define the row height (pixel) for the events in the event list.

24 (default) - enter the desired row height, if applicable.

Item height (archive)

Here you define the row height (pixel) for display of archived events.

20 (default) - enter the desired row height, if applicable.

Display focus rectangle

This option determines if the selected row of the event list is outlined with a focus box (thin black line).

Yes - the selected row is outlined with a focus box.

No (default) - the focus box is not shown.



We recommend that at least one of the following options is applied: marking via inverting, focus box, or arrows!

Display Frame

This option determines whether the individual rows of the event list are separated by a thin frame with the selected row displayed in a special manner.

Yes (default) - the rows of the event list are displayed with a frame.

Non - no frames are displayed

Display selection as pressed in

This option determines if the selected row in the event list is presented as pressed in (pushed in).

Yes - the selected row is presented as pressed in.

No (default) - the selected row is **not** presented as pressed in.

Column widths

Here you can define the width (pixel) of the individual columns (from left to right). Entries should be separated by commas. An entry of **0** or **no entry** leaves the respective column unchanged.

30,150,150,350,112,112,44,44 (default) - modify the width of the columns if applicable.



Columns cannot be faded out and their order cannot be changed!

Events are shown colored as follows:

Here you define if events in the list are displayed in different colors depending on event type.

Yes (default) - events are displayed in the color of the event type.

No - the color display is deactivated.

**Highlighting by means of inverting**

Here you define if the selected event is marked via inverting the colors (switch between text and background color).

Yes - selected events are marked by respective inversion of the colors.

No (default) - no inverted display.

**Highlighting by means of a box**

Here you define if the selected event is marked by a black frame.

Yes (default) - selected events are marked with a respective frame.

No - no marking via a frame.

**Highlighting by means of arrows**

Here you define if the selected event should be marked with black arrows (at the beginning and end of the row).

Yes (default) - selected events are marked with black arrows.

No - no marking using arrows.

**Gradient Background filling**

Here you define if the background color shall have a gradient of increasing transparency from top to bottom.

Yes (default) - background fill with gradient.

No - background fill **without** gradient.



Some text may not be visible when events are flashing!

**Alarm ... Ended: Text Color**

Color selection for text of state-dependent events such as alarm, pre-alarm, etc.

#aabbcc - select the color for the respective state types if applicable.

**Alarm ... Ended: Background Color**

Selection of the background color for state-dependent events such as alarm, pre-alarm, etc.

#aabbcc - select the color for the respective state types.

Definitions can be made for the following state types:

State type	Text color	Background color
Alarm	#000000 (default)	#ff5555 (default)
Pre-alarm	#000000 (default)	#ff5555 (default)
Warning	#000000 (default)	#ff5555 (default)
Active	#000000 (default)	#55ff55 (default)
Fault	#000000 (default)	#ffc71d (default)
Shut down	#000000 (default)	#d860ff (default)
Revision	#000000 (default)	#9b4d4d (default)
Other	#000000 (default)	#6767fb (default)
Completed	default	default

(RGB value: 3 hexadecimal values, each between 00 and ff - e.g. #B2B2B2)

Ended: Inverted

This option determines if a completed event should be displayed inverted (switch between text and background color).

Yes - completed events are displayed inverted.

No (default) - completed events are **not** inverted.

▼ Event list - List 1 ... 12

In this section, the event filters (up to a maximum of 12) can be defined. By entering a name, the respective tab can be activated. The definable settings options are identical so that we have only provided one description here. For the filters of list 11 and 12, a special functionality has been implemented (please see below).

Text

Here the name of the respective event filter is defined, which is also used for the label of the tab. If no name is entered, the respective event list filter is not displayed - and it is then inactive.

Name... (default) - enter the desired name, if applicable.

Blank - the respective event list filter is **not** displayed (inactive).



These lists/tabs are only visible if the name/text has been defined!

Icon

Here you can select an icon that is shown on the tab of the list.

Icon-ID - modify the selection if applicable.

Color: Text

Here you define the color of the text for the tab of the list.

#aabbcc - modify the color if applicable.

(RGB value: 3 hexadecimal values, each between 00 and ff - e.g. #B2B2B2)



This color is only utilized if the list is not empty!

**Color: Background**

Here you define the background color for the tab of the list.

#aabbcc - modify the color if applicable.

(RGB value: 3 hexadecimal values, each between 00 and ff - e.g. #B2B2B2)



This color is only utilized if the list is not empty!

**Filter: Assign**

Here you can define the workstation numbers to which **no** events should be forwarded. Separate the list by commas.

Blank (default) - no limitations - events can be forwarded / transferred to all workstations.

... - enter the workstation numbers to which **no** events should be forwarded/transferred (for example: 1,3,4).

**Filter: Datapoint category**

With this filter, the datapoint categories that shall be included can be defined. Via this function, a dialog is opened for their selection (the number represented corresponds to the internal coding of the filter).

You can select from: **all** and the **individual datapoint categories**.

4294967295 (default) - all datapoint categories are selected.

... - select the desired datapoint categories, if applicable.

**Filter: Interface**

With this filter the interfaces that should be included can be defined. Via this function a respective dialog is opened for their selection (the number represented corresponds to the internal coding of the filter).

You can select from: **all** and **the individual interfaces**.

Blank (default) - the filter is inactive.

... - select the desired interfaces, if applicable.

**Filter: State Type**

With this filter you can select the state types that shall be included. Via this function a respective dialog for their selection is opened (the number represented corresponds to the internal coding of the filter).

You can select from: **all** and **the individual state types**.

... (default) - select the desired state types if applicable.

**Filter: Priority**

With this filter, the individual priorities for the event display can be defined. This means that only events with the priorities indicated here are displayed.

Blank (default) - the filter is inactive.

... - enter the priorities that should be included, if applicable.

**Filter: Deferred**

This filter determines if only deferred events should be included.

Yes - only deferred events are included.

No (default) - all events according to the settings are displayed.

**Display events automatically**

This filter determines how/when the respective events are displayed.

Default (default) - events are displayed in accordance with the settings defined under [Event Handling](#)⁴⁷⁵.

Yes - the event is displayed automatically if applicable (automatic notification/alert).

No - the event is **not** automatically displayed (there is no automatic notification/alert).



For active grouping, list 11 behaves differently from lists 1 to 10!

If grouping is active, the events that have been grouped will be displayed here.



List 12 works differently than Lists 1 through 10 / 11!

The filters *datapoint category*, *interface*, and *state time* remain ineffective. Instead, List 12 inherits these filters and the name from the last selected counter in the explorer bar. In List 12, you can see the events that have been compiled by the relevant counter.

6.2.6 Event Handling

Event Handling contains settings that allow you to define event display and WinGuard event processing.

▼ Dialog: Settings / Global / Event Handling

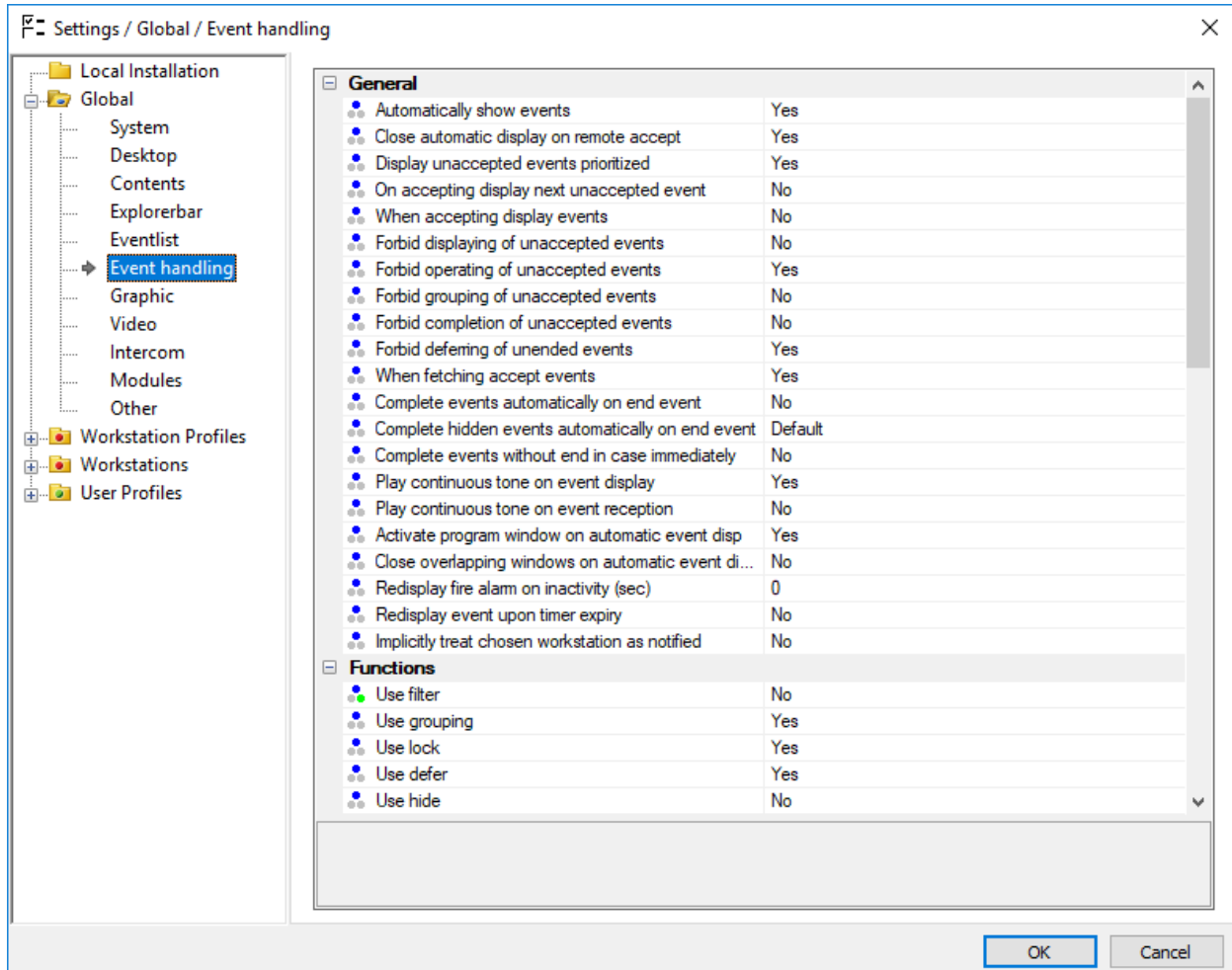


Figure 176: Settings / Global / Event Handling

▼ Event Handling - General

In this section, general settings for event handling are defined.

▼ Automatically show events

This option defines whether events are displayed automatically as long as no other event with a higher priority is currently shown. Alerting the respective workstation is always a prerequisite for automatic display.

Yes (default) - events are automatically shown (alerting).


No - events are **not** automatically shown.

▼ Close automatic display on remote accept

Here it is defined that the event display of an automatically displayed event will be closed again upon acceptance at another workstation.

Yes (default) - event display is automatically closed if required.

No - event display will not be closed upon (remote) acceptance.


- Display unaccepted events prioritized**
- This option defines if new events are immediately shown during automatic event display, as long as higher priority events have already been accepted.
- Yes (default)** - new events are shown prioritized.
- No** - a new event is displayed only after a higher priority event has been closed, if applicable.
-  *Here, events with lower priority are also automatically shown as long as higher priority events have already been accepted.*
- On accepting display next unaccepted event**
- This option determines if, during automatic event display, when an event has been accepted, there is an immediate switch to the next unaccepted event.
- Yes** - after an event has been accepted, the next event that has not yet been accepted is shown.
- No (default)** - after an event has been accepted, the next unaccepted event is **not** displayed automatically.
- When accepting display events**
- This option determines if an event is automatically displayed upon acceptance. This may be helpful with the previous option.
- Yes** - events are automatically displayed when accepted.
- No (default)** - events are **not** automatically displayed when accepted.
- Forbid displaying of unaccepted events**
- This option determines if event must first be explicitly accepted before they are displayed.
- Yes** - events must be accepted before they are displayed.
- No (default)** - events can be displayed anytime.
- Forbid operating of unaccepted events**
- This option determines if events must first be explicitly accepted before they can be processed.
- Yes (default)** - events must be accepted before processing.
- No** - events can be processed anytime.
- Forbid completion of unaccepted events**
- This option defines if events must first be explicitly accepted before they can be completed.
- Yes** - events have to be accepted prior to being completed.
- No (default)** - Events can be completed without prior acceptance (events are implicitly accepted when completed).
- Forbid deferring of unended events**
- This option determines if events can be placed in the list of deferred events only after an event has been ended.
- Yes (default)** - events without an end time **cannot** be deferred.
- No** - events without an end time can also be deferred.

▼ **When fetching accept events**

This option defines if events that were fetched from another workstation are also automatically accepted upon fetching.

Yes (default) - events fetched from another workstation are automatically accepted.


No - events fetched from another workstation are **not** automatically accepted.

 *Only available with multi-client operation!*


▼ **Complete events automatically on end event**

This option defines when events are automatically completed and thereby removed from the event list.

Always (no display in some cases) - as soon as an event receives an end time, it is automatically completed and moved into the archive, if applicable.


 *This function is only available if the event text does not contain required fields!*

If accepted - as soon as an event receives an end time and is then accepted or has already been accepted, it is automatically completed/closed and moved into the archive, if applicable.

 *This function is only available if the event text does not contain any required fields!*

If deferred - as soon as a deferred event receives an end time or an event with an end time stamp is deferred, the event is automatically completed/closed and moved into the archive, if applicable.

No (default) - no automatic completion at the end of an event.

 **This option can be overwritten for every interface at the interface (please see: Define Interface)!**

▼ **Complete events without end in case immediately**

This option determines if events ended implicitly (end time "-----"; for example following a restart of the interface) are automatically completed.

Yes - implicitly ended events are completed automatically and moved into the archive, if applicable.


No (default) - no automatic completion of implicitly ended events.


▼ **Play continuous tone on event display**


This option determines the acoustic alarm during automatic event display. Receipt of an alert by the respective workstation is always a prerequisite for an acoustic alarm.

Yes (default) - until an event is accepted or the **Horn off** function is activated, the corresponding sound file is played continuously (continuous loop) during automatic event display.

No - the corresponding sound file is only played once during automatic event display.

 *If an event is not displayed automatically, the corresponding acoustic sound is played only once!*

 *Alarm and alert sounds are WAV files that can be found under [System](#)⁴²⁴ in the section **Sounds**.*

 **Please note that the following setting may override this option!**

**Play continuous tone on event reception**

This option determines the acoustic alarm when an event is received. Here, playing the corresponding sound file is not dependent on event display (please see: **Play continuous tone on event display**)!

Yes (default) - until an event is accepted or the function **Horn off** is activated, the corresponding sound file is played continuously (continuous loop) during automatic event display.

No - the setting "**Play continuous tone on event display**" is active.

**Activate program window on automatic event display**

This option determines if the program window should be activated (pop up) or not in case of an event.

Yes (default) - the program window should be activated (pop up).

No - the program window is activated (pop up)

**Close overlapping windows on automatic event display**

This option controls the function of windows during event display. If several windows are overlapping, the windows in the background can be closed automatically, if applicable.

Yes - control panels, VideoManager, or history display are automatically closed if applicable.

No (default) - the windows remain open.

**Redisplay fire alarm on inactivity (sec)**

With this option, fire alarms can be redisplayed after the amount of time defined here has elapsed in user inactivity. This occurs when an unended alarm event by a datapoint of the category **Fire** is pending and the user is not actively working in the system.

0 (default) - the function is deactivated.

... - enter the desired time if applicable

**Redisplay event on timer expiry**

Using this option, it is defined whether an event shall be redisplayed after expiration of an assigned timer.

No (default) - Events will **not** be redisplayed.

Yes - Events will be redisplayed after expiration of an assigned timer.



The event is only redisplayed on the assigned workstation!

**Implicitly treat chosen workstation as notified**

Using this option, it is defined if the function **Chose workstation** implicitly executes the function **Notify workstation**.

No (default) - both function are working independently from the other.

Yes - the function **Chose workstation** implicitly executes the function **Notify workstation**.



Allows to activate the former behaviour of X3 for compatibility reason!

▼ Event Handling - Functions

In this section, settings for activation of additional functions of event handling are defined.

**Use filter**

Using this option, it is defined whether filtering of events shall be basically possible (consider rights). At the right toolbar of the event list the symbol to open the filter dialog is automatically shown.

Yes - filtering of events is possible.

No (default) - filtering of events is **not** possible.



If the function is activated the default right toolbar of the event list will show an appropriated button!



If the function is activated liste 12 of the event list is used to view the filtered events!

**Use grouping**

Using this option, it is defined whether grouping of events shall be basically possible (consider rights). At the right toolbar of the event list the symbol to view groups is automatically shown.

Yes - grouping of events is possible.

No (default) - grouping of events is **not** possible.



If the function is activated the default right toolbar of the event list will show an appropriated button!



If the function is activated liste 11 of the event list is used to view the groups!

**Use lock**

Using this option, it is defined whether locking of events shall be basically possible (consider rights).

Yes - locking of events is possible.

No (default) - locking of events is **not** possible.



If the function is activated the default toolbar of the event list will show an appropriated button!

**Use defer**

Using this option, it is defined whether deferring of events shall be basically possible (consider rights).

Yes - deferring of events is possible.

No(default) - deferring of events is **not** possible.

**Use hide**

Using this option, it is defined whether hiding of events shall be basically possible (consider rights).

Yes- hiding of events is possible.

No (default) - hiding of events is **not** possible.



If the function is activated the default toolbar of the event list will show an appropriated button!

▼ Event Handling - Event Display

This section covers the settings for the functionality and appearance of the event window.



Show toolbar

Here you can determine if a toolbar should appear in the event window.

Yes (default) - the toolbar is visible.

No - the toolbar is **not** visible.



Toolbar

Here you can assign a toolbar to the event window. Your selection includes the standard toolbar and user defined toolbars (please see [Edit toolbars](#)⁽⁶⁵⁴⁾).

<Standard> (default) - the standard toolbar is used.

Toolbar... - select the desired toolbar if applicable.



Close window when the current event is deferred

This option determines how the event display functions when events are deferred.

Yes (default) - when an event is deferred, the corresponding event display is automatically closed.

No - the event display remains open even after the event has been deferred.



On closing show the next unaccepted event

Here you can define the function of the display window when an event is closed.

Yes - if an event display is closed, the next unaccepted event is automatically shown.

No (default) - if an event display is closed, the display that was active prior to the last event display is shown.



If there are other unaccepted events in the event list, you may not be able to end the event display!



On closing show the next non-deferred event

Here is another option for how the display window functions upon closing. If there are still additional non-deferred events in the event list, then these can be automatically displayed on closing.

Yes - if an event display is closed, the next non-deferred event is automatically displayed.

No (default) - if an event display is closed, the last display that was active prior to that event display is shown.



If other non-deferred events are in the event list, you may not be able to end the event display!

▼ Event Handling - Modification

In this section you can define settings for later event modifications via the event list.



Prio

This option determines if priority changes via the event list are allowed.

Yes - to change the priority is allowed.

No (default) - to change the priority is **not** allowed.

State type

This option determines if State type changes via the event list are allowed.

Yes - to change the state type is allowed.

No (default) - to change the state type is **not** allowed.

State text

This option determines if state text changes via the event list are allowed.

Yes - to change the state text is allowed.

No (default) - to change the state text is **not** allowed.

▼ Event Handling - Attachments

In this section you can define settings for attachments.

Add allowed

This option determines if adding attachments to events is allowed (please verify your license).

Yes (default) - *adding attachments to events is allowed.*

No - *adding attachments to events is not allowed.*

Export allowed

Here you can determine if attachments are allowed to be exported.

Yes (default) - *attachments are allowed to be exported*

No - *attachments are not allowed to be exported.*

Max. file size (MB)

Here you can determine the maximum file size of attachments.

10 (default) - adjust the size to meet your requirements if applicable.

0 - the size limitation is deactivated.

Graphic snapshots (pixels)

This parameter defines the longest side of a graphic (pixel), the short side is automatically adjusted. If a value of 0 is entered, the snapshots are stored in the size in which the respective graphic is currently displayed. A current zoom setting is not taken into account during export.

1280 (default) - adjust the size to meet your requirements if applicable.

0 - the current size of the graphic is used.

Permitted file types

Here you can define the file types that are allowed as attachments. The list of respective file extensions should be separated by commas.

png, jpg, pdf, txt, doc, docx, mov (default) - modify the list if applicable.



The use of attachments depends on your licensing!

▼ Event Handling - Reports

In this section you can define settings for the event reports in PDF format.

Logo

Here you can define the name of an icon graphic for the report. The default folder is the folder graphic in your project folder.

The following graphic formats are supported: BMP, JPG and PNG.

The max. size of the logo is limited to 1000 x 230 pixel.

Blank (default) - enter the desired icon graphic name.

Paper size

Here you can define the paper size for the reports.

The selection includes: **Letter**, **A4**, and **A3**.

A4 (default) - select the desired size if applicable.

Orientation

Here you can select the orientation of the paper for your report.

You can choose from: **landscape** and **portrait**.

Portrait (default) - select the desired orientation if applicable.

Top margin (mm)

Here you can define the top margin for the report (space between edge of paper and text).

7 (default) - enter the desired margin if applicable.

Bottom margin (mm)

Here you can define the bottom margin for the report (space between edge of paper and text).

7 (default) - enter the desired margin if applicable.

Right margin (mm)

Here you can define the right margin for the report (space between edge of paper and text).

14 (default) - enter the desired margin if applicable.

Left margin (mm)

Here you can define the left margin for the report (space between edge of paper and text).

14 (default) - enter the desired margin if applicable.

Included event graphics


Here you can determine the graphics that should be integrated into the report. The individual graphics should be separated by commas. You also have the option of using the variables for the five datapoint graphics **<GRAPHIC1...5>**.

<GRAPHIC1>, ... , <GRAPHIC5> (default) - modify the graphics if applicable.

Event Handling - Archiving

In this section you can define settings for the archiving of events.

Simulation events

With this option, you determine if events that were generated via the function [Event Simulation](#)  are also stored in the archive.

Yes (default) - simulated events are archived.

No - simulated events are **not** archived.

Revision Event

With this option, you can determine if revision events should be archived.

Yes (default) - revision events are archived.

No - revision events are **not** archived.

All other events

This option defines if all events (except for simulation or revision events) should be archived.

Yes (default) - the respective events are archived.

No - the respective events are **not** archived.

▼ Event Handling - Event History

In this section you can define settings for the filter of the event history.

Location

With this option, you determine the hierarchy level used for the matching of the location.

Same location - events belonging to the same location are shown.

Same facility - events belonging to the same facility are shown.

Same building (default) - events belonging to the same building are shown.

Same floor - events belonging to the same floor are shown.

Same room - events belonging to the same room are shown.



If the hierarchy of a location does not contain the same level of depth, the best possible match at a higher level of the location is considered.

Datapoint

With this option, you can determine if child datapoints should be shown as well.

Datapoint - only events for the datapoint and its sensors are shown.

Datapoint with children (default) - events from child datapoints are shown as well.

Event age (Days)

Here you can define the time span (in days) that is used in the filter of the event history.

14 (default) - adjust the time span covered by the event history.

▼ Event Handling - Scripts

In this section you can define the names of the event scripts.

Script: Event routing

Here you define the name of the WinGuard- action text (**.WGT**), which is executed with receipt of every event.

Eventrouting.wgt (default) - define the name of the file if applicable.



*This file can be opened directly via the menu **System|Scripts|Event routing...***



*If no path is indicated, the file can be found in the project subdirectory **Texts|Actions!***



The execution always occurs on the local workstation that generates the event, for example, where the respective interface is active!

Script: Event printing

Here you define the name of the WinGuard action text (**.WGT**), which is executed by the alarm print function for the printing of events. The action always uses the information contained in the selected event as context.

Eventprint.wgt (default) - define the name of the file if applicable.



*If no path is indicated, the file can be found in the project subdirectory **Texts\Actions!***

Skript: Event accept

Here you define the name of the WinGuard action text (**.WGT**), which is executed by all event acceptance. The action always uses the information contained in the selected event as context.

Event Accept.wgt (default) - define the name of the file if applicable.

Skript: Event end

Here you define the name of the WinGuard action text (**.WGT**), which is executed by all event end triggers. The action always uses the information contained in the selected event as context.

Eventend.wgt (default) - define the name of the file if applicable.

Script: Event complete

Here you define the name of the WinGuard action text (**.WGT**), which is executed every time an event is completed. The action always uses the information contained in the selected event as context.

Eventprint.wgt (default) - define the name of the file if applicable.



The execution always occurs on the local workstation where the event is completed!



*You can directly open the file via the menu command **System/Scripts...***



*If no path is indicated, the file can be found in the project subdirectory **Texts\Actions!***

▼ Event Handling - Other

In this section you can define other settings for event handling.

Status text for user alarms

Here you define the state text for events that were generated via the function [user alarm](#)²³⁶

User alarm (default) - enter the desired event text if applicable.

6.2.7 Graphic

In the section, **Graphic**, you can define settings for the graphic editor and graphic display.

▼ Dialog: Settings / Global / Graphic

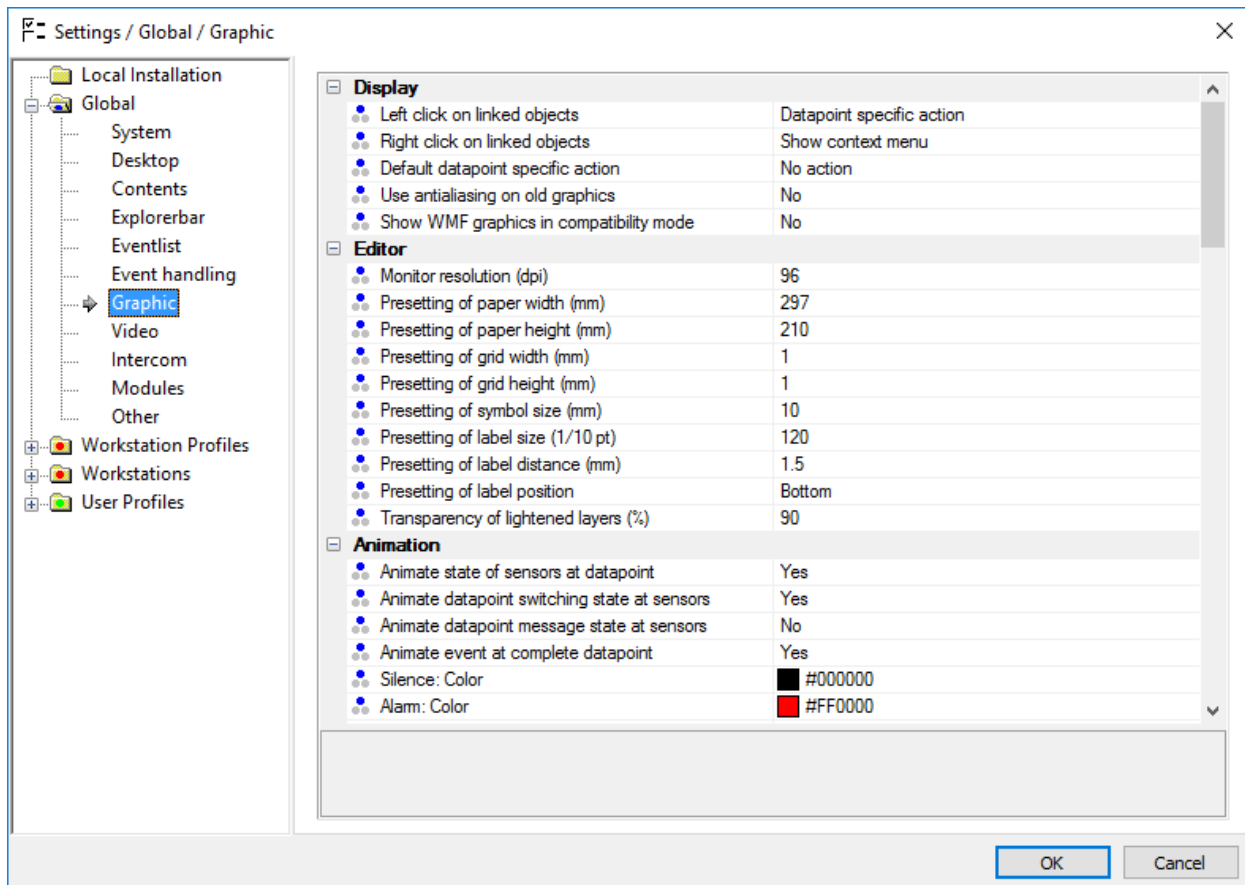


Figure 177: Settings / Global / Graphic

▼ Graphic - Display

In this section, general settings for graphic display are defined.

▼ Left click on linked objects

Here you define the standard action that is executed by clicking on linked objects with the **left** mouse key.

No action - no action is executed.

Datapoint specific action (default) - the action defined in the [Action Tab](#)⁸⁴⁶ of the linked object is executed.

Show context menu - displays the context menu if applicable.

Show control panel - opens the datapoint-specific control panel (for example, camera or intercom control panel), or, if not available, the main control panel.

Show main control panel - opens the main control panel.

Switch selection - when the item, **Selection**, is chosen for animation in the [Link Tab](#)⁸⁶⁰ of the linked object, then the object is respectively selected or deselected. Visually, the linked object changes the animated color between the states 0 (silence) and 1 (alarm).

▼ Right click on linked objects

Here you can define the standard function that is executed when clicking on linked objects with the **right** mouse key.

No action - no action is executed.

Datapoint specific action - the action defined in the [Action Tab](#)^[846] of the linked object is executed.

Show context menu (default) - displays the context menu *if applicable*.

Show control panel - opens the datapoint specific control panel (for example, camera or intercom control panel), or, if not available, the main control panel.

Show main control panel - opens the main control panel.

Switch selection - when the item, **Selection**, is chosen for animation in the [Link Tab](#)^[860] of the linked object, then the object is respectively selected or deselected. Visually, the linked object changes the animated color between the states 0 (silence) and 1 (alarm).

▼ Default datapoint specific action

Here you can define the standard action that is executed when clicking on linked objects if no specific functions are defined via the [Action Tab](#)^[846].

No action (default) - no action is executed.

Show context menu - displays the context menu if applicable.

Show control panel - opens the datapoint specific control panel (for example, camera or intercom control panel), or, if not available, the main control panel.

Show main control panel - opens the main control panel.

Switch selection - when the item, **Selection**, is chosen for animation in the [Link Tab](#)^[860] of the linked object, then the object is respectively selected or deselected. Visually, the linked object changes the animated color between the states 0 (silence) and 1 (alarm).

▼ Use antialiasing on old graphics

This option determines if antialiasing (smoothing of jagged edges) should be used on a standard basis on graphics in an older file format, if they were created in a version that did not yet support this feature.

Yes - antialiasing is used for the display of older WGD graphics.

No (default) - antialiasing is not used for older WGD graphics.

▼ Show WMF graphics in compatibility mode

This option determines whether WMF graphics are not analyzed and simply displayed using the standard Windows functions, as was the case in earlier program versions.

Yes - WMF graphics are displayed using standard Windows functions.

No (default) - the current WMF functionality from WinGuard is used for display.

▼ Graphic Editor

In this section, the basic settings for the graphic editor are defined.

Monitor resolution (dpi)

Here you can define the actual monitor resolution (in dpi) in order to achieve the best possible correlation between graphic size and screen display.

96 (default) - modify the resolution to meet your requirements if applicable.



Any changes made here take effect only after restart of WinGuard!

Presetting of paper width (mm)

Here you define the paper width that is used when creating a new graphic.

297 (default) - modify the paper width if applicable.

Presetting of paper height (mm)

Here you define the paper height that is used when creating a new graphic.

210 (default) - modify the paper height if applicable.

Presetting of grid width (mm)

Here you define the grid width that is used when creating a new graphic.

5 (default) - modify the grid width if applicable.

Presetting of grid height (mm)

Here you define the grid height that is used when creating a new graphic.

5 (default) - modify the grid height if applicable.

Presetting of symbol size (mm)

Here you define the symbol size (length and width) that is used when symbols are inserted into a graphic.

10 (default) - modify the symbol size if applicable.

Presetting of label size (1/10 pt)

Here you define the label size / font size of the symbol labels that is used when inserting a symbol with label into a graphic.

120 (default) - modify the label size if applicable.

Presetting of label distance (mm)

Here you define the label distance of the symbol label that is used when inserting a symbol with label into a graphic.

1.5 (default) - modify the label distance if applicable.

**Presetting of label position**

Here you define the label position of the symbol label that is used when symbols with labels are inserted into a graphic. The position of the label is always relative to the position of the symbol.

You can select from: **Left**, **Top**, **Center**, **Right** and **Bottom**

Bottom (default) - select the desired label position if applicable.

Transparency of lightened layers (%)

Here you define the transparency of layers that are faded out/ lightened. If you use the status bar button in the graphic editor with the function, **Fade out non-active layers**, the layers that are not active are displayed partly faded out / lightened depending on the setting selected here.

90 (default) - modify the transparency to meet your requirements if applicable.



Changes to the presettings described here affect only new graphics. Graphics that have already been defined remain unchanged!



The individual presettings can be modified anytime when editing the graphics!

▼ Graphic - Default Animation

In the section **Default Animation**, you can define the animation that is used by linked, animated graphic objects for which no user-defined animation schemes have been created. Individual assignments to user-defined animation schemes are made in the definition of symbol graphics in the dialog, **Properties**, under the [File Tab](#)⁸³¹ (option: **Animation via Color Change**). For graphic objects the assignment is done under the [Link Tab](#)⁸⁶⁰. Here the color change function is active if the animation option, **State**, is selected. For the animation option, **Selection**, only the colors for **silence** and **alarm** are used.

In graphics display, we differentiate between two different types of display:

- Event mode
- State mode

These two display types can show different flashing scenarios as flashing cannot be deactivated in event mode.



▼ Animate state of sensors at datapoint

This setting determines if, when there is a change in state, the animation of the sensor is applied in the same way to the datapoint of its sensor group.

Yes (default) - sensor groups are also animated accordingly.

No - sensor groups are **not** animated.



*This applies only to the event states: **alarm**, **pre-alarm**, **warning**, **fault**, **message**, and **active**!*



▼ Animate datapoint switching state at sensors

This setting determines, if, when there is a change in state, the animation of the sensor group is applied in the same manner to the individual sensors.

Yes (default) - sensors are also animated accordingly.

No - the sensors are **not** animated.



*Only valid for switching states **Off** and **Revision**!*



▼ Animate datapoint message state at sensors

This setting determines if, when there is a change in state, the animation of the sensor group is applied in the same manner to the individual sensors.

Yes - sensors are also animated accordingly.

No (default) - sensors are **not** animated.



*Only valid for event states: **alarm**, **pre-alarm**, **warning**, **fault**, **message**, and **active**!*



▼ Animate event at complete datapoint

This setting determines, if, when there is a change in state, the animation of the sensor group is applied in the same manner to the individual sensors.

Yes (default) - sensors are also animated accordingly.

No - sensors are **not** animated.



*This setting is valid for **all** states!*

▼ **Silence: Color**

Here you can define the presettings for the colors used to display the respective state types in color-animated graphic objects.

#aabbcc - select the colors for the respective state types if applicable.

Definitions can be made for the following state types:

State type	Color	Flashing mode
Silence	#000000 (default)	-
Alarm	#ff0000 (default)	No (default)
Pre-alarm/Warning	#ff0000 (default)	No (default)
Active	#55ff55 (default)	No (default)
Message	#6767fb (default)	No (default)
Fault	#ffc71d (default)	No (default)
Off	#d860ff (default)	No (default)
Revision	#9b4d4d (default)	No (default)
RevAlarm	#ff0000 (default)	No (default)
Unknown	#808080 (default)	No (default)

(RGB value: 3 hexadecimal values, each between 00 and ff - e.g. #B2B2B2)

▼ **Unknown: Blinking mode**

Here you can define the presetting for the animation via color change as it relates to flashing for the display of respective states for animated objects.

You can select from:

No - the display color for the state is static.

Yes (normal) - flashes approx. 1 x per second.

Yes (fast) - flashes approx 2 x per second.

i *Flashing is only available for linked graphic objects. For color-animated objects, flashing is created by a change in color between the color assigned to the respective state and the color assigned to the state, **Silence**. Therefore, flashing cannot be defined for the state, **Silence**!*

▼ **Graphic - FOVs**

In this section, general settings for camera views are defined. Views show e.g. the area in the graphic that the camera captures. For PTZ cameras, this can also be realized dynamically by corresponding position information of the respective camera, provided that this is supported by the respective interface.

▼ **Visible**

It can be defined here whether views shall be visible by default or not. The user can change the visibility in both cases via the menu command **Camera views**.

No (default) - Camera views are not supported in the graphics.

Yes - Support of camera views is active.

Size

A factor for the display size can be defined here. This factor is indicated as a floating-point number and relates to the size of the corresponding camera symbol.

3 (default) - if required, indicate the ratio of the size view/camera symbol.

Impact of zoom

A factor for adaptation of the size depending on the zoom can be indicated as a floating-point number here. For example, a value of 0.5 means that upon double zoom, the display size only increases by 50 %.

0.5 (default) - if required, indicate the factor.

Transparency

It is possible to define the transparency in % at the beginning of the display in the middle of the symbol here. To the outer sides, the display always expires in full transparency.

50 (default) - if required, indicated the transparency (0-100 %).

▼ Graphic - CAD Support

In this section, general settings for the preview of CAD graphics are defined.

Preview: Is used

This option determines if the preview mechanism is used for CAD graphics.

Yes (default) - the automatic preview mechanism is active.

No - the automatic preview mechanism is deactivated.

Preview: Minimum size (pixel)

With this setting, the minimum size of the preview graphics is defined. The creation of the graphics occurs automatically with the first display, as long as these have not already been manually created (please see: [CAD Preview](#)^[370]). If the presetting is changed here, then the preview graphics may be newly created.

The Minimum size can be set between **64** and **4096** pixel.

256 (default) - modify the minimum size if applicable.



The objective here is to achieve optimal balance between display speed and level of detail. Small graphics are less exact but load faster!

Preview: Quality

With this option, the quality of the individual preview graphics is determined. This allows you to generate exact preview graphics, which may mean a large number of preview graphics for the different views of a CAD graphic. Alternatively, preview graphics can be generated in specific size levels that are then scaled accordingly for display.

Exact - for each view, the respective preview graphic is created.

Scaled (default) - graphics are generated in specific size levels and scaled accordingly for display.



Here too, the objective is to achieve optimal balance between display speed, quantity, and level of detail.

Preview generation: Execution

Here you can determine if and when automatic preview generation should be performed on the individual workstations.

You can select from: *Never, Daily, Mondays, ..., Sundays, Monthly on the 1st, Monthly on the 15th.*

Never (default) - modify the selection to meet your requirements.

 Preview generation: Time

Time at which automatic preview generation should be executed.

12:00 (default) - modify the time to meet your requirements.

 Preview generation: Search datapoints

This option determines if the graphics of the datapoints are included in the creation of the preview objects.

Yes (default) - the datapoint graphic previews are generated.

No - the previews are **not** generated.

 Preview generation: Search locations

This option determines if the graphics of the locations are included in the creation of the preview objects.

Yes (default) - the location graphic previews are generated.

No - the previews are **not** generated.

 Preview generation: Search graphics

This option determines if the graphics itself are included in the creation of the preview objects.

Yes (default) - the graphic previews are generated.

No - the previews are **not** generated.

 Preview generation: Search texts

This option determines if the graphics contained in WinGuard texts are included in the creation of the preview objects.

Yes (default) - the text-graphic previews are generated.

No - the previews are **not** generated.

 Preview generation: Search layouts

This option determines if the graphics contained in WinGuard layouts are included in the creation of the preview objects.

Yes (default) - the layout graphic previews are generated.

No - the previews are **not** generated.

 Preview generation: Size (pixel)

With this setting, the preview graphics size (pixel) for automatic generation is defined.

2048 (default) - modify the size to meet your requirements.



The entered size must be a multiple of the preview minimum size, otherwise it will be automatically set to the next multiple!

▼ Graphic - DWG/DXF Support

In this section, the settings for the integration of CAD graphics of the type, DWG or DXF (AutoCAD®) are defined. You can find additional information on this topic in the document: **CAD Graphics (Manual WinGuard X4 2018)**.



The term, "linkable", used in the following text refers to objects with respective attributes - blocks with an attribute for datapoint names, a location, or an area!



Adjust colors of objects without link on loading

This option determines if the CAD graphic objects that were identified as non-linkable (without respective attributes) are displayed in their original colors or in monochrome.

Yes (default) - the respective objects are displayed in monochrome.

No - the respective objects are displayed in their original colors.



Color for objects without link

This option determines the color of the CAD graphic objects that were identified as non-linkable (without respective attributes) - provided that the option, **Modify colors of objects without link upon loading**, is active.

#000000 (default) - select the desired color if applicable.

(RGB value: 3 hexadecimal values, each between 00 and ff - e.g. #B2B2B2)



Adjust colors of objects with link on loading

This option determines if the CAD graphic objects identified as linkable (with respective attributes) are displayed in their original colors or in monochrome.

Yes (default) - the respective objects are displayed in monochrome.

No - the respective objects are displayed in their original colors.



Color for objects with link

This option determines the color for CAD graphic objects that were identified as linkable (with respective attributes) - provided that the option, **Modify colors of objects with link upon loading**, is active.

#000000 (default) - select the desired color if applicable.

(RGB value: 3 hexadecimal values, each between 00 and ff - e.g. #B2B2B2)



Generally replace linked symbols

This option determines if the symbols of the CAD graphic are consistently replaced with WinGuard symbols or if the original CAD symbols are used. If no individual sensor type is indicated, the symbol of the sensor type of the respective datapoint or sensor is used if this option is active.

Yes (default) - the respective symbols are replaced if applicable.

No - the original CAD symbols are shown or will be replaced by the symbol from the assigned (by attribute) sensor type.



If a sensor type or a symbol not exists it cannot be replaced!

Default datapoint category

This setting defines a standard (default) datapoint category. This datapoint category is used when no attribute for the datapoint category has been defined for the linked datapoint object (please see AutoCAD property with datapoint category).

Fire (default) - select a datapoint category if applicable.

AutoCAD property with datapoint category

This setting defines the name of the AutoCAD property (attribute) that contains the datapoint category. If this attribute is not defined, the setting of the default datapoint is used.

Category (default) - modify the property name for your project if applicable.

AutoCAD property with datapoint name

This setting defines the name of the AutoCAD property (attribute) that contains the datapoint name.

Datapoint (default) - modify the property name for your project if applicable.

AutoCAD property with sensor number

This setting defines the name of the AutoCAD property (attribute) that contains the sensor number. Alternatively, a separator list in <> can be entered in case the sensor name should be determined from the datapoint name.

Sensor (default) - modify the property name for your project if applicable.



If the separator between name and sensor number is a /, then both AutoCad properties (for datapoint name and sensor number) can be referenced on the same attribute (for datapoint name).

AutoCAD property with sensor type

This setting defines the name of the AutoCAD property (attribute) that contains the sensor type.

<BLOCKNAME> - using this key word, the name of the symbol block definition from AutoCAD is used as name of the sensor type.

Sensor type (default) - modify the property name for your project if applicable.

AutoCAD property with location

This setting defines that name of the AutoCAD property (attribute) that contains the location description.

Location (default) - modify the property name for your project if applicable.



This field is used only if no attribute for the datapoint name was defined!

AutoCAD property with area name

This setting defines the name of the AutoCAD property (attribute) that contains display area name.

Area (default) - modify the property name for your project if applicable.



This field is only used when no attribute for the datapoint name or for the location was defined!

AutoCAD property with animation color

This setting defines the name of the AutoCAD property (attribute) that contains the animation color (RGB value: 3 hexadecimal values, each between 00 and ff - e.g. #B2B2B2). If the attribute does not exist or no valid color is defined there, then either the block color of the object or the replacement color (**Color for objects with link**) is used.

Animation color (default) - modify the property name for your project if applicable.

 AutoCAD property with animation scheme

This setting defines the name of the AutoCAD property (attribute) that contains the name of a WinGuard animation scheme. If the attribute does not exist or no valid name is defined there, the standard animation scheme that is defined below (please see: **Animation scheme**) is used.

Animation scheme (default) - modify the property name for your project if applicable.

 Visibility of linked objects

Here you can define the settings for the visibility mode for linkable objects. Additional information regarding these options can be found under Data Supply/Graphic in the section [Link Tab](#).⁸⁶⁰ Basically, the display varies depending on event mode or state mode.

Standard - these objects are always visible on a standard basis.

Invisible based on event (default) -

- Event mode: only objects that are linked with the triggering datapoint or sensor are visible.
- State view: all objects are visible.

Visible depending on context -

- Event view: only objects linked with the triggering datapoint or sensor are displayed.
- State mode: all objects are invisible.

 Animation of linked objects

Here you can define the type of animation for linkable objects. Additional information regarding these options can be found under Data Supply/Graphic in the section, [Link Tab](#).⁸⁶⁰

None - animation is deactivated.

State (default) - animation is state dependent.

Value (fill) - the animation is via fill (only for measured values).

Selection - animation is via selection (selected or deselected).

 Animation Scheme

Here the animation scheme used for the animation of linkable objects is defined.

<Standard> (default) - the default animation (please see above) is used.

... - select the desired animation scheme if applicable.

 Full redraw of linked objects

This option determines if, for example, with a change in state, the respective object is completely or only partially redrawn. This may prevent that artifacts remain from the previous display.

Yes - the objects are completely redrawn.

No (default) - the objects are only partially redrawn.

Left click on linked objects

This setting defines the actions initiated by a click with the left or right mouse key on a linked object. Additional information regarding these options can be found under Data supply/Graphic in the section, [Link Tab](#)⁸⁶⁰.

No action - no action is executed.

Presetting (default) - the presetting is used (please see above: Display).

Datapoint-specific action (default) - the action defined in the [Action Tab](#)⁸⁴⁶ of the linked object is executed.

Show context menu - displays the context menu if applicable.

Show control panel - opens the datapoint-specific control panel (for example, camera or intercom control panel), or, if not available, the main control panel.

Show main control panel - opens the main control panel.

Switch selection - when the item, **Selection**, is chosen for animation in the [Link Tab](#)⁸⁶⁰ of the linked object, then the object is respectively selected or deselected. Visually, the linked object changes the animated color between the states 0 (silence) and 1 (alarm).

 Right click on linked objects

For the respective functionality, please see: **Left click on linked objects**.

 Use line width from DWG files

This option determines if the line weight should be directly accepted from DWG files. Alternatively, you can subsequently define a minimum weight.

Yes - the line weight is accepted from the DWG files.

No (default) - the line weight is defined by the setting below.

 Minimum line width (mm)

Here you can define the minimum line weight for display.

0 (default) - no minimum weight is defined (min. line weight = 1 pixel).

... - enter the minimum weight if applicable.

 Calculate coordinates mapping from content

This option defines the calculation for coordinates mapping.

If **No** is indicated, the coordinates are calculated using the dimensions contained in the graphic. This option should be selected for AutoCAD®-generated graphics.

If **Yes** is indicated, the dimensions are approximated using the actual graphic content. This method does not always result in exact dimensions, but it does correct potentially erroneous dimensions contained in the graphic file which may occur with the implementation of software by third parties.

Yes (default) - the size calculation is done from the content.

No - the sizes are defined by file parameters.

 For layouts in frames use old loading method

Layouts with page widths or heights ≤ 0 were incorrectly displayed in older program versions (prior to **X3 Build 53.36**). If this has been manually corrected, this option should be activated for reasons of compatibility.

No (default) - correct display of AutoCAD layouts.

Yes - the new (correct) display is deactivated - compatible with older versions.

Optional resource folder

Here you can set up a user-defined resource folder for fonts, line types, or references that may be used in potential reloads of DWG graphics. Independent of this folder, missing resources for truetype fonts are always searched for in the existing AutoCAD folder as well as the Windows folder.

... - enter the respective resource folder if applicable.

 Default projection width (mm)

Here you can define the projection width of directly opened graphics that do not have an assigned paper size.

297 (default) - modify the width to meet your requirements.

 Default projection height (mm)

Here you can define the projection height of directly opened graphics that do not have an assigned paper size.

210 (default) - modify the height to meet your requirements.

▼ Graphic - DGN Support

In this section, the settings for the integration of CAD graphics of the type, DGN (MicroStation®), are defined. Additional information on this topic is available in the document: **CAD Graphics (Manual WinGuard X4 2018)**.



The term, "linkable", used in the section below, refers to objects with respective tags - objects with a tag for the datapoint name!



For DGN graphics, the symbols are generally replaced by WinGuard symbols during display!

 Adjust colors of objects without link on loading

This option determines if the CAD graphic objects that were identified as non-linkable (without respective attributes) are displayed in their original colors or in monochrome.

Yes (default) - the respective objects are displayed in monochrome.

No - the respective objects are displayed in their original colors.

 Color for objects without link

This option determines the color for CAD graphic objects that were identified as not linkable (without respective attributes) - provided that the option, **Modify colors of objects without link upon loading**, is active.

#000000 (default) - select the desired color if applicable.

(RGB value: 3 hexadecimal values, each between 00 and ff - e.g. #B2B2B2)

 Adjust colors of objects with link on loading

This option determines the color for CAD graphic objects that were identified as linkable (with respective attributes) - are displayed in their original colors or in monochrome.

Yes (default) - the respective objects are displayed in monochrome.

No - the respective objects are displayed in their original colors.

**Color for objects with link**

This option determines the color for CAD graphic objects that were identified as linkable (with respective attributes) - provided that the option, **Modify colors of objects with link upon loading**, is active.

#000000 (default) - select the desired color if applicable.

(RGB value: 3 hexadecimal values, each between 00 and ff - e.g. #B2B2B2)

**Default datapoint category**

This setting defines a standard (default) datapoint category. This datapoint category is used when no attribute for the datapoint category has been defined for the linked datapoint object (please see AutoCAD property with datapoint category).

Fire (default) - select a datapoint category if applicable.

**Linking with text wildcard**

If a format is specified, the link is made via the text inside the cell. Thereby the first text is chosen that matches the given format. In this case the link through tags is deactivated and the tag option is therefore of no account.

Blank (default) - enter the text wildcard if applicable.



For the format specification the wildcards (*) and (?) can be used. For example the format definition **MG*** would link to all datapoints whose names start with **MG!**

**Create label from**

Determines data source (text, position and size) for label generation.

Object tag (default) - the cell tag is used.

Object text - the linked text keep the position.

Datapoint label - a new label with the datapoint name is generated.

**Datapoint label size (1/10 pt)**

Here you define the label size / font size of the new created object labels.

120 (default) - modify the label size if applicable.



Works only when setting **Create lable from** is set to **Datapoint label!**

**Datapoint label position**

This defines the preset position of a label that is automatically added to an object. The position of the label is always relative to the position of the object.

You can select from: **Left, Top, Center, Right** and **Bottom**

Bottom (default) - select the desired label position if applicable.



Works only when setting **Create lable from** is set to **Datapoint label!**

**MicroStation tag with datapoint category**

This setting defines the name of the MicroStation tag that contains the datapoint category. If this tag is not defined, the setting for the default datapoint category is used.

Category (default) - modify the tag name for your project.

**MicroStation tag with datapoint name**

This setting defines the name of the MicroStation tag that contains the datapoint name.

Datapoint (default) - modify the tag name for your project.

MicroStation tag with sensor number

This setting defines the name of the MicroStation tag that contains the sensor number. Alternatively, a separator list in <> can be entered in case the sensor number should be determined from the datapoint name.

Sensor (default) - modify the tag name for your project.



If the separator between name and sensor number is a /, then the two MicroStation tags (for datapoint name and sensor number) can be referenced on the same tag (for datapoint name).

 MicroStation tag with sensor type

This setting defines the name of the MicroStation tag that contains the sensor type. If the keyword <Blockname> is defined, than the system is using the block / cell name to search for the sensor type. This is valide for tag- and text link mode.

Sensor type (default) - modify the tag name for your project.

<Blockname> - the block / cell name is used as sensor type.

 MicroStation tag with area name

This setting defines the name of the MicroStation tag that contains the name of the display area.

Area (default) - modify the tag name for your project.



This field is only used if no tag for the datapoint name was defined!

 Visibility of linked objects

Here you can define the settings for the visibility mode or linkable objects. Additional information regarding these options can be found under Data Supply/Graphic in the section, [Link Tab](#)⁸⁶⁰. Basically, the display varies depending on event mode or state mode.

Standard - these objects are always visible on a standard basis.

Invisible based on event (default) -

- Event mode: only objects that are linked with the triggering datapoint or sensor are visible.
- State view: all objects are visible.

Visible depending on context -

- Event view: only objects that are linked with the triggering datapoint or sensor are visible.
- State mode: all objects are invisible.

 Animation of linked objects

Here the setting for the type of animation for linkable objects is defined. Additional information regarding these options can be found under Data Supply/Graphic in the section, [Link Tab](#)⁸⁶⁰.

None - animation is deactivated.

State (default) -animation is state dependent.

Value (fill) - the animation is via fill (only for measured values).

Selection - animation is via selection (selection or deselected).

Animation Scheme

Here the animation scheme that is used for the animation of linkable objects is defined.

<Standard> (default) - the default animation (please see above) is used.

... - select the desired animation scheme if applicable.

 Full redraw of linked objects

This option determines, if, for example, with a change in state, the respective object is completely or partially redrawn. This may prevent that artifacts remain from the previous display.

Yes - the objects are completely redrawn.

No (default) - the objects are only partially redrawn.

 Left click on linked objects

This setting defines the action initiated by a click with the left mouse key on a linked object. Additional information regarding these options can be found under Data Supply/Graphic in the section, [Link Tab](#)⁸⁶⁰.

No action - no action is executed.

Presetting (default) - the presetting is used (please see above: Display).

Datapoint-specific action (default) - the action defined in the [Action Tab](#)⁸⁴⁶ of the linked object is executed.

Show context menu - displays the context menu if applicable.

Show control panel - opens the datapoint-specific control panel (for example, camera or intercom control panel, or ,if not available, the main control panel).

Show main control panel - opens the main control panel.

Switch selection - when the item, **Selection**, is chosen for animation in the [Link Tab](#)⁸⁶⁰ of the linked object, then the object is respectively selected or deselected. Visually, the linked object changes the animated color between the states 0 (silence) and 1 (alarm).

 Right click on linked objects

For the respective functionality, please see: **Left click on linked objects**.

 Optional resources directory

Here you can set up a user-defined resource folder for fonts, line types, or references that may be used in potential reloads of DWG graphics. Independent of this folder, missing resources for TrueType fonts are always searched for in the existing AutoCAD folder as well as the Windows folder.

... - enter the respective resource folder if applicable.

 Default projection width (mm)

Here you can define the projection width of directly opened graphics that do not have an assigned paper size.

297 (default) - modify the width to meet your requirements.

 Default projection height (mm)

Here you can define the projection height of directly opened graphics that do not have an assigned paper size.

210 (default) - modify the height to meet your requirements.

6.2.8 Video

In the Video section, settings that are relevant for video system connection, display and control are defined. Here, the settings for the VideoManager (windows 1-4), VideoDisplays (1-4), local cameras (1-3) and the video archive are also determined.

▼ Dialog: Settings / Global / Video

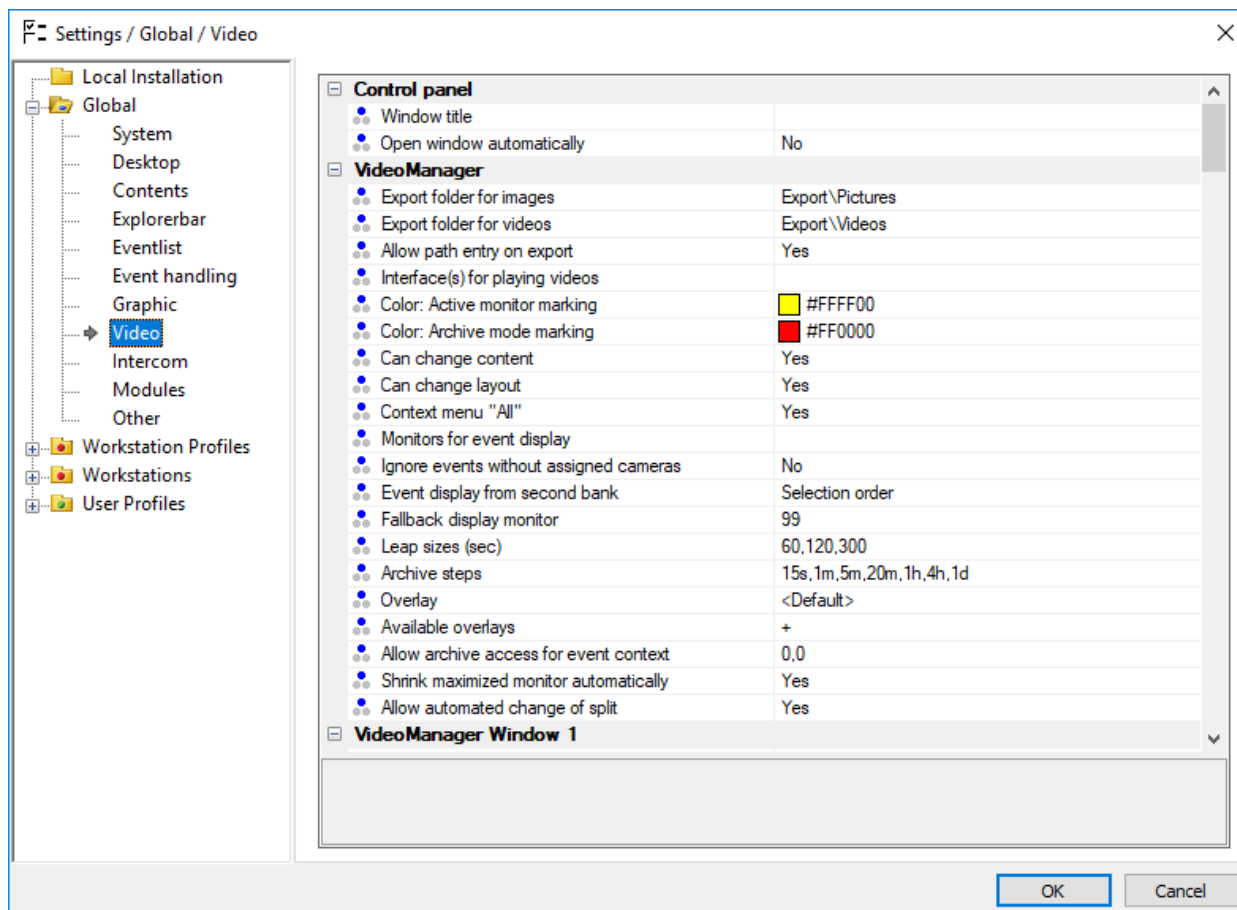


Figure 178: Settings / Global / Video

▼ Video - Control Panel

In this section, general settings for the video control panel are defined.

Window title

With this setting, a user-defined window title can be defined for the camera control panel.

Blank (default) - the standard name of the window is used.

... - enter the desired window title, if applicable.

Open window automatically

This option determines if the camera control panel opens automatically when a camera has been activated based on an event.

Yes - the camera control panel opens automatically.

No (default) - the camera control panel is **not** opened automatically.

▼ Video - VideoManager

In this section, general settings / presets for the VideoManager are defined.

Export folder for images

Here you can define a folder (in the project folder/directory) in which exported images can be stored. If no folder is defined, images cannot be exported.

Export\Images (default) - select the desired export folder if applicable.

Blank - images cannot be exported.

Export folder for videos

Here you can define a folder (in the project folder/directory) in which exported video sequences can be stored. If no folder is defined, video sequences cannot be exported.

Export\Videos (default) - select the desired export folder if applicable.

Blank - video sequences cannot be exported.

Allow path entry on export

This option determines if the user can freely select the folder when exporting images or video sequences.

Yes (default) - the user is allowed to select the folder when exporting.

No - the user **cannot select a folder** when exporting.

Interface(s) for playing videos

Here you can define the interfaces that can be used to play exported video sequences. If no interface is selected, no video sequences can be displayed.

Blank (default) - exported video sequences cannot be played.

... - select the desired interfaces if applicable.

Color: Active monitor marking

Here you define the color that is used as the frame color to indicate a currently active video monitor. Selecting an active video monitor can be done by a single click on the respective monitor.

#ffff00 (default) - select the desired frame color.

(RGB value: 3 hexadecimal values, each between 00 and ff - e.g. #B2B2B2)

Color: Archive mode marking

This setting defines the color of the upper left point in the video monitor when the display is in archive mode.

#ff0000 (default) - select the desired color for marking, if applicable.

(RGB value: 3 hexadecimal values, each between 00 and ff - e.g. #B2B2B2)

Can change content

This setting defines if the contents (camera, sequence, or clip) of the VideoManager can be changed by the user.

Yes (default) - the content can be changed by the user.

No - the content can **not** be changed by the user.

Can change layout

This setting defines if the layout or view of the window (full screen, show / hide controls, etc.) can be changed by the user.

Yes (default) - the layout can be changed by the user.

No - the layout can **not** be changed by the user.

 Context menu "All"

With this option, the VideoManager context menu can be expanded. If this option is active, additional commands such as the control of all monitors are available. For example, this allows you to close all active cameras in a VideoManager window with just one command.

Yes (default) - the context menu is expanded with the addition of the menu item **All**.

No - the menu item, **All**, is not available in the context menu.


 Monitors for event display

This definition allows you to define video banks for event display. Individual monitors are combined in video banks. For the definition, monitors should be separated by commas and video banks by semicolons.

Example: 1,2,3;4,5,6 (defines two video banks with monitors 1-2-3 and 4-5-6). The video banks are used from left to right in the order in which they are entered here. The display also depends on the setting, **Event display from second bank**, which is defined further below.

Blank (default) - no video banks are defined.

... - define the desired video banks for event display if applicable.

 *Monitor numbers should be separated by commas and video banks by semicolons!*

 Ignore events without assigned cameras

When using video banks, these are activated based on events. This option helps you prevent that events without such camera assignments are also displayed on the video banks.

Yes - events without respective camera assignment are **not** displayed on video banks.

No (default) - Events without respective camera assignments can be displayed on video banks.

 Event display from second bank

With this option, event display on additional (second) video banks can be controlled.

Priority/Time controlled - if several events with the same priority ranking come in, these are displayed in the order in which they were received. If events with varying priorities are received, then the event with the highest priority is displayed first. When events are selected, they are displayed in the order in which they were selected.

Selection order (default) - the event that is currently selected is displayed on the first video bank. If another event is selected, the events displayed previously move to the subsequent video banks.

 Fallback display monitor

The defined monitor will be used for display of manual operations, in case no monitor has been selected or it cannot be used. If this Monitor is assigned to a VideoManager the video is shown there. In this case the VideoManager can be opened automatically.

Blank (default) - no function.

... - define the desired monitor number.

Leap sizes (sec)

Here, the times (seconds) are defined that are leaped upon using the leap function in the video system. The times are separated by commas and are available for the different leap sizes **small, medium, large**.

60,120,300 (default) - leap sizes for small, medium and large.

... - if required, adapt the leap sizes.

Archive steps

It is possible to define up to seven archive leaps here. The archive leaps are defined in integral numbers, directly followed by units.

Units: **s**=seconds, **m**=minutes, **h**=hours, **d**=days

15s, 1m, 5m, 20m, 1h, 4h, 1d (default) - Archive leaps (7 times).

... - if required, adapt the leaps.



It is not allowed to mix the units (e.g. 90s is allowed, 1m 30s is not allowed)!

**Overlay**

Here, the standard definition of the overlay is made for all video windows. This setting can be additionally overwritten in the definition of the single windows.

<Standard> (default) - the standard overlay preset by WinGuard.

... - if required, select an overlay.

**Available overlays**

With this definition, it is defined which overlays are available as a selection for the user. The overlays are indicated separated by commas or can be selected via the selection function. A (+) symbolizes all defined overlays.

+ (default) - all defined overlays are available.

... - if required, indicate the overlays or select them.

Allow archive access for event context

Using this setting, an archive access can be allowed in event context although the user does not have an explicit right for archive access of cameras. It is possible to define the time span (time before and after the event) during which the user may display the archive for cameras that have been assigned with the command [Assign Cameras](#)⁹⁵⁷ to the active event.

Within such an archive access, it is however only possible to access the indicated time span around the time of event. Beyond this time span, the time cursor will be set back to the start or end of the time span. If the user does not have the right **Video Archive**, all archive access upon closing or switching between events will be closed. The VideoDisplay will behave accordingly.

The times are defined in integral numbers, directly followed by units.

Units: **s**=Seconds, **m**=Minutes, **h**=Hours, **d**=Days

0,0 (default) - the function is not active.

... - if required, indicate the times from before until after the event (e.g. -30s,2m)



Cameras must be assigned with the command [Assign Cameras](#)⁹⁵⁷!



It is not allowed to mix the units (e.g. 90s is allowed, 1m 30s is not allowed)!

Shrink maximized monitor automatically

This option defines to shrink maximized monitor automatically when a camera is displayed (automatically) on a different monitor.

Yes (default) - the automatic shrinking of monitors is activated.

No - the automatic shrinking of monitors is **not** active.

Allow automated change of split

This option allows the automated change of the split if e.g. not enough monitors are available when displaying a camera group or the target monitor is outside the currently visible monitors.

Yes (default) - the automated change of splits is activated.

No - the automated change of splits is **not** active.

▼ **Video - VideoManager Window 1 ... 4**

In this section, the settings for VideoManager windows 1-4 are defined.

Window initially opened

Here you can determine if the respective VideoManager window shall be opened upon startup or login.

Yes - the window is opened upon startup or login.

No (default) - the window is not opened.

Open window automatically

This option determines if the respective VideoManager window opens automatically if a camera is activated on a monitor defined for this window.

Yes - the window is automatically opened upon camera activation.

No (default) - the window is not opened automatically.

Screen

Here you determine on which screen the window is displayed. Currently, a maximum of 8 screens (1-8) are supported.

Blank (default) - select the desired screen (1-8).

Position

Here you define the position of the window for display.

You can select from: **<Standard>**, **upper left**, **upper middle**, **upper right**, **centered**, **lower left**, **lower middle**, and **lower right**.

<Standard> (default) - currently reflects a centered display.

Position... - select the desired position.



The position described under <Standard> may change in future versions!

Offset (x,y)

Here you can define an offset relative to the **Position** selected above. With values **x** (pixel on the x-axis from the left) and **y** (pixel on the y-axis from the top) the displacement of the window position is determined on the upper left.

Blank (default) - no offset is defined.

x,y - enter the desired offset to the position.

Size (cx,cy)

Here you can define the width and the height of the window using the values **cx** (pixel on the x-axis) and **cy** (pixel on the y-axis).

Blank (default) - the internal preset (3/4 of the screen size) is used.

cx,cy - enter the desired size of the window.

Maximized

This option determines whether the window on the monitor is maximized.

Yes (default) - the window is maximized.

No - the window is **not** maximized.



*If this option is active, the entries for **Position**, **Offset** and **Size** will be ignored!*

Fullscreen

This option determines if the window is displayed in full-screen mode. If this function is activated, no frame and therefore no window functions are available. The window thus does not have a title bar, cannot be closed, minimized, maximized, or moved, and its size is unchangeable.

Yes - the window is displayed in full-screen mode.

No (default) - the window is displayed using the other settings.

Caption

Here you define whether the title bar of the window should be displayed. The title bar contains information regarding the system, license, and, if applicable, the title defined above. The title bar also contains window functions such as close, minimize, etc.

Yes (default) - the title bar is displayed.

No - the title bar is **not** displayed.



If the title bar is faded out, window functions are only available via the respective function keys!

Frame

This option determines whether the window is displayed with or without a frame. If this option is deactivated, no window functions will be available. This means that the window has not title bar, cannot be closed, minimized, maximized, or moved and its size is unchangeable.

Yes (default) - the window frame is displayed.

No - the window frame is **not** displayed (window functions are inactive!).



The following functions may not be available!

Can close

This option determines whether the user can close the window.

Yes (default) - the user can close the window.

No - the user **cannot** close the window.


Can maximize

This option determines whether the user can minimize or maximize the window.

Yes (default) - the user can minimize or maximize the window.

No - the user **cannot** maximize or minimize the window.

- Can fullscreen**
- This option determines whether the user can change the full screen view.
Yes (default) - the user can change the full screen view.
No - the user **cannot** change the full screen view.
- Can move**
- This option determines whether the user can move the window.
Yes (default) - the user can move the window.
No - the user **cannot** move the window.
- Can size**
- This option determines whether the user can change the size of the window.
Yes (default) - the user can change the size of the window.
No - the user **cannot** change the size of the window.
- Can change content**
- This setting defines whether the contents (camera, sequence, or clip) of the VideoManager can be changed by the user.
<Default> (default) - the preset from section VideoManager is used.
Yes - the content can be changed by the user.
No - the content can **not** be changed by the user.
- Can change layout**
- This setting defines whether the layout or view of the window (full screen, show / hide controls, etc.) can be changed by the user.
<Default> (default) - the preset from section VideoManager is used.
Yes - the layout can be changed by the user.
No - the layout can **not** be changed by the user.
- Context menu "All"**
- With this option, the VideoManager context menu can be expanded. If this option is active, additional commands such as the control of all monitors will be available. For example, this allows you to close all active cameras in a VideoManager window with just one command.
<Default> (default) - the preset from section VideoManager is used.
Yes - the context menu is expanded with the addition of the menu item **All**.
No - the menu item, **All**, is not available in the context menu.
- Toolbar: Visible**
- Here you can determine whether the toolbar should be visible and accessible by the user immediately after login.
Yes (default) - the toolbar is visible.
No - the toolbar is **not** visible.
- Toolbar: File**
- Here you can assign a toolbar for the window.
Your selection includes the standard toolbar and the user-defined toolbars (please see: [Edit Toolbars](#)⁶⁵⁴).
<Standard> (default) - the standard toolbar is used.
... - select the desired toolbar if applicable.

- Camera Control bar: Visible**
- Here you can determine whether the control elements used for controlling the camera shall be displayed on the right side of the VideoManager.
- Yes (default)** - the control elements are accessible.
- No** - the control elements are faded out.
- Archive Control bar: Visible**
- Here you can determine whether the control elements to control the video archive shall be displayed at the bottom section of the VideoManager.
- Yes (default)** - archive control is accessible.
- No** - archive control is faded out.
- Log Window: Visible**
- Here you can determine whether the display area for logs should be displayed to the right of the archive control in the lower section of the VideoManager.
- Yes** - the display area for logs is available.
- No (default)** - the display area for logs is faded out.
- Log Window: Width**
- This definition determines the width (%) of the log excerpt.
- This setting is only relevant if the archive controls are also active. A minimum width of the archive controls is determined by the system.
- Blank (default)** - the division is 50 %.
- ...** - enter the desired division (generally 25 - 75 %).
- Transparency control**
- With this option, the use of mouse actions is defined. Mouse actions that are executed via activated cameras can be sent directly to the respective control of the video system.
- Yes** - the mouse actions are sent directly to the control of the video system.
- No (default)** - the mouse actions are evaluated by WinGuard.
- Keep background streams open**
- Here you can determine whether active cameras remain connected after minimising the VideoManager. This option has the advantage that, when the VideoManager is reactivated, no new connection has to be established and the video signals are immediately available. The disadvantage is that this action puts a corresponding load on the system.
- Yes (default)** - the video connections remain active in the background.
- No** - the video connections are closed.
-  *The option is only operable if the function is supported by the used video system!*
- Split (Start)**
- Here you determine the window configuration (Split) of the VideoManager at startup (first/initial display).
- You can select from: **1x1, 2x2, 3x3, 4x4, 5x5, 6x6, 1+5, 1+7, 1+12, 2+8, 2x1, 3x2, 4x3, 5x4, 6x5, 1+2, 1+3, 1+8, 2+4**
- Blank (default)** - only the first video element (monitor) is displayed (1x1).
- ...** - select the desired start configuration/split.

Split (Event display)

Here you determine the configuration (split) of the VideoManager for event display.

You can select from: *1x1, 2x2, 3x3, 4x4, 5x5, 6x6, 1+5, 1+7, 1+12, 2+8, 2x1, 3x2, 4x3, 5x4, 6x5, 1+2, 1+3, 1+8, 2+4*

Blank (default) - only the first video element (monitor) is displayed (1x1).

... - select the desired configuration/split for event display.

 Overlay

Here, the definition of this overlay is made.

<Standard> (default) - the standard overlay preset by VideoManager definition.

... - if required, select an overlay.

▼ Video - VideoDisplay

The presets for the four VideoDisplays are defined here.

 Can change content

This setting defines whether the contents (camera, sequence, or clip) of the VideoDisplay can be changed by the user.

Yes (default) - the content can be changed by the user.

No - the content can **not** be changed by the user.

 Can change layout

This setting defines whether the layout or view of the window (full screen, show / hide controls, etc.) can be changed by the user.

Yes (default) - the layout can be changed by the user.

No - the layout can **not** be changed by the user.

 Context menu "All"

With this option, the VideoDisplay context menu can be expanded. If this option is active, additional commands such as the control of all monitors will be available. For example, this allows you to close all active cameras in a VideoDisplay window with just one command.

Yes (default) - the context menu is expanded with the addition of the menu item **All**.

No - the menu item, **All**, is not available in the context menu.

▼ Video - VideoDisplay 1 ... 4

Here you can define the settings for the four VideoDisplays.

 Workstation

Here you can select the workstation which is used as VideoDisplay. You can choose only workstations with the activated option **Usable as display**. This workstation must be additionally configured as workstation type **Display** in the lokal settings.

Blank (default) - the connection is inactive!

... - select the workstation.

▼ Split (Event display) window 1 ... 4

Here the respective window configuration (split) of the VideoManager for event display is defined.

You can select from: **1x1, 2x2, 3x3, 4x4, 5x5, 6x6, 1+5, 1+7, 1+12, 2+8, 2x1, 3x2, 4x3, 5x4, 6x5, 1+2, 1+3, 1+8, 2+4**

Blank (default) - only the first video element (monitor) is displayed (1x1).

... - select the desired configuration/split for event display.

i Here, we refer to an event display only if **video banks** are used for event display, meaning that cameras are activated using the action [Define Cameras](#) ⁹⁵⁷!

▼ Replace internal VideoManager

Here you can set up the use of the VideoDisplay instead of the VideoManager. When the VideoManager is retrieved, window 1 of the VideoDisplay opens automatically. The layout and monitor assignments prior to the switch are applied then.

Yes - VideoDisplay is used in place of the VideoManager.

No (default) - the VideoManager is used.

i This setting is only available for VideoDisplay 1 and is effective only after restarting WinGuard!

▼ Can change content

This setting defines whether the contents (camera, sequence, or clip) of the VideoDisplay can be changed by the user.

<Default> (default) - the preset from section VideoDisplay is used.

Yes - the content can be changed by the user.

No - the content can **not** be changed by the user.

▼ Can change layout

This setting defines whether the layout or view of the window (full screen, show / hide controls, etc.) can be changed by the user.

<Default> (default) - the preset from section VideoDisplay is used.

Yes - the layout can be changed by the user.

No - the layout can **not** be changed by the user.

▼ Context menu "All"

With this option, the VideoDisplay context menu can be expanded. If this option is active, additional commands such as the control of all monitors will be available. For example, this allows you to close all active cameras in a VideoDisplay window with just one command.

<Default> (default) - the preset from section VideoDisplay is used.

Yes - the context menu is expanded with the addition of the menu item **All**.

No - the menu item, **All**, is not available in the context menu.

▼ Video - Video Archive

This section defines general settings with regard to the video archive.

Storage time: Clips (days)

It can be defined whether clips that are older than the indicated time period shall be deleted automatically upon maintenance. For this process, the option **Remove clips for which storage time has elapsed** in the section [System](#)⁴²⁴ has to be active. If the storage date has not explicitly been set for the clip, it will be calculated from the end time of the clip plus the time period indicated here.

90 (default) - if required, adapt the time after which clips will be deleted automatically.

Blank / 0 - no action.

 Display list title in info bar

This option defines whether the title shall be displayed in the info bar of the current list view.

Yes (default) - the camera operation panel will be opened automatically.

No - the camera will be switched to the currently selected monitor.


 *Changes will only become active upon opening the window again!*

 Column width: Clips

It is possible to defined the width (pixel) of the single columns (from left to right) for the list of bookmarks here. The entries have to be separated by commas.

A **0** or a **Space character** will leave the corresponding column unchanged.

20,102,40,100,240,70,70 (default) - if required, adapt the width of the columns.


 *Columns cannot be faded out and their order cannot be changed!
Changes will only become active upon opening the window again!*

Column widths: Bookmarks

It is possible to defined the width (pixel) of the single columns (from left to right) for the list of bookmarks here. The entries have to be separated by commas.

A **0** or a **Space character** will leave the corresponding column unchanged.

20,102,40,100,240,240,240,80,80 (default) - if required, adapt the width of the columns.


 *Columns cannot be faded out and their order cannot be changed!
Changes will only become active upon opening the window again!*

Column widths: Bookmarks Event display

It is possible to defined the width (pixel) of the single columns (from left to right) for the event list of bookmarks here. The entries have to be separated by commas.

A **0** or a **Space character** will leave the corresponding column unchanged.

20,102,40,100,300,60,60 (default) - if required, adapt the width of the columns.

 *Columns cannot be faded out and their order cannot be changed!
Changes will only become active upon opening the window again!*

▼ Video - Overlays

Here it is possible to set colours and fonts of the overlays.

Bar 1 ... 3: Background

The colour display for the background is defined here.

Transparent - the background is displayed transparently.

Filling (vertical) (default) - the color gradient between **Color start / end** is realized vertically.

Filling (horizontal) - the color gradient between **Color start / end** is realized horizontally.

 Bar 1 ... 3: Color (Start)

The start color for the filling/color gradient of the background is defined here. Selection is realized with the help of a corresponding dialog.

bar.gradientdark (default) - System color for backgrounds from customizing.

... - indicate the color directly, if required, or select it.

 Bar 1 ... 3: Color (End)

The end color for the filling/color gradient of the background is defined here. Selection is realized with the help of a corresponding dialog.

bar.gradientlight (default) - System color for backgrounds from customizing.

... - indicate the color directly, if required, or select it.

 Font 1 ... 3: Font

The font for the text is defined here. Selection is realized with the help of a corresponding dialog.

Segoe UI (10) (default) - System font for text display from customizing.

... - if required, select the font type.

 Font 1 ... 3: Text color

The text color for the background is defined here. Selection is realized with the help of a corresponding dialog.

bar.text (default) - System color for text from customizing.

... - indicate the color directly, if required, or select it.

▼ Video - Local Camera 1 ... 3

Here you can set up a maximum of three cameras connected to the local workstation.

 Function

Here you set up the function of each local camera.

None (default) - the camera is inactive.

Windows MMI - select Windows MMI as device.

 MMI Device

Here you define the MMI device that is to be used.

Blank (default) - the camera is inactive.

... - select the desired MMI device (USB camera, TV, etc.).

▼ Video - Camera Control

In this section, you can define the settings for the external camera control device (for example, joystick).

**Device**

Here the device used for camera control is determined.

Without (default) - local control is **not** active.

... - select a compatible control device.



In general, control devices for video systems are connected via respective interfaces!

6.2.9 Intercom

In the section **Intercom**, you can define various settings that will affect the connection of an intercom system and its operation via the intercom control panel.

▼ Dialog: Settings / Global / Intercom

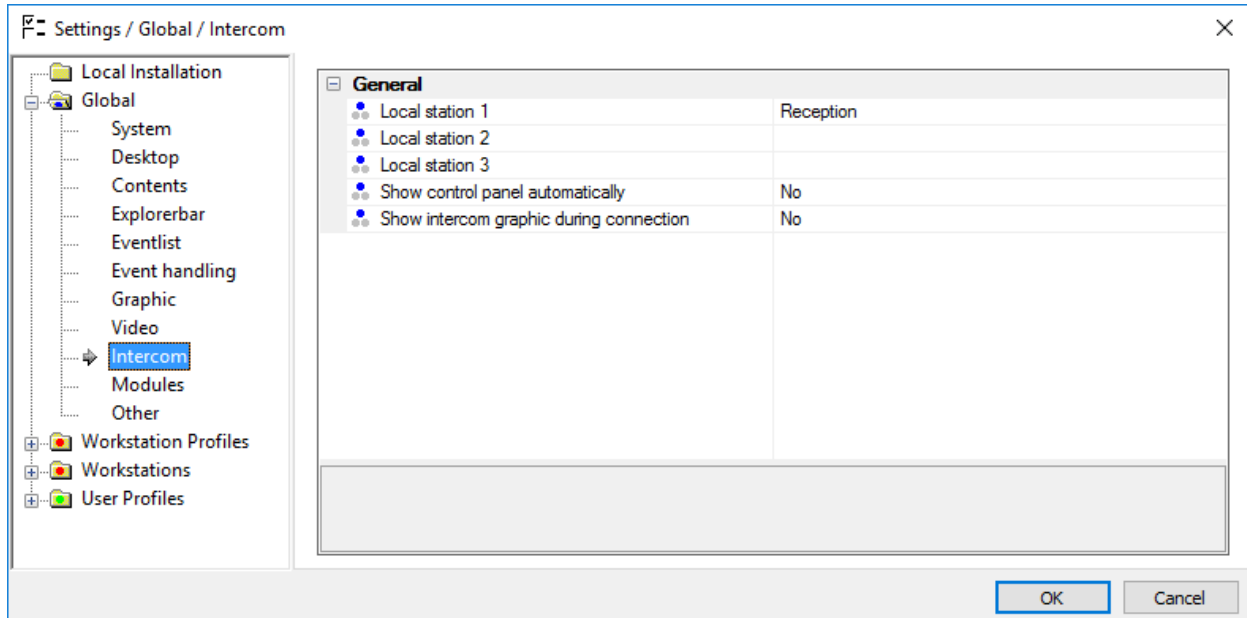


Figure 179: Settings / Global / Intercom

▼ Intercom - General

General settings for the integration of intercom elements.

▼ Local station 1 ... 3

Here you can define up to three stations located on this workstation (for example, when different communication installations are used).

You can select from all datapoints of the category: **intercom**.

Blank (default) - no local station is assigned.

... - select the desired stations(s) if applicable.

▼ Show control panel automatically

With this option you determine if the intercom control panel opens automatically when a call comes in (datapoint of the category: intercom).

Yes - the intercom control panel opens automatically upon incoming calls.

No (default) - the intercom control panel does **not** open automatically.

▼ Show intercom graphic during connection

Here you determine if the intercom graphic (Graphic 1 of the intercom datapoint) is automatically displayed via the event list when a call is accepted.

Yes - the intercom graphic is automatically displayed upon call acceptance.

No (default) - the intercom graphic is **not** automatically displayed upon call acceptance.

6.2.10 Modules

The **Module** section contains settings options for various external systems, primarily in the communication sector, such as SMS, e-mail, sound, etc.

▼ Dialog: Settings / Global / Modules

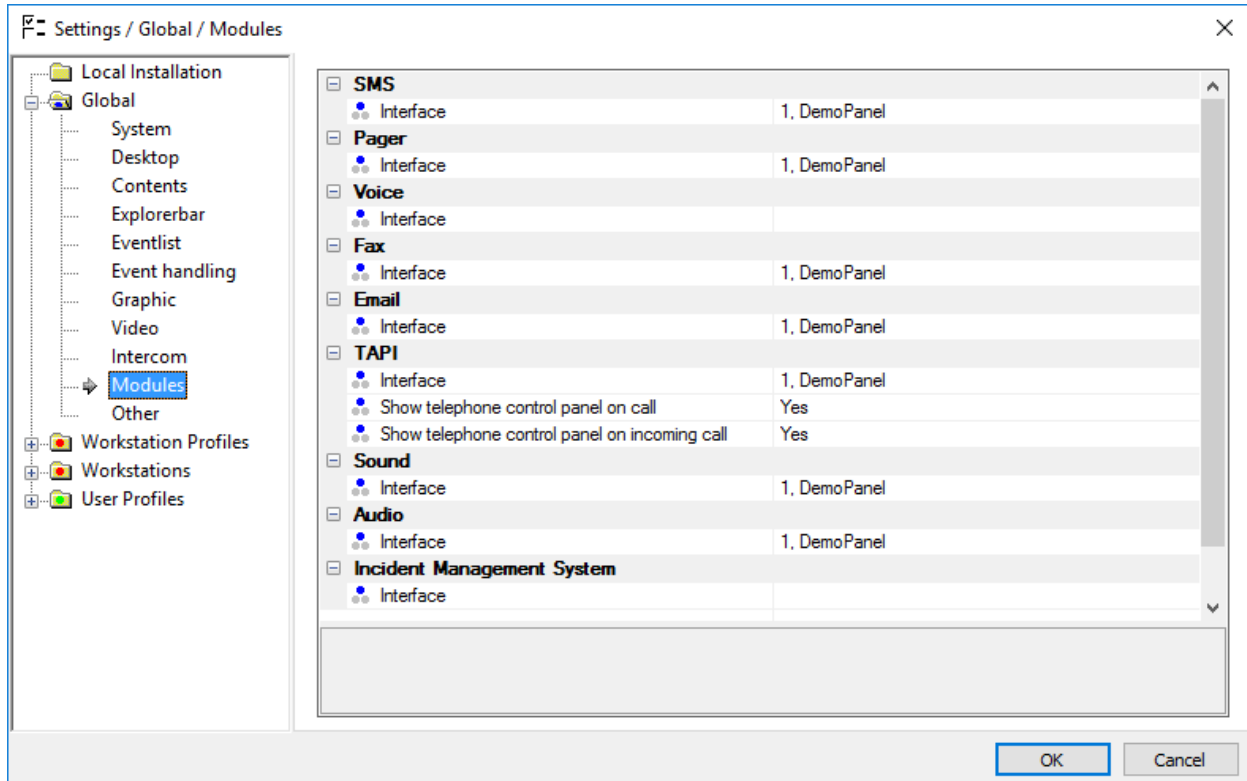


Figure 180: Settings / Global / Modules

▼ Module - SMS



Settings for SMS sending.

▼ Interface

Here you select the interface to carry out SMS. It is also possible to set up different interfaces on individual workstations.

Blank (default) - the function is inactive.

... - select the respective interface for SMS sending.

 The settings are used by the action, [send SMS](#) 

▼ Module - Pager



Settings for the sending of pager messages.

▼ Interface

Here the interface for pager messaging is selected. It is also possible to set up different interfaces on individual workstations.

Blank (default) - the function is inactive.

... - select the respective interface for pager messaging.

 The setting is used by the action, [send message to pager](#) 

▼ Module - Voice

Settings for the Voice function. This function may be used to play sound files or applied in TTS (text to speech) for text converted to sound files via ISDN.


Interface

Here you select the interface via which the respective sound files should be sent (ISDN). It is also possible to set up different interfaces on the individual workstations.

Blank (default) - the function is inactive.

... - select the respective interface for send-out.



The setting is used by the action, [send voice message](#) 

▼ Module - Fax

Settings for sending via fax.


Interface

Here you select the interface that carries out fax messaging. It is also possible to set up different interfaces on the individual workstations.

Blank (default) - the function is inactive.

... - select the respective interface for fax messaging.



This setting is used by the action, [send fax](#) 

▼ Module - Email

Settings for sending e-mails.


Interface

Here you select the interface for e-mail messaging. It is also possible to set up different interfaces on individual workstations.

Blank (default) - the function is inactive.

... - select the respective interface for sending e-mails.



This setting is used by the action, [send e-mail](#) 

▼ Module - TAPI

Settings for using a telephone connection via TAPI (Telephony Application Programming Interface).

Interface

Here you select the interface for TAPI communication.

Blank (default) - this function is inactive.

... - select the respective interface for the TAPI function.

Show telephone control panel on call.

Here you determine if the telephone control panel is automatically displayed when making a call, when a datapoint issues the command **call**.

Yes (default) - opens the telephone control panel automatically when making a call.

No - the telephone control panel is **not** automatically displayed here.

Show telephone control panel on incoming call

Here you determine if the telephone control panel is automatically displayed upon an incoming call for a subscriber that is defined as a datapoint.

Yes (default) - the telephone control panel is automatically opened upon call receipt.

No - the telephone control panel is **not** automatically displayed.

▼ Module - Sound


Settings for sound emission.

 Interface

Here you select the interface for playing/emitting sound files (only **.WAV** format). It is also possible to set up different interfaces on individual workstations.

Blank (default) - this function is inactive.

... - select the respective interface for sound emission.

 This setting is used by the action, [play sound](#)⁹⁹⁷.

▼ Module - Audio

Settings for audio systems (ELA).

 Interface

Here you select the interface for the control of audio in and output. It is also possible to set up different interfaces on individual workstations.

Blank (default) - this function is inactive.

... - select the respective interface for audio control.

▼ Module - Incident Management System

Settings for a coupled incident management system (IMS).

 Interface

Here you select the interface for the coupling of a connected incident management system.

Blank (default) - this function is inactive.

... - select the respective interface for the incident management system.

6.2.11 Other

In the section, **Other**, you can determine various settings used in the History display.

▼ Dialog: Settings / Global / Other

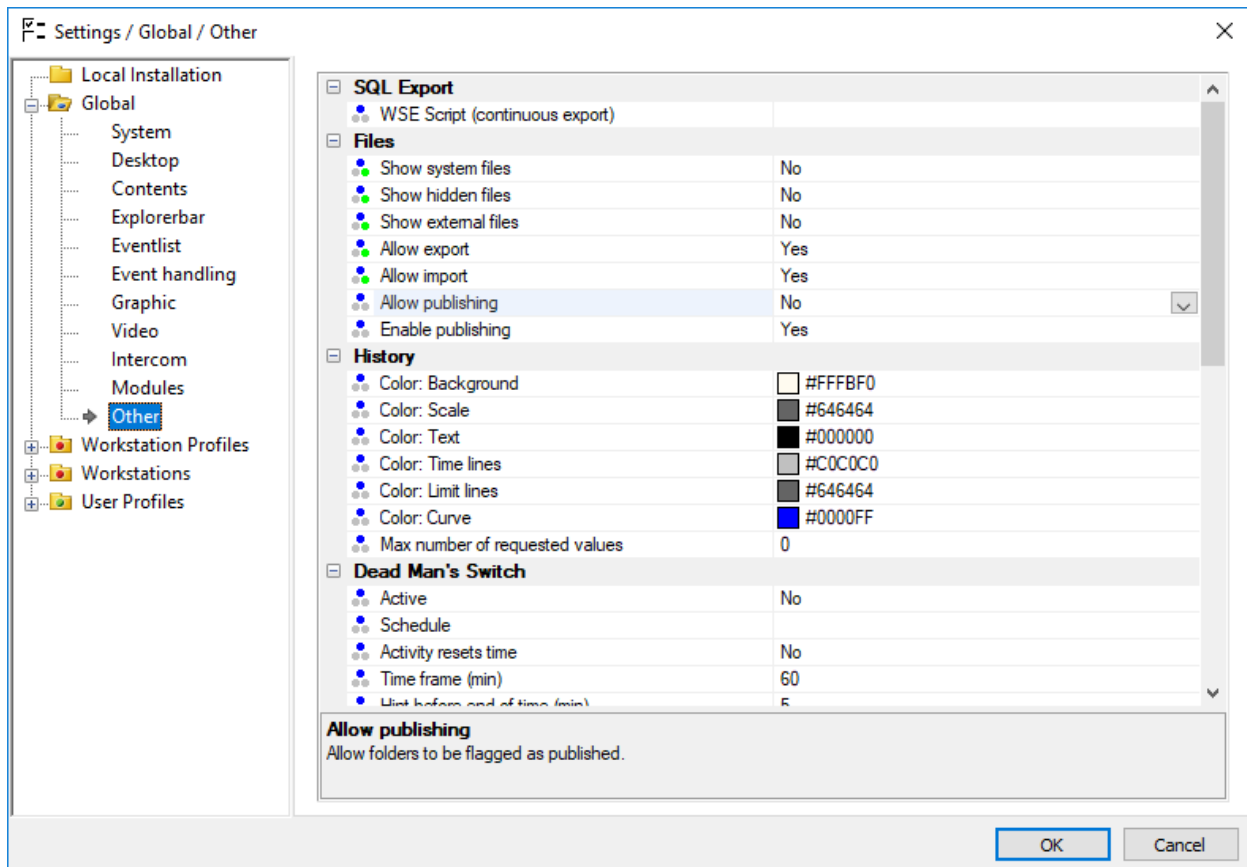


Figure 181: Settings / Global / Other

▼ Other - SQL-Export

▼ WSE-Script (continuous export)

Specifies the WSE-Script to use for continuously SQL-export. If no script is selected, the continuous SQL-export is switched off.

Blank (default) - continuous SQL-export is switched off.

... - enter the script name if applicable.

▼ Other - Files

In this section you can define the visibility of system files in the data explorer and if import and export of files (e.g. graphics, texts, lists, etc.) is allowed.

▼ Show system files

This setting defines, if the system setting and rights files (settings.xml, rights.dat) are visible or not.

No (default) - the system files are **not** visible.

Yes - the system files are visible.

**Show hidden files**

This setting defines, if the hidden files (files, attachments and media) are visible or not.

No (default) - the hidden files are **not** visible.

Yes - the hidden files are visible.

**Show external files**

This setting defines, if external files outside of the project folder under **This PC** are visible or not. A network access is only with assigned network folders possible.

No (default) - the external files are **not** visible.

Yes - the external files are visible.

**Allow export**

This setting defines, if files can be exported from WinGuard to the Windows® environment.

No - files can **not** be exported.

Yes (default) - files can be exported.

**Allow import**

This setting defines, if files can be imported from Windows® to WinGuard.

No - files can **not** be imported.

Yes (default) - files can be imported.

**Allow publishing**

This setting defines, if the modification of the folder / file setting **Published** is allowed or not.

No (default) - the publishing setting can **not** be modified.

Yes - the publishing setting can be modified.

**Execute publishing**

This setting defines the mirroring of published folders and files.

No (default) - mirroring of folders and files is **not** active.

Yes - mirroring of folders and files is activated.

Other - History

The **History** section pertains to the graphic representation of data in the History display, which can be accessed via the menu item **View | History Display**. The History display is only available for datapoints of the category, **value**, and if the function, **save History**, has been explicitly selected for that datapoint.

**Color: Background**

This setting defines the background color of the History display.

#ffffb0 (default) - select the desired background color if applicable.

(RGB value: 3 hexadecimal values, each between 00 and ff - e.g. #B2B2B2)

**Color: Scale**

This setting defines the color for the scale of the History display.

#646464 (default) - select the desired color for the scale if applicable.

(RGB value: 3 hexadecimal values, each between 00 and ff - e.g. #B2B2B2)

**Color: Text**

This setting defines the text color of the History display.

#000000 (default) - select the desired text color if applicable.

(RGB value: 3 hexadecimal values, each between 00 and ff - e.g. #B2B2B2)

**Color: Time lines**

This setting defines the color of the time lines in the History display.

#c0c0c0 (default) - select the desired color for the time lines if applicable.

(RGB value: 3 hexadecimal values, each between 00 and ff - e.g. #B2B2B2)

**Color: Limit lines**

This setting defines the color of the limit lines in the History display.

#646464 (default) - select the desired color for the limit lines if applicable.

(RGB value: 3 hexadecimal values, each between 00 and ff - e.g. #B2B2B2)

**Color: Curve**

This setting defines the color of the curve for the data display.

#0000ff (default) - select the desired color for the curve if applicable.

(RGB value: 3 hexadecimal values, each between 00 and ff - e.g. #B2B2B2)

**Max number of requested values**

Here you can define the maximum number of values that will be given in response to a query.

0 (default) - the query is limited to 50,000 values.

... - enter the maximum number of values for archive queries if applicable.

Other - Deadman's Control

Configuration of the functionality is only made via the settings. All settings can be defined globally and overwritten for profiles and workstations. However, in the global definition, the default settings for the function should be set to **not active**.

**Active**

This option activates or deactivates the total function.

No (default) - deadman's control is inactive.

Yes - deadman's control is active.



Please also note the options **Schedule** and **Time window**!

**Schedule**

It is possible to indicate a schedule for definition of execution times. If a schedule has been set, the sections **Sections 2 ... 12** define the active time period. For the section 1 of the schedule, monitoring is not active.

Blank (default) - if required, select a schedule.



If no schedule is indicated, there will be no limitations with regard to time!

Activity extends time

Using this option, it can be defined whether a keyboard entry or mouseclick will reset the time window.

No (default) - no time extension will take place.

Yes - time will be extended by user actions (mouse, keyboard).

Time window (min)

The time window is defined (in minutes). An alarm message will be triggered after expiration of this time.

60 (default) - if required, enter the desired time window.

0 - no alarm message will be triggered!



At 0, the total functionality will be deactivated!

Note before expiry (min)

The time (in minutes) is defined at which, before expiry of the time window, a note popup will be displayed at the main screen.

5 (default) - enter the desired time for note display.

0 - note display is deactivated.

Warning before expiry (min)

The time (in minutes) is defined at which, before expiry of the time window, there will be an acoustic warning.

1 (default) - enter the desired time for acoustic warning.

0 - the function is deactivated.

...

Sound

A sound file can be defined that will be issued in case of a warning.

wecker.wav (default) - if required, select a sound file.



The deadman's control function should not be activated globally, but only related to workstations or users!

Other - Control Operations

The default settings for display and monitoring of control operations are defined here.

Switching tolerance (sec)

After expiry of the time set up here, wrong states will be considered as mistakes.

30 (default) - if required, adapt the time.

0 - the function is deactivated.

▼

Presetting for the selection

With this option, the default setting for visibility of the list entries is defined.

Observed control operations - only observed control operations are visible.

All control operations (default) - all control operations are visible.

Columns widths

The column width for the list in the table view (from left to right) is defined in pixels. The entries are separated by commas.

90,100,20,100,100,50,200,160,200 (default) - if required, adapt the column widths.

**Sound Playback**

This option defines the type of acoustic information for control operations.

None - no acoustic note will be issued.

Once (default) - the corresponding sound file will be issued once.

Continuous - the corresponding sound file will be repeated until confirmation.

Sound

It is possible to define a sound file here which will be played upon a notification.

blank (default) - if required, select a sound file.

**Presetting: Start requires confirmation**

Here, the presetting for the option **Start requires confirmation** is defined for new control operations.

No (default) - the option is **not** activated.

Yes - the option will be activated.

**Presetting: End requires confirmation**

Here, the presetting for the option **End requires confirmation** is defined for new control operations.

No (default) - the option will **not** be activated.

Yes - the option will be activated.

**Presetting: Approval required**

Here, the presetting for the option **Approval required** is defined for new control operations..

No (default) - the option will **not** be activated.

Ja - the option will be activated.

**Activate program window on notification**

Here it is defined whether the program window shall be automatically reactivated upon a notification.

No (default) - the program window will **not** be reactivated.

Yes - the program window will be reactivated automatically.

Reactivate program window after (sec)

Here it is defined whether the program window shall be automatically reactivated after expiry of the time defined here and according to the existing notifications.

0 (default) - the program window will **not** be reactivated.

... - if required, indicated a reactivation time (sec.).

Other - Timers

Presettings for the timer of event display are defined here. The display of the progress bar of the timer can be realized via a corresponding button, in the toolbar of the eventlist.

**Use timers**

With this option, the timer functionality is activated. The timer display in the eventlist and the timer button in the toolbar are available then.

No (default) - the timer functionality is **not** activated.

Yes - the timer functionality is activated.

**Background color: Start / Hint / Warning / Expired**

Background colors for the timer progress bars are defined for the different timer sections. For selection of the colors, a corresponding dialog is available.

#cccccc (default) - Start

#ffe35c (default) - Note

#ff7373 (default) - Warning

#ff7373 (default) - Expired

... - if required, adapt the colors directly or select them.

(RGB value: 3 hexadecimal values, each between 00 and ff - e.g. #B2B2B2)

**Text color: Start / Hint / Warning / Expired**

The font colors for the timer progress bars for the different timer sections are defined here. For selection of the colors, a corresponding dialog is available.

#000000 (default) - Start / Note / Warning / Expired

... - if required, adapt the colors directly or select them.

(RGB value: 3 hexadecimal values, each between 00 and ff - e.g. #B2B2B2)

6.3 Workstation Profiles

Via the workstation profiles, settings for workstations that are of the same kind can be made. This allows you to centrally set up workstations with similar functions (for example surveillance).

In order to display and edit workstation profiles here in the settings, they must first be established. The respective window for the creation of profiles can be opened via the menu function **System | Profiles**. Once the workstation profiles have been established, the settings can be defined here. Subsequently, only special modifications may have to be done to individual workstations.

Almost all settings of the workstation profiles have already been determined (inherited) through the settings under [Global](#)^[422]. Only the definition for the automatic backup function can/must be added here.

All sections are, as a standard, displayed in a faded out way and cannot be change initially. In order to change an entry, it has to be selected via the context menu (right mouse button) and the setting has to be adapted to **Define here**. Now the corresponding change can be executed. In order to restore the superordinated pre-set (inheritance), the function **Remove this definition** can be executed via the context menu (see also [Settings](#)^[404]). Comparable functions are also available for the total section via the section headline (**Define all here** resp. **Remove all definitions**).



Generally, it makes sense only to set up automatic backups on a server or a standalone system, since it is only there that the event archive and all log data is available for backup.

6.4 Workstation

In this section, modifications for individual workstations can be made. Almost all of these settings are already pre-defined (inherited) through the settings in the area [Global](#)^[422] and Workstation Profiles. The settings for the automatic backup function must be defined here if they have not been predetermined by the workstation profiles.

All sections are, as a standard, displayed in a faded out way and cannot be change initially. In order to change an entry, it has to be selected via the context menu (right mouse button) and the setting has to be adapted to **Define here**. Now the corresponding change can be executed. In order to restore the superordinated pre-set (inheritance), the function **Remove this definition** can be executed via the context menu (see also [Settings](#)^[404]). Comparable functions are also available for the total section via the section headline (**Define all here** resp. **Remove all definitions**).

6.5 User Profiles

User profiles are the central elements to define settings for individual users and groups of users. Within the context of the settings, the respective user rights are also assigned. The user profiles thus, in large part, define the appearance and actions by WinGuard for the single user and/or a group of users.

In order to display and edit user profiles here in the settings, they must first be established. The respective window for the creation of profiles can be opened via the menu function **System | Profiles**. Once the user profiles have been established, the settings can be defined here.

Every user who has access to the system may be assigned one or several profiles that are then available for selection.

All available settings here have already been pre-determined through the settings established in the area [Global](#)^[422] and [Workstations](#)^[524]. These inherited settings can be respectively changed or modified for the user profiles.

All sections are, as a standard, displayed in a faded out way and cannot be change initially. In order to change an entry, it has to be selected via the context menu (right mouse button) and the setting has to be adapted to **Define here**. Now the corresponding change can be executed. In order to restore the superordinated pre-set (inheritance), the function **Remove this definition** can be executed via the context menu (see also [Settings](#)^[404]). Comparable functions are also available for the total section via the section headline (**Define all here** resp. **Remove all definitions**).

7 Setup

This chapter contains information regarding setting up the system following installation. For information about starting the program, please refer to the section: [Program Start](#)^[146]. System setup not only includes definitions such as toolbars, menu bars, printers, etc., but also the definition of users, profiles, rights, etc.

WinGuard allows you to configure the program interface in large part according to your preferences. Here you can determine how the program interface should be arranged depending on the user or workstation, and, among other things, define which [Menu](#)^[650], [Toolbar](#)^[654], and [Shortcuts](#)^[144] should be used. These are elements that you can define freely. You can also select the scope and configuration of the retrievable functions. Numerous pre-defined program commands are available, as are self-defined commands that allow you to execute any actions in the program.

The customizable configuration of the program interface allows you to ensure that certain users only have access to program functions that are relevant to their activities. You can also modify the operability of the interface to meet the specific requirements of a workstation. For example, if a touchscreen is to be used, you can configure an interface that can be operated mainly via buttons.

In the section, [Settings](#)^[404], the program interface, standard and event displays, control panels, etc. for individual workstations and/or users are defined. This allows you to change or modify the configuration of the program interface at any time even during system operation.

The [Layouts](#)^[604] are important design instruments that enable you to freely define the displayed content of active program windows. Every program window has a main display area, subsequently also referred to as **Display**, in which content such as graphics, texts, etc. and even other layouts can be directly shown.

The actual data supply, which includes interfaces, datapoints, graphics, texts, etc., is described in the section: [Data Supply](#)^[691].

7.1 Persons

Under persons, various information regarding people and organizations can be filed. This information can then be used in texts or graphics. For example, when an event is displayed, the name and address of a person that should be contacted in emergencies can be centrally filed. Personal data is also used by several commands such as SMS, voice message, e-mail, fax, etc. and are also available for notifications.

With the command **Database|Persons...** the window, **DB:Persons** and the list of defined people is shown in [Table View](#)^[526]. To view or edit the record, you can switch to [Form View](#)^[527]. You can add or delete persons in both formats (table and form), but can only edit persons in Form view.

Alternatively, the window containing the form for editing/viewing persons can also be directly accessed via the persons explorer.

7.1.1 Table View

In the table view, all persons defined in the system are listed. Here you can add, copy, or delete persons. The table columns contain the content of the following fields for each record: Company/Group, Last Name, First Name, Telephone, etc. as well as information regarding last changes. By double-clicking on one of the records or by selecting an entry and then clicking on the button [Form](#)^[527] view, the form is opened for editing. For additional information on the content of the individual columns, please see the section: Form View.

Window: Persons - Table View

Comp./Group	Last name, First name	Phone Office	Phone Private	Substituted	through	Last change	by	Segment
	Miller, David	555 234 5678		No		23.09.16 19:42	Andy	
	Notruf	112		No		02.09.14 12:13	Andy	
	O'Neil, Andreas	555 345 6789		No		17.12.14 10:32	Andy	
	Polizei	0800 6 888 000		No		24.11.14 15:30	Andy	
	Smart, Lucy	555 456 7890		No		06.03.13 11:57	Start	
	Smith, John	555 123 4567		No		19.09.14 12:27	Andy	
Administrators	Müller, Andreas			No		17.11.14 11:42	Andy	
Main User	Schulz, Hans			No		17.11.14 11:43	Andy	
Main User	Smith, Marc			No		21.11.14 14:21	Andy	
Sicherheitsdie...	DB Sicherheit	(800) 700400399		No		21.09.16 22:47	Andy	
User	Meier, Bernd			No		17.11.14 11:43	Andy	
User	Miller, Ulric			No		21.11.14 14:21	Andy	

Figure 182: Persons - Table View

Functions: Toolbar - Table View



Form View

This function switches the window to form view.



Previous / Next Record

With these functions the previous / next record is selected.



Changes are accepted without further confirmation!



New

With this function a new record is created.



Copy

This function creates a copy of a selected record.



Delete

With this function the selected record is deleted.

7.1.2 Form View

In form view, an editing form is displayed in which the information for persons can be entered or changed. Entry elements for various data such as name, department, address, contact numbers, e-mail, etc. are available. Persons can also be added or their data record deleted or copied here.



Telephone numbers should be entered in canonical form (for example, +49(6103)8073535). Otherwise, the selection (for example in the SMS interface) may not be warranted! External access codes and area codes are defined during setup of the respective interface cards (such as ISDN) in Windows!

The individual elements for definition of the person-related data are available in the various sections of the form.

Window: Persons - Form View

Figure 183: Persons - Form View

Functions: Toolbar - Form View



Table View

This function switches the window to table view.



Previous / Next Record

With these functions the previous / next record is selected.



Changes are accepted without further confirmation!



New

With this function a new record is created.



Copy

This function creates a copy of a selected record.



Delete

With this function the selected record is deleted.

**Undo**

With this function the last change(s) can be undone / reversed.

**Save changes**

With this function the current record is saved.

▼ Data section: Persons**Company/Group**

Here you can define a company or group to which the person should be assigned (optional).

Blank (default) - the person is not assigned to a group.

... - select a company or group or enter one.



A new group is added by entering a new name.

Name

Here the last name of the person is defined (required).

Blank (default) - enter the last name.

First Name/Salutation

Here you can define the first name and salutation for the person (optional).

Blank (default) - enter the first name and/or salutation if applicable.



A new salutation cannot be added to the selection field.

Department

Here you can define the department in which the person works (optional).

Blank (default) - enter the department if applicable.

Function

Here you can define the person's function in the company/department (optional).

Blank (default) - enter the function if applicable.

Language

Here you can define a language for the person (optional).

Blank (default) - a language is not assign to the person.

... - select a language if applicable.

▼ Data section: Phone Numbers**Office**

Entry of the office telephone number in canonical format (optional).

Blank (default) - enter the respective telephone number if applicable.

Private

Entry of the private telephone number in canonical format (optional).

Blank (default) - enter the respective telephone number if applicable.

Mobile

Entry of the mobile telephone number in canonical format (optional).

Blank (default) - enter the respective telephone number if applicable.

Pager

Entry of the pager number (format depends on pager system) (optional).

Blank (default) - enter the respective number if applicable.

Fax

Entry of the fax number in canonical format (optional).

Blank (default) - enter the respective fax number if applicable.

▼ Data section: Address**Street**

Entry of the street for mailing address (optional).

Blank (default) - enter the street name.

ZIP, City

Entry of the ZIP code and city (optional).

Blank (default) - enter the ZIP code and city.

▼ Data section: Internet**Email**

Entry of the e-mail address (optional).

Blank (default) - enter the e-mail address if applicable.

Website

Entry of the website (for example, home page of company, etc. - optional)

Blank (default) - enter the web address if applicable.

▼ Data section: Other**Substituted**

This option activates the substitution function. If this selection is active, the respective information is taken from the substitute and then used in texts, graphics, and also for dialing (optional).

Active - the substitution function is active.

Inactive (default) - the substitution function is **not** active.

**through**

Here you select the substitute from the list of available persons (optional).

Blank (default) - select the substitute if applicable.

Info

Here you have the option of entering additional general information about the person (optional).

Blank (default) - enter a text if applicable.

i *Currently, information entered here is not used further by the system.*

ExtRef

Here you can add an external reference to the person. These may be required for some interfaces when they are coupled with external systems.

Blank (default) - enter the respective external reference if applicable.

Segment

Here you can assign a segment definition to a person. In this case the data of the person are only available on the appropriated workstations.

Blank (default) - select a segment if applicable.

7.1.3 Explorer

In the explorer window, **Persons**, people are displayed arranged by **company/group**. For each company/group, a respective folder is automatically inserted to which all persons of the respective company/group are then assigned. If no company or group was entered for a person, this person is assigned to the folder, **Other**, which is always inserted at the very end of the list.

With the telephone button located on the far right in the titlebar of the explorer, all entered contact numbers for a person can be displayed. Furthermore, general functions such as edit, new, etc. are available via the context menu.

Example: Explorer - Persons with Context Menu

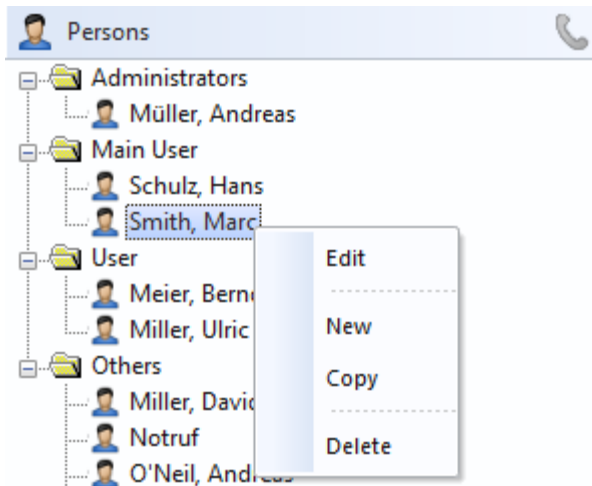


Figure 184: Explorer - Persons

Functions: Explorer - Persons



(Close explorer)

Provided this function is activated for the user, you can close the Persons explorer with this button.

**(Show telephone numbers)**

This function shows a window containing the telephone information of the selected person at the mouse position.

▼ Functions: Explorer - Persons (generally)

Here is a description of the general functions available in the persons explorer. Some of the functions are dependent on the selected object or the user rights.

Information regarding expanded explorer functions available for editing persons is available in the section [Setup](#)^[526], under [Persons](#)^[526].

- **(Double or single click with the left mouse key)**

By double-clicking on a person, the window **DB:Persons** is opened in the Form view, meaning that no changes can be made here. If the window is already active, a single click on a person is sufficient to change the display accordingly.

- **(Single click with right mouse button)**

Using the right mouse button to click on an entry in the explorer opens the corresponding context menu with the available functions.

- **View**

This function opens the window **DB:Persons** with the Form in view mode, meaning that no changes can be made here.



This function is only available if the user does not have the right to edit persons!

- **Edit**

This function opens the window **DB:Persons** in the Form view in editing mode, meaning that persons can be edited here.

([please see: [Form View Persons](#)^[527]])

- **New**

This function adds a new person and opens the window to edit that person.

- **Copy**

With this function a copy of the selected person is created under the same name. To edit persons, the person must be subsequently selected and the function, **edit**, carried out.

- **Delete**

This function deletes the selected person following appropriate confirmation.

7.2 User

The user definitions determine who can log in to the system and what operating options are available to that user. For every user, a distinct, max. 8-character ID must be defined. Using this ID or the login name (with or without password) users can log in to the system. Logging in at several different workstations simultaneously is possible for users.

The configuration of the user interface as well as available functions and rights are determined for every user through the assignment of one or more profiles. Additional rights and settings can be assigned or withdrawn through the definitions of the individual workstations.

As long as no users have been established, you will be automatically logged in to the system as a user at program start without any further entries (ID: 000000). This user is furnished with all rights (administrator). After one or more users have been established, login into the system is only possible with a defined ID or login name.

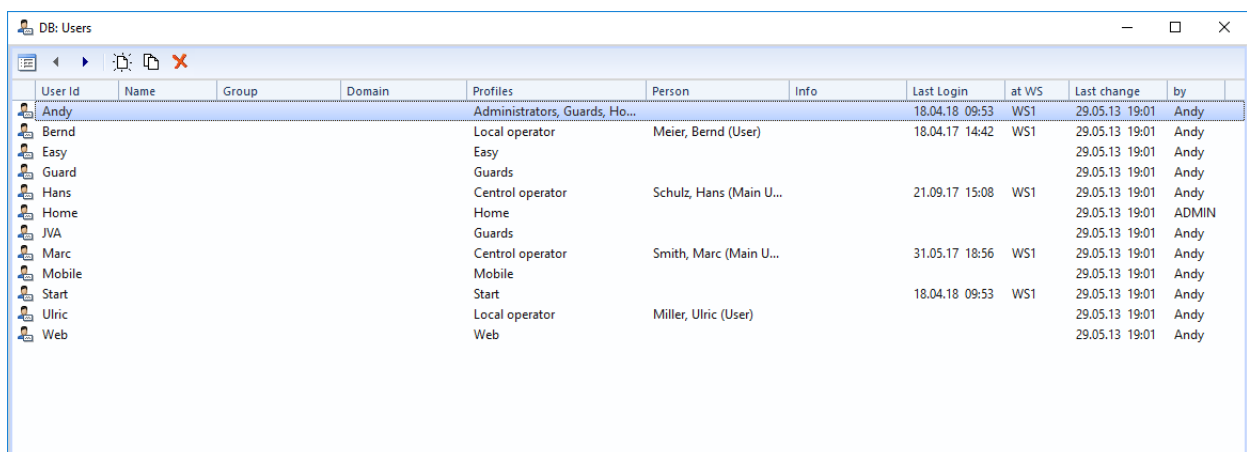
Additionally users can be defined as administrators. Such a user owns independent of the assigned rights always all rights, i.e. he will not lose his rights by mistake e.g. wrong rights, etc. He can also access the settings all time typing **CTRL+SHIFT+S**.

With the menu command **System|User...** you can access the window **DB:User**. You will initially see the [Table View](#)⁵³³ that lists all users defined in the system. Viewing or editing a specific record requires switching to [Form View](#)⁵³⁴. Users can be created or deleted in both formats/views, but editing is only possible in Form view.

7.2.1 Table View

All users defined in the system are listed in the table view. Here you can set up, copy, and delete users. You can open the editing window by either double-clicking on a record, or selecting a record and then activating the button, [Form View](#)⁵³⁴. You can find additional information about the content in the individual columns in the section, Form View.

Window: Users - Table View



User Id	Name	Group	Domain	Profiles	Person	Info	Last Login	at WS	Last change	by
Andy				Administrators, Guards, Ho...			18.04.18 09:53	WS1	29.05.13 19:01	Andy
Bernd				Local operator	Meier, Bernd (User)		18.04.17 14:42	WS1	29.05.13 19:01	Andy
Easy				Easy					29.05.13 19:01	Andy
Guard				Guards					29.05.13 19:01	Andy
Hans				Control operator	Schulz, Hans (Main U...		21.09.17 15:08	WS1	29.05.13 19:01	Andy
Home				Home					29.05.13 19:01	ADMIN
JVA				Guards					29.05.13 19:01	Andy
Marc				Control operator	Smith, Marc (Main U...		31.05.17 18:56	WS1	29.05.13 19:01	Andy
Mobile				Mobile					29.05.13 19:01	Andy
Start				Start			18.04.18 09:53	WS1	29.05.13 19:01	Andy
Ulric				Local operator	Miller, Ulric (User)				29.05.13 19:01	Andy
Web				Web					29.05.13 19:01	Andy

Figure 185: User - Table View

Functions: Toolbar - Table View




Form View

This function switches the window to form view.

◀ ▶ Previous / Next Record

With these functions the previous / next record is selected.

 *Changes are accepted without further confirmation!*

**New**

With this function a new record is created.

**Copy**

This function creates a copy of a selected record.

**Delete**

With this function the selected record is deleted.

7.2.2 Form View

In form view, an editing form is displayed in which the user data can be entered or modified. Various entry elements such as ID, password, profile, etc. are available.

▼ **Window: User - Form View**

The screenshot shows a window titled "DB: Users" with a standard Windows-style title bar. Below the title bar is a toolbar with icons for close, back, forward, refresh, save, and delete. The main content area is divided into three sections:

- User:** Contains a "Type" dropdown menu set to "User", a "Group" dropdown menu, a "User Id" text box containing "Andy", a "Password" text box with masked characters, a "Confirm" text box with masked characters, a "Login" text box, a "Domain" text box, and two checkboxes: "Administrator" (checked) and "Disabled" (unchecked). There is also an unchecked checkbox labeled "Info entry (only LDAP login)".
- Profiles:** Contains a tree view under "User Profiles" with sub-items: "Administrators", "Control operator", "Guards", "Home", and "Local operator". Each sub-item has a small icon and a checkmark. To the right of the tree are buttons for "+", "X", and a checkmark.
- Other:** Contains a "Person" dropdown menu set to "Müller, Andreas (Administrators)", a "Last name:" text box, a "First name:" text box, an "Info:" text box with a scroll bar, and an "ExtRef:" text box.

Figure 186: User - Form View

▼ **Functions: Toolbar - Form View**



Table View

This function switches the window to table view.



Previous / Next Record

With these functions the previous / next record is selected.



Changes are accepted without further confirmation!

**New**

With this function a new record is created.

**Copy**

This function creates a copy of a selected record.

**Delete**

With this function the selected record is deleted.

**Undo**

With this function the last change(s) can be undone / reversed.

**Save changes**

With this function the current record is saved.

▼ Data section: System access**Type**

The dataset type is defined here. Select a type.

User (default) - is the definition of a user

User group - is the definition of a user group

User Id

Here a unique user ID for login is defined. The ID cannot exceed 8 characters, dot (.) and at (@) are not permitted. For login upper and lower case characters are not distinct.

Blank (default) - enter an ID for the user.

Name

Here a unique name (text) for alternative system login can be (additionally to the User Id) defined. The name cannot exceed 50 characters, dot (.) and At (@) are permitted. While login upper and lower case characters are not distinct.

For login via domain, here the user login name from the domain must be used.

Blank (default) - enter a login name for the user if applicable.

Domain

If user login is via domain, then the domain name must be entered here (optional).

Blank (default) - enter the domain name if applicable.

Info entry (only LDAP login)


Users having an info entry are usually those users that have been created automatically upon login via LDAP (for better traceability). However, this also leads to the fact that users for which this option has been set can only register via LDAP and not log in locally. This means, in case no connection can be established to LDAP, these users cannot log in to the system and might then only be available for research purposes (e.g. archive research).

inactive (default) -

- in case of a defined domain (LDAP user), the user can **not** log in.
- only local login possible (without defined domain).

active -


- the user can only log in **via LDAP**.
- local login **not** possible.

 *In case of a local user, the option has to be deactivated and a domain must not be defined too!*

 Group

The user can be assigned to a group.


Blank (default) - if required, select a user group

 *Only available in case of type user!*

 Password

Here you define the password for the user. A password can consist of a maximum of 19 characters (upper- and lower case is distinct), but this field can also be left blank (optional).


Blank (default) - enter a password if applicable.

 *Only available in case of type user!*

 Confirm

Re-enter password to ensure, for security reasons, that the password is hidden.

Blank (default) - re-enter password if applicable.

 *Only available in case of type user!*

 Disabled

Using this option, a user can be temporarily deactivated for login, i.e. it might be that he cannot log into the system any more.

inactive (default) - the user has been approved for login.

active - the user is blocked for login.

**Administrator**

With this option, a user can be defined as a special administrator. Such a user owns independent of the assigned rights always all rights, i.e. he will not lose his rights by mistake e.g. wrong rights, etc. He can also access the settings all time typing **CTRL+SHIFT+S**.

Administrator user can only be modified by administrators. Only such users can modify this setting! If there is no active administrator defined, a normal users with the required rights can change this setting too.

inactive (default) - the user is **no** special administrator.

active - the user is defined as a special administrator.



Only available in case of type user!

▼ Data section: User Profiles

(List of available profiles)

List of profiles available to the user.

Blank (default) - select a profile if applicable.

**(Open dialog for profile selection)**

This function opens a dialog for selection or adding of the profiles.



Only those profiles that have not been assigned here can be found in the selection!

**(the selected profile is removed)**

Removes the selected profile from the list of available profiles.

**(the selected profile is activated / set to standard)**

This function defines the selected profile(s) as active or standard profile(s). A user profile has to be selected always.

- **User and workstation profiles** can be selected from the assigned elements during login. If the first profile is added it will become automatically active. If you have assigned multiple profiles, only one of each can be the active one.
- **Function profiles** can be activated dynamically. You can select anyone to predefine the basically active profiles.
- **Right profiles** are always active.



The standard/active profiles are marked by corresponding icons in the list!



An user without user profile (without direct right assignment or active function profile) will have all rights!

▼ Data section: Other

Person

Here you select the person that should be assigned to the user (optional).

Blank (default) - select the respective person if applicable.



Only available in case of type user!

Last name

The last name of the user can be defined here.

blank (default) - if required, enter the name.



This indication might overwrite the name of an assigned person!

First name

The first name of the user can be defined here.

blank (default) - if required, enter the first name.



This indication might overwrite the first name of an assigned person!

Info

Here you can enter additional information about the person. Currently, this information is not used any further by the system (optional).

Blank (default) - enter additional information if applicable.

ExtRef

Here you can define an external reference for the user, which is required for some interfaces when coupled with external systems.

Blank (default) - enter the respective external reference if applicable.



Only available in case of type user!

7.2.3 LDAP Login

Users that have authenticated via **LDAP** and whose user name has not yet been defined in the WinGuard user management will be automatically set up and marked as **Info entry**. If there already is an entry for the same user name, this entry will be updated.

In this way, all users that have been active are known to the system so that, upon searching in the archive and in logs, it can be searched for the user name or even for the first and last name of a user, in addition to the user ID.

The users that have been automatically created and marked as info entry can be recognized by the **i** (overlay) at the user icon. The characteristics **Info entry** can be adapted upon editing of a user entry.



*A mobile client (iOS and Android) can not login using LDAP if the encryption of the communication is **activated!***



A web-client can not login using LDAP any time!

Behavior at LDAP-Login:

- User name is not defined in WinGuard
 - User identification is received from LDAP
 - User identification check
 - User identification exists
 - Domain identically => data updated (user name, last name, first name)
 - Domain not identically / blank => login not possible
 - User identification not existing
 - New data set with Info entry will be created and saved

- User name is defined in WinGuard
 - normal login => data updated (last name, first name)
- User identification exists in WinGuard
 - User name and domain are checked
 - Domain not existing => Login not possible
 - Normal login => data updated (last name, first name)
- User identification is not existing in WinGuard
 - Login not possible

Upon LDAP login, the following data is saved or updated:

- User name (entered by user)
- User identification (is only entered upon new setup)
- First name (from LDAP attribute)
- Last name (from LDAP attribute)
- Time of last login
- Workstation of last login
- Info entry (is only set upon first setup)



The definitions of *First name* and *Last name* have a higher priority than linked information from the person definitions!

7.2.4 Remarks

Persons who do not have a user definition cannot log into the system. On the other hand, it is not required that a user is assigned a person - although this is reasonable.



Please be sure to remember your password as you will not be able to log into the system without it!



Users without an ID cannot log into the system!



Users that do not have an assigned profile have all rights available to them!

7.3 Workstations

If you wish to set up and operate WinGuard as a multi-client system, then setup of all workstations, server as well as clients, is required. When defining workstations, each is identified by its distinct number and distinct name.

The names and numbers assigned to each respective workstation are used for login by the individual clients at the server. They are also used for the definitions in event routing and monitoring. The server itself also uses its name for the assignment of its own workstation number, which is required to start the corresponding interfaces.

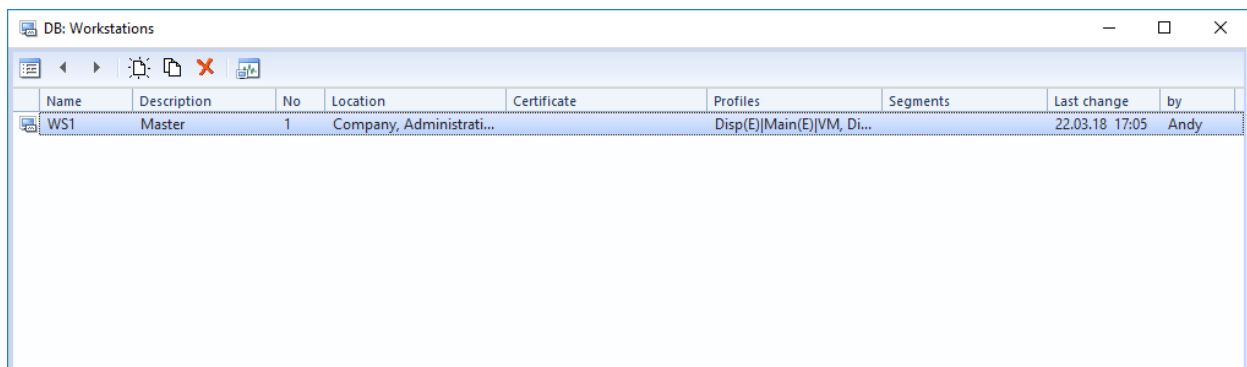
Via the menu command **System | Workstations...** you can open the window **DB:Workstations**. You will first get to the [Table View](#)^[541] which lists all workstations defined in the system. To view or edit a record, it is necessary to switch to the [Form View](#)^[542]. New workstations can be set up or deleted in either view, but editing is only possible in Form View.

i Currently, the number of possible workstations (workstation numbers) is limited to 255.

7.3.1 Table View

All defined workstations are listed in the table. The table columns contain the content of the following fields for every record: number, name, location, etc. By double-clicking on a record or by selecting a record and then clicking on the button [Form View](#)^[542] the editing window can be opened. Additional information about the content of the individual columns can be found in the section [Form View](#)^[542].

Window: Workstations - Table View



Name	Description	No	Location	Certificate	Profiles	Segments	Last change	by
WS1	Master	1	Company, Administrati...		Disp(E) Main(E) VM, Di...		22.03.18 17:05	Andy

Figure 187: Workstations - Table View

Functions: Toolbar - Table View



Form View

This function switches the window to form view.



Previous / Next Record

With these functions the previous / next record is selected.



Changes are accepted without further confirmation!



New

With this function a new record is created.

**Copy**

This function creates a copy of a selected record.

**Delete**

With this function the selected record is deleted.

**Network Monitor**

After clicking this button, the window [Network Monitor](#)³³⁵ is opened. There, the network communication can be observed and displayed/saved for test purposes.

7.3.2 Form View

The form view displays an editing form that allows you to enter or modify information for workstations. You can define workstation numbers, names, profiles, etc. as well as add new workstations and delete existing ones. The definitions of all other data for workstations such as system, desktop, content, etc. are made in the dialog, Settings.

Available profile assignments for workstations:

- Workstation profiles
- Function profiles
- Right profiles

▼ Window: Workstations - Form View

The screenshot shows a software window titled "DB: Workstations". At the top, there is a toolbar with icons for table view, navigation (previous/next), a plus sign, and a copy icon. Below the toolbar, the form is organized into several sections:

- Workstation:** Contains three input fields: "Name" (filled with "WS1"), "Description" (empty), and "Number" (filled with "1").
- Profiles:** A tree view showing a hierarchy of profiles. The root is "Workstation Profiles", which includes several sub-items: "Disp(E)|Main(E)|VM", "Disp|Main(E)|VM", "Main(E)", "Main(E)|Disp", "Main(E)|Disp(E)", "Main(E)|VM", and "Projecting".
- Segments:** An empty list box with a plus sign icon on the right.
- Other:** Contains three unchecked checkboxes: "Usable as display", "Usable for control operations", and "Usable as web station". Below these is a "Location" dropdown menu currently set to "<none>" and an empty "Certificate" text field.

Figure 188: Workstations - Form View

▼ Functions: Toolbar - Form View



Table View

This function switches the window to table view.



Previous / Next Record

With these functions the previous / next record is selected.



Changes are accepted without further confirmation!



New

With this function a new record is created.



Copy

This function creates a copy of a selected record.

**Delete**

With this function the selected record is deleted.

**Undo**

With this function the last change(s) can be undone / reversed.

**Save changes**

With this function the current record is saved.

**Network Monitor**

After clicking this button, the window [Network Monitor](#)³³⁵ is opened. There, the network communication can be observed and displayed/saved for test purposes.

▼ Data section: Workstation

Number

Here the distinct number (ID) of the workstation is defined. This number is used in several areas of the system such as event routing, login, etc. as well as the definition of internal datapoints (required).

Blank (default) - enter the number of the workstation.

Name

Here the distinct name of the workstation is defined. The assignment of the workstation number in the system is later determined via this name (required).

Blank (default) - enter the name of the workstation.

▼ Data section: Profiles

(List of available workstation profiles)

List of workstation profiles available for this workstation.

Blank (default) - select a profile if applicable.

**(Open dialog for profile selection)**

This function opens a dialog for selection or adding of the profiles.



Only those profiles that are not assigned here can be found in the selection!

**(the selected profile is removed)**

Removes the selected profile from the list of available profiles.

**(the selected profile is set as standard)**

This function defines the selected profile(s) as standard profile(s). A user profile has to be selected always. In addition, a functional profile can be defined.



The standard profiles are marked by corresponding icons in the list or the tree!

▼ Section: Segments

Only visible in assigned segments

Using this option, it can be defined whether this workstation is using only the data of the assigned segments.

inaktiv (default) - the workstation is using (replicating) all data.

aktiv - the workstation is only using (replicating) the data of the assigned segments.

(List of assigned segments)

This is the list of the segments assigned to the workstation.

leer (default) - select one or more segments if applicable.

+ (Open dialog for segment selection)

This function opens a dialog for selection or adding segments.

✗ (the selected segment is removed)

Removes the selected segment from the list of assigned segments.

▼ Data section: Other

Usable as display

Using this option, it can be defined whether this workstation can also be selected as display for video output.

inactive (default) - the workstation can **not** be selected as display.

active - the workstation can be selected as display.

Usable as web station

Using this option, it can be defined whether this workstation (name) can also be selected as webclient.

inactive (default) - the workstation can **not** be selected as webclient.

active - the workstation can be selected as webclient.

Usable for control operations

Using this option, it can be defined whether this workstation can also be used for control operations.

inactive (default) - the workstation can **not** be used for control operations.

active - the client can be used for control operations.

Location

Here, a location can be assigned to workstations. This definition is used, for example, in the Austrian Standard mode to regulate control of fire detection systems (optional).

Blank (default) - no location has been assigned to the workstation.

... - select a location for the workstation if applicable.

Certificate

Here you can define the name of a certificate for encryption of the workstation data.

leer (default) - define the certificate if applicable.

7.4 Profiles

In the system, we fundamentally differentiate between types of profiles, the **user-**, **workstation-**, **function-** and **rights profiles**. Via the profiles, the look and functions of user interfaces can be defined for users, user groups, and workstations. User rights for working in the system can also be defined in a user profile. More than one profile can be assigned to every user in order to provide him/her with the necessary rights and functions to perform his/her responsibilities. Users can choose from the profiles assigned to them at system login. The selection is pre-allocated with the default profile for the user or workstation. The appearance and functions of the program and user interface depend on the profile that was selected, as do the rights.

With the menu command **System|Profile...** you can open the window **DB:Profile**. You will first see the [Table View](#)^[546] that lists all the profiles (user and workstation) that are defined in the system. To edit a record, you can then change to [Form View](#)^[547]. While you can add or delete profiles in both formats, you can edit profiles on in form view. Only the basic information about the individual profiles is available for editing here. The definition for all the other data of the profiles for system, user interface, Explorerbar, event list, etc. are made in the section, Settings (**System|Settings...**) and for rights (**System|Rights...**).



Rights are assigned to a user profile through the editing of rights!

7.4.1 Table View

In the table view, all defined profiles (user and workstation) are listed. The columns of the table contain the content of the following fields for each record: Type, Name, Descriptions, etc. By double-clicking on one of the records or by selecting an entry and then clicking on the button [Form](#)^[547] view, the form is opened for editing. For additional information on the content of the individual columns, please see the section: Form View.

Window: Profiles - Table View

Type	Name	LDAP Name	Description	Assigned Profiles	Last change	by
User Profile	Administrators		Default profile for Administrators	Disp(E) Main(E) VM, Disp Main(E) ...	04.07.17 13:50	Andy
User Profile	Easy		Default profile for simple visualisation	Main(E)	27.01.17 14:57	Andy
User Profile	Guards		Default profile for Guards	Main(E)	27.01.17 14:57	Andy
User Profile	Home		Default profile for Home	Main(E)	27.01.17 14:57	Andy
User Profile	Control operator		Default profile for Control operator	Disp(E) Main(E) VM, Disp Main(E) ...	03.07.17 12:57	Andy
User Profile	Mobile		Default profile for Mobile	Main(E)	27.01.17 14:57	Andy
User Profile	Start		Default profile for Start	Main(E)	27.01.17 14:58	Andy
User Profile	Tablet		Default profile for Tablet	Main(E)	27.01.17 14:58	Andy
User Profile	Local operator		Default profile for Local operator	Disp(E) Main(E) VM, Disp Main(E) ...	27.01.17 14:58	Andy
User Profile	Web		Default profile for Web	Main(E)	27.01.17 14:58	Andy
Workstation Profile	Disp(E) Main(E)...		3 Monitor operation with main display, second displ...		27.01.17 15:14	Andy
Workstation Profile	Disp Main(E) VM		3 Monitor operation with main display, second displ...		27.01.17 15:03	Andy
Workstation Profile	Main(E)		1 Monitor operation with main display (E=Event disp...		27.01.17 15:05	Andy
Workstation Profile	Main(E) Disp		2 Monitor operation with main display and second di...		27.01.17 15:07	Andy
Workstation Profile	Main(E) Disp(E)		2 Monitor operation with main display and second di...		27.01.17 15:08	Andy
Workstation Profile	Main(E) VM		2 Monitor operation with main display and VideoMa...		27.01.17 15:09	Andy
Workstation Profile	Projecting		2 Monitor operation designed for projection		27.01.17 15:10	Andy

Figure 189: Profiles Table View

▼ Functions: Toolbar - Table View



Form View

This function switches the window to form view.



Previous / Next Record

With these functions the previous / next record is selected.



Changes are accepted without further confirmation!



New

With this function a new record is created.



Copy

This function creates a copy of a selected record.



Delete

With this function the selected record is deleted.



When copying, only the profile itself is copied. The settings and rights must be reassigned!

7.4.2 Form View

In the form view, an editing form is displayed in which you can enter or change information on profiles. Entry fields for the name and a description (general information) are available. You can also add new profiles or delete existing ones. All other data about the profiles regarding the system, user interface, Explorerbar, event list, etc. is defined in the dialog **Settings**.

Possible assignment for user profiles:

- Workstation profiles
- Functional profiles
- Rights profiles

Possible assignment for workstation profiles:

- Functional profiles
- Rights profiles



It is not possible to assign any further profiles to functional and rights profiles!

▼ Window: Profile - Form View

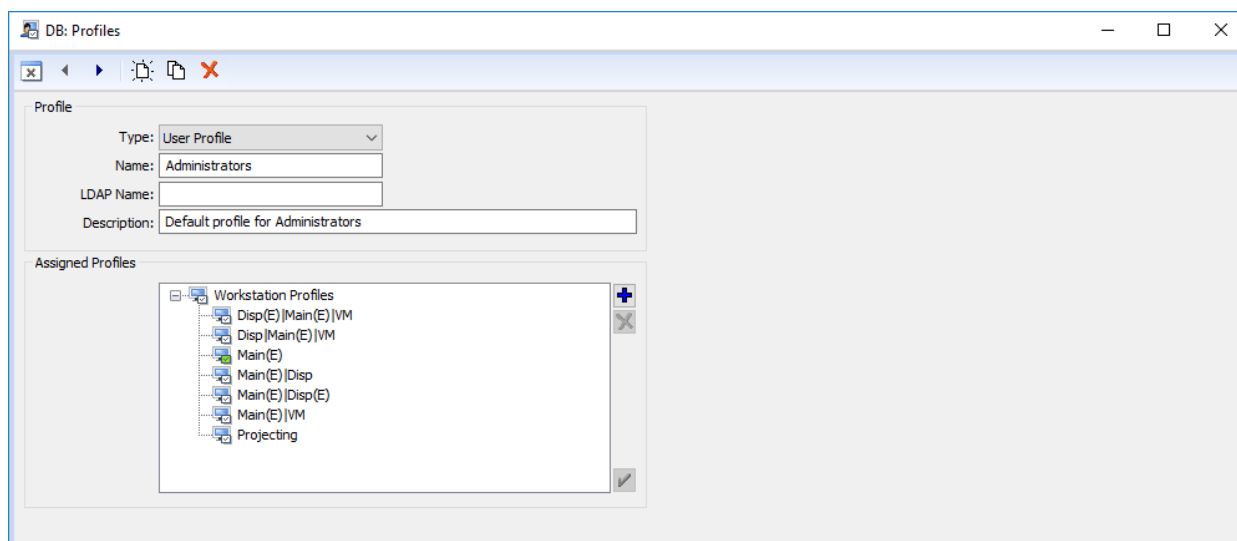


Figure 190: Profile - Form View

▼ Functions: Toolbar - Form View



Table View

This function switches the window to table view.



Previous / Next Record

With these functions the previous / next record is selected.



Changes are accepted without further confirmation!



New

With this function a new record is created.



Copy

This function creates a copy of a selected record.



Delete

With this function the selected record is deleted.



Undo

With this function the last change(s) can be undone / reversed.



Save changes

With this function the current record is saved.



When copying, only the profile is copied. The settings and rights must be reassigned!



When switching to another record, the changes in the current record are automatically saved without prior confirmation!

▼ Data section: Profile

In the editing form, you will find the following elements for the definition of profile-related information.

Type

Here the type of the profile is determined (user profile or workstation profile).

User profile (default) - the profile is a user profile.

Workstation profile - the profile is a workstation profile.

Function profile - the profile is a function profile.

Rights profile - the profile is a rights profile.

Name

Here the name of the user or workstation profile is defined (required).

Blank (default) - enter a distinct name for the profile.

LDAP Name

If the user login is completed via a domain, then the LDAP name is to be entered here (optional, please see: [Login with Active Directory \(LDAP\)](#)⁶⁸⁵).

Blank (default) - enter the LDAP name if applicable.

Description

Here, additional information for a description of the profile can be defined (optional).

Blank (default) - enter the text for the description.



The following section of the workstation profiles is only available for the definition of user profiles!

▼ Data section: Assigned Profiles

It is not possible to assign further profiles to all profiles. For example, it is possible to assign workstation, functional and rights profiles to user profiles, however it is only possible to assign functional and rights profiles to workstation profiles.

(List of available profiles)

List of profiles available to the user.

Blank (default) - select a profile if applicable.



(Open dialog for profile selection)

This function opens a dialog for selection or adding of profiles.



Only those profiles that have not been assigned here can be found in the selection!



(The selected profile is removed)

Removes the selected profile from the list of available profiles.



(the selected profile is used as standard)

This function defined the selected profile(s) as standard profile(s).



The standard profiles are marked by corresponding icons in the list or the tree!

7.4.3 Remarks

In WinGuard, profiles are not managed based on their name, but on their distinct, internal identification number (ID). This process has the advantage that you can change a profile name at a later date without any ramifications regarding the functionality of the program.

You should remember, however, that the deletion of a profile cannot be reverted by a subsequent addition of a new profile with the same name as this would involve two different profiles with differing identification numbers.

7.5 Printer Profiles

In WinGuard, local printers can be defined that are then available for various functions at all workstations by using printer profiles. However, the physical printers (printers defined in the operating system) must still be assigned to the printer profiles at each workstation. In this manner, the printer profile **Graphic**, for example, can be assigned to a locally available printer on the individual workstations.

Via the menu command **System | Sensortypes...** you can open the window **DB:Printer profiles**. You will first see the [Table View](#)^[551] which lists all printer profiles defined in the system. To view or edit a record, it is necessary to switch to the [Form View](#)^[552]. New printer profiles can be set up or deleted in either view, but editing is only possible in Form View.

If a print command is linked with the print profile **Graphic** in WinGuard, printout will be realized at various workstations by the printer assigned to them.



The workstation-specific assignment of printers to the printer profiles is realized in the local settings ([Printer Profiles](#)^[419]) of the respective workstation!

7.5.1 Table View

All defined printer profiles are listed in the table. The table columns contain the content of the following fields for every record name and description. By double-clicking on a record or by selecting a record and then clicking on the button Form View the editing window can be opened. Additional information about the content of the individual columns can be found in the section [Form View](#)^[552].

Window: Printer Profiles - Table View

Name	Description	Last change	by
Graphic	Standard Graphic - A4 landscape	22.05.18 10:56	Andy
Text	Standard Text - A4 portrait	22.05.18 10:56	Andy

Figure 191: Printer Profiles - Table View

Functions: Toolbar - Table View



Form View

This function switches the window to form view.



Previous / Next Record

With these functions the previous / next record is selected.



Changes are accepted without further confirmation!

**New**

With this function a new record is created.

**Copy**

This function creates a copy of a selected record.

**Delete**

With this function the selected record is deleted.



After any changes to printer profiles, the local settings for the printer profiles at the individual workstations must be checked or, if a new profile was created, defined accordingly!

7.5.2 Form View

After the function **New** or **Edit** has been used or a double click on a list element has been executed, the form view is opened. Here you can make the respective changes or definitions to printer profiles. The name and descriptions of the printer profile can be defined.

▼ Window: Printer Profiles - Form View

The screenshot shows a window titled "DB: Printer Profiles". The toolbar includes a close button (X), a back button (left arrow), a forward button (right arrow), a new button (document with plus), a copy button (two documents), and a delete button (red X). The form area contains two text input fields: "Name" with the text "Graphic" and "Description" with the text "Standard Graphic - A4 landscape".

Figure 192: Printer Profiles - Form View

▼ Functions: Toolbar - Form View

The functions of the toolbar are changing depending on the actual status of the window. For example functions like **OK** oder **Cancel** are only visible after changes have been made.

**Back (Table View)**

This function switches back to table view.

**OK**


This function save the actual definitions (same as save changes) and switches back to the table view.

**Cancel**

This function ignore all changes without a call back and switches back to table view.

 **Previous / Next Record**

With these functions the previous / next record is selected.

 *Changes are accepted without further confirmation!*

 **New**

With this function a new record is created.

 **Copy**

This function creates a copy of a selected record.

 **Delete**

With this function the selected record is deleted.

 **Undo**

With this function the last change(s) can be undone / reversed.

 **Save changes**

With this function the current record is saved.

 **Data section: Dialog** **Name**


Here, the distinct, freely-selectable name of the profile is defined (required).

Blank (default) - enter the name of the printer profile.

 Description

For additional information, a description of the profile can be defined here (optional).

Blank (default) - enter a description of the printer profile.

 *After any changes to printer profiles, the local settings for the printer profiles at the individual workstations must be checked or, if a new profile was created, defined accordingly!*

7.6 Rights

The rights of WinGuard users are centrally and uniformly managed. You can edit the respective settings via the dialog, **Rights**, which is retrieved via **System | Rights...**

The core of the rights concept are the largely freely-definable [Activities / Individual Rights](#)⁵⁵⁷ through which [Rules](#)⁵⁶⁴ can be formed. Rules, in turn, can be assigned to rule sets, profiles, users, or workstations. The result is that each profile - either directly or indirectly through rule sets - can be assigned a certain number of rules. In the same manner, a certain number of rules can be assigned to every workstation - either directly or indirectly through rule sets. The assignment between profiles, workstations, rule sets, and rules is determined in the left three columns of the dialog, where icons indicate whether assignments are done via workstations, profiles (profile type), or rule sets.

7.6.1 Edit Rights




Via the menu item **System | Rights...** you can access the dialog **Rights** in which the rights for users and workstations can be defined.

The objects for which rights can be defined are displayed in a uniform way, jointly as a tree, on the left side in the section **Rights holder**. **Users**, **User groups**, **User profiles**, **Workstation profiles**, **Functional profiles** and **Rights profiles** are available for which rights can be directly defined. If a subordinated entry (e.g. user) is individually selected, only its rights and not the ones of the superordinated entry (e.g. user group) will be visible.

Multiple selection of entries is possible here in order to visualize their rights combination, it is also possible to jointly select a subordinated or superordinated entry to display the rights combination. Multiple selection does not have any restriction with regard to logic aspects (i.e. whether the combination can really exist in practice).

The symbols on the left side in this rule list display via which definition (user, rule set, profile, etc.) this right has been added. The symbols in the second column display whether it is a prohibition or allowance.

The colour marking of the activity symbols informs about the structural depth of each definition.

-  general rights (blue).
-  special rights via filters (first filter level - green).
-  special rights via additional filters (deeper filter level- red).



A user always has exactly those rights that are available in the rule list for the particular situation (e.g. at a workstation). All rights not explicitly allowed in the rule list will be considered as prohibition (see: [Effective Rights](#)⁵⁶⁸)!



Special case:

If no rights have been defined for a user and his user profile (also via the user group, no active rights and function profiles), he will implicitly have all rights!

The rights of the workstation and of the workstation profile will not be applied in this case! In addition, all assigned function and rights profiles will be ignored.

▼ **Dialog: Rights**

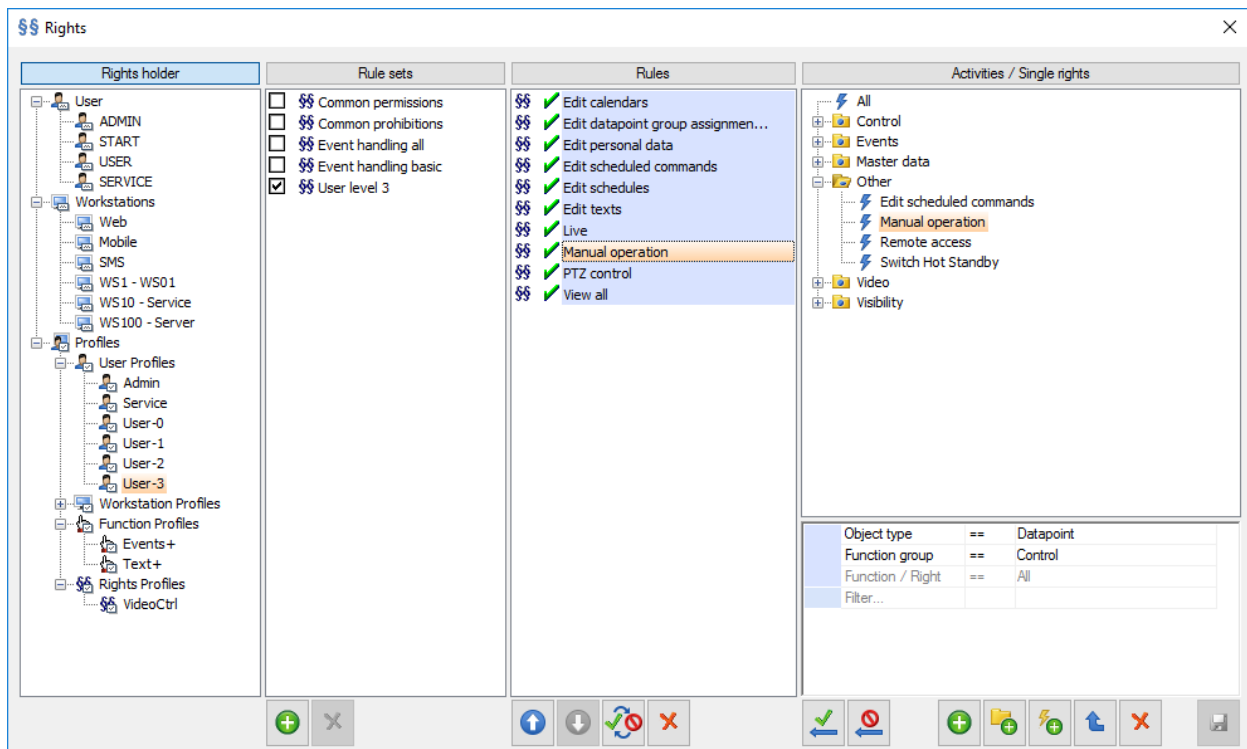


Figure 193: Dialog - Rights

▼ **Functions: General**



Save

This function saves the current configuration of the rights. The settings are immediately active after saving.



Close window

Closes the **Rights** dialog. If changes have not yet been saved, a respective confirmation window appears with the buttons **Yes / No / Cancel**.

▼ **Functions: Rule Sets**



New

With this function a new rule set is created. The rule set is inserted into the list under the name **New Rule Set** and can then be renamed/defined.

... - enter a name for the new rule set.



Delete

This function deletes the selected rule set. A confirmation dialog with the buttons **Yes / No** is displayed prior to execution.

▼ Functions: Rules



Priority +

With this function, the priority of the selected rule is increased by one. The highest definable priority for rules is ten.



The priority is indicated in the symbol in a small blue circle!



Priority -

With this function, the priority of the selected rule is decreased by one. The lowest definable priority for rules is zero.



The priority is indicated in the symbol in a small blue circle!



Permission / Prohibition

With this function you can switch between permission and prohibition.



Permission or Prohibition are respectively indicated as a symbol!



Delete

With this function, the selected rule is deleted. The activity itself remains unchanged.



All actions that relate to the rules are executed immediately without confirmation!

▼ Functions: Activities / Single Rights



Create rule (Permission)

This function generates a new **permitted** rule from the selected activity.



Create rule (Prohibition)

This function generates a new **prohibited** rule from the selected activity.



New

Via this function, a new activity is generated under the name **New Activity** and saved in the selected folder at the bottom of the respective list.

... - modify the name of the new activity.



New Folder

Via this function a new folder is created under the name **New Activity** and saved in the selected folder at the bottom of the respective list.

... - modify the name of the new folder.



Copy

Generates a copy of the selected activity under the same name with added consecutive number.

... - modify the name of the new activity.



Hierarchy (to the left)

With this function, the selected element in the hierarchy is moved one level to the left.

Delete

This function deletes the selected element. When a folder is deleted, all elements contained therein are also deleted. Deletion occurs only after respective confirmation.

7.6.2 Function- and Rights Profiles

These profiles are intended to extend the rights during operation for users or workstations (e.g. in case of alarm) or to reduce their rights (e.g. end of an alarm).

Function profiles

Function profiles are profiles allowing to add or take away particular rights in a dynamic way. These profiles receive their characteristics only via the rights definition and are not available in the settings. The assignment of available function profiles is made via the definition of the corresponding objects ([Users](#)⁵³³, [Workstations](#)⁵⁴¹). If a function profile has been assigned via several rights holders, the activity setting of the first assignment will prevail in the following order.

Definition of function profiles:

- Users
- User groups
- Workstations
- Workstation profiles

During assignment of function profiles, it can be defined whether a function profile shall be active at the beginning or not. Each available function profile can be activated or deactivated via a corresponding menu entry or via the action **Activate function profile**.

Rights profiles

Rights profiles are profiles allowing to add or take away particular rights in a grouped way. In principle, rights profiles have thus a similar function as rule sets but can also be selected externally via LDAP. These profiles receive their characteristics only via definition in the rights and are not available in the settings. Assignment of the available rights profiles is made via the definition of the corresponding objects ([Users](#)⁵³³, [Workstations](#)⁵⁴¹).

7.6.3 Activities / Single Rights

Even without any type of projection, WinGuard contains a certain number of pre-defined activities and rights that can be defined and managed in the right column of the dialog. Changing the pre-defined activities/rights is possible but not recommended. It is preferable to define one's own new activities.

▼ Dialog excerpt: Rights - Define Activities

This excerpt from the Dialog **Rights** shows the definition of an activity to determine the control of all datapoints of the category, fire.

Object type	==	Datapoint
Function group	==	Control
Function / Right	==	Datapoint.Control
Category	==	🔥 Fire
Filter...		

Figure 194: Rights - Define Activity

▼ ToDo: Define Activity / Single Right

To define an activity, please proceed as follows:

- ➔ Select the activity that is to be defined in the area Activities / Single Right or add a new activity. In the lower section, you can then define the activity.
- ➔ Define the activity by selecting / entering the respective element or filter.

Various object types such as datapoints, commands, graphics, or events are subjugated by the rights system. For such object types, and in some cases also for parts thereof (such as datapoints that are assigned to a specific location), you can define individual activities by combining the function groups (currently **edit**, **view**, **control**, **system function**, and **special right**), and other specific definitions.

Not every object type supports all possible function groups. Most only support the function group **edit**. By selecting an object type, you can easily recognize which function group it supports in the current program version by the respective selection box.

Multi-selection is possible for both object types and function groups. For example, it is thus possible to define the function group **edit** in one activity for settings, graphics, sensor types, rights, and shortcut keys and, by applying this activity as a rule, to allow or prohibit precisely these editing rights across the board.

For both object types and function group, the selection **All** is always available, which basically means "all object types subjugated to the rights system of the current program version" or "all possible assigned function groups for the object type selected above".

For some object types, special functions are available. These include for example: system functions that affect the entire system, and special rights to regulate the Hot-Standby switch or the prioritized transfer of exclusive controls within the framework of projections in accordance with the Austrian Standard.

Control rights for datapoints can be defined down to the individual command using

Object type == Datapoint, Function/Right == Datapoint.Control

and then selecting the respective filter, whereby each subsequent line is to be viewed as linked by **AND**. In this manner, limits to the activity defined here can be applied to an explicitly enumerated list of datapoints or to all datapoints of an interface, a location, and/or a datapoint category. Even individual sensor numbers can be limited. With regard to limits to an interface, additional limitations can be made to data types and commands.

7.6.3.1 Object types

Within the scope of the rights definition, it is first of all differentiated according to object types in WinGuard. The following list provides the available object types.

Available object types:

- All
- Animation Scheme
- Bookmark
- Calendar
- Clip
- Command
- Control Operation
- Datapoint
- Event
- Event Handling
- Graphic
- Interface
- Layout
- List
- Location
- Menu
- Overlay definition
- Pane
- Person
- Printer profile
- Profile
- Rights
- Schedule
- Schedule commands
- Segment
- Sensor type
- Settings
- Shortcut
- System
- Tag
- Text

- Timer
- Toolbar
- Users
- VideoManager
- Workstation

7.6.3.2 Function Groups

Depending on the selected object type, the following function groups are available for further definition of activities / single rights.

Available function groups:

- All
- Edit
- View
- Control
- Observe
- System function
- Special right

7.6.3.3 Functions / Rights

Depending on object type and function group, the following rights are available for further definition of activities / single rights. The rights to **Create**, **Edit** and **Delete** different objects are not directly specified at the list.

Available rights:

- **All**
All rights are available without limitation.
- **Bookmark.Administrate**
Only with this right, a bookmark can be deleted even if it is linked to an event and if this event cannot be edited (for example as it is already in the archive). In addition, the event linkage can be changed independent from the access to events. The right only extends Edit.Object for bookmarks which is always additionally required.
- **Clip.Administrate**
Only with this right, the storage time of clips can be changed and clips can be deleted. This right only extends "Edit.Objects" for clips which is always additionally required.
- **Control Operation.Administrate**
Only with this right, executors and owners of control operations can be changed. In addition, control operations can be deleted whose executors are not reachable.

- **Control Operation.Control**

With this right, all operations for control operations such as e.g. **Start**, **Defer**, etc. can be executed. In addition, it is possible to **Accept** requested control operations. Without this right, control operations can only be set up as request as the editing of already accepted control operations is not possible without this right.

- **Control Operation.View all**

With this right, the application window can be switched to the display **All control operations**.



*Even if the pre-set **All control operations** has been made in the settings, the missing right will prevail and only **Observed control operations** will be possible!*

- **Datapoint.Control**

Right for general control of datapoints.

- **Datapoint.Group edit**

This special right defines the editing of content of datapoint groups, independent from the editing of datapoints themselves.

- **Event (all functions)**

This is the superordinated right for general event processing and contains all single rights for events (see following).

- **Event.Accept**

Right to accept events.

- **Event.Assign**

Right to assign own events to another workstation.

- **Event.Commands**

Right for execution of commands via the toolbar of the event list.

- **Event.Complete**

Right to complete terminated events with edited mandatory entries.

- **Event.Complete also when not ended**

Right to complete events even if they are not terminated yet.

- **Event.Complete also without mandatory entries**

Right to complete events even if not all mandatory entries have been edited yet.

- **Event.Data input**

Right to edit events or event texts.


- **Event.Defer**

Right to defer events.

- **Event.Fetch**

Right to fetch events from other workstations.

- **Event.Grouping**
Right to define event grouping function in handling definitions.
- **Event.Hide**
Right to define the hide function in event handling definitions.
- **Event.History**
Right to open the event history.
- **Event.Investigate**
Right to start investigation time for events (e.g. fire alarm system).
- **Event.Lock**
With this right, the command for locking of events (if required via the toolbar of the event list) can be executed.
- **Event.Modify**
Right to modify priority, state text and state type from events.
- **Event.Print**
Right to print (graphic, text) events.
- **Event.Reset**
Right to execute the command Reset via the toolbar of the event list (e.g. fire alarm system).
- **Event.See list for all workstations**
Right to display events that are assigned to other workstations.
- **Event.Undefefer**
Right to undefefer deferred events.
- **Event.Unhide**
Right to define the hide function in event handling definitions.
- **Event.Unlock**
Right to unlock locked events.
- **Object.Change**
This is the general right to change objects (e.g. datapoints, graphics, persons, etc.).
- **Object.Create**
This is the general right to create objects (e.g. datapoints, graphics, persons, etc.).

 *Control operations: If the right **Control operation.Control** is not available or if the right **Control.Datapoints** is not available for all datapoints, control operations can only be set up as request!*
- **Object.Delete**
This is the general right to delete objects (e.g. datapoints, graphics, persons, etc.).

- **Object.Observe**

It is possible to define the objects to be observed, e.g. control operations.

- **Object.View**

This is the general right to define the visibility of objects (at the moment only datapoints, locations and graphics).



For datapoints and locations, the visibility relates to the corresponding explorers and the event list, but not to the display in graphics.

For graphics, the visibility can only be defined for layers and paths!

- **System.Exclusive operation**

This is right defines the exclusive operation or interface control of WinGuard for fire alarm systems subject to Ö-Norm settings. Before operation of a fire alarm system, operation has to exclusively taken over here. Without this right, a takeover of operation is not possible.

- **System.Exclusive operation forced take over**

This right also defines the exclusive operation or interface control of WinGuard for fire alarm systems subject to Ö-Norm settings. This right allows the user to take over the operation even without approval of the currently responsible operator.

- **System.Remote access**

This right defines the external access to the system as it is e.g. required for iPhone or webserver / webclient.

- **System.Switch Hot Standby**

This right provides the manual function for switching to Hot-Standby operation or re-set to the normal Server operation.

- **Video (all functions)**

This is the superordinated right for all video functions, comprising all single rights for video (see following).

- **Video.Archive**

This right allows access to the video archives of video systems. Only if this right is available for a camera datapoint, a corresponding clip can be played.

- **Video.Configuration**

This right defines the configuration of the VideoManager.

- **Video.Control**

This right defines the control for video display (e.g. video splits for VideoDisplay, VideoManager, etc.)

- **Video.Displaycontrol**

This right defines the control of VideoDisplays.

- **Video.Live**

This right defines the display of live video streams / cameras.

- **Video.Lock**
With this right, the command for locking of cameras (if required, via the toolbar of the event list) can be executed.
- **Video.PTZ**
This right defines the control of video cameras (Zoom, rotation, etc.).
- **Video.Unlock**
With this right, the lock of cameras can be removed again.

7.6.4 Rules

Rules determine what a user is allowed to do in the system and can be assigned to every profile or workstation. Rules are a result of the definition of activities - they allow or prohibit information and also have a priority. Rules can also be compiled into rule sets.

A rule consists of:

- an activity or single right or a group of activities/single rights defined in Activities/Single Rights;
- a permission or a prohibition;
- a priority (between 0 and 10).

For actions in the program that are subjugated to the WinGuard rule system - for example, control rights for datapoints - the list of assigned rules is searched beginning with the highest priority. Prohibitions with the same priority as permissions are internally higher prioritized than permissions (of the same priority). If a matching rule is found, the mechanism stops and the action is either allowed or prohibited according to the exact rule definition. If no match is found, the action is prohibited.

For example, if controlling:

- datapoints (all) is allowed with priority 0;
- datapoints at location A is prohibited with priority 0;
- datapoints from interface 1 is allowed with priority 1;

then the result is that one is allowed to control datapoints from interface 1, but one is not allowed to control datapoints that are assigned to location A or one of its subordinated locations from any other interface.

Identical entries can appear multiple times in a rule list, for example when several rule sets are assigned to a profile and the rules contained in the rule sets overlap.






In the rules section you can view all the rules that are assigned to a profile / workstation. The symbol to the left indicates if the rule is linked directly or via rule sets.




If the rule list is empty or no profile has been assigned to the user, the user has unlimited rights, even if rules have been assigned to the current workstation!

▼ Define Rule

ToDo: Define rules

-  Select the profile that is to be edited in the Profile section or the workstation that is to be edited from the workstation section. In the Rules section, you can then view the rules assigned to that profile or workstation.
-  Select an activity.
-  Create the rule from the selected activity using the function keys (allow activity) or (prohibit activity). The rule is automatically assigned to the respective profile / workstation.




 *When creating rules, they are always directly assigned to the selected profile, workstation, or rule set!*


Example:

For a user who is logged in with the profile **ADMIN** at **Workstation 1** (WS1), all rules assigned to profile ADMIN and WS1 apply - this specific assignment can be reviewed by selecting the profile in the profiles section and the workstation per **<Ctrl>** in the workstations section.

Define Rule Set



ToDo: Define rule sets


-  In the Rule Sets area, select the rule set that is to be defined or create a new one. In the Rules area you can view of the rules assigned to the rule set.
-  Select an activity.
-  Add the selected activity to the rule set by using the buttons (allow activity) or (prohibit activity).

 *Rules assigned to the rule set can be modified with the respective function keys (change priority, change permission or prohibition, or delete).*

Assign Rule Set

ToDo: Assign a rule set

-  Select the respective element in the profiles area or workstations area.
-  Select (activate check box) one or more rule sets to assign these to the selected profile or workstation.

 *In the Rules section, you can view all the rules that are assigned to the profile/workstation. The symbol on the left indicates if the rule is linked directly or via rule set.*

7.6.5 Preset Rights

The following table shows fundamental, pre-defined rights as well as several additional definitions of rights.

Events

Name	Obj. Type	Function Grp.	Function / Right
------	-----------	---------------	------------------

Close Event	Event	All	Event.Close
Edit Event	Event	All	Event.Accept, Event.Commands, Event.Data entry, Event.Print, Event.Un-defer, Event.Unlock, Event.Explore, Event.Defer, Event.Reset, Event.Lock, System.Exclusive operation
Fetch event	Event	All	Event.Fetch
Close event without end message	Event	All	Event.Close even without end message
Close event without required entries	Event	All	Event.Close even without required entries
View events from other workstations	Event	All	Event.View list for all workstations
Transfer event	Event	All	Event.Transfer

▼ Visibility

Name	Obj. Type	Function Grp.	Function / Right
View all	All	View	All

▼ Other

Name	Obj. Type	Function Grp.	Function / Right
Edit scheduled commands	Scheduled command	Edit	All
Prioritized control transfer	System	All	System.Prioritized control transfer
Switch Hot-Standby	System	All	System.Switch Hot-Standby
Manual operation	Datapoint	Control	All
Edit switch processes	Switch process	Edit	All
System access	System	All	System.System access

▼ Master data

Name	Obj. Type	Function Grp.	Function / Right
Edit animation schemes	Animation scheme	Edit	All
User profiles / rights	User, User profile, Rights	Edit	All
Edit datapoints	Datapoint	Edit	All
Group datapoints (special right)	Datapoint	All	Datapoint. Group edit

Edit graphics	Graphic	Edit	All
Edit calendars	Calendar	Edit	All
Edit lists	List	Edit	All
Edits sensor types	Sensor type	Edit	All
Edit user interface elements	Command, Layout, Menu, Toolbar, Shortcut key	Edit	All
Edit locations	Location	Edit	All
Edit data for persons	Person	Edit	All
Edit system configuration	Workstation, Workstation profile, Printer profile, Settings, Interface	Edit	All
Edit texts	Text	Edit	All
Edit schedules	Schedule	Edit	All

▼ CCTV

Name	Obj. Type	Function Grp.	Function / Right
Archive	All	All	Video.Archive
Configuration	All	All	Video.Configuration
Layout switch	VideoManager	All	Video.Split
Live	All	All	Video.Live
PTZ control	All	All	Video.PTZ

▼ Helpful supplements

Name	Obj. Type	Function Grp.	Function / Right	Filter
All	All	All	All	-
Layer- visibility	Graphic	View	Object.View	Layer name
Interface control	Datapoint	Control	Datapoint.Control	Interface #
Location visibility	Location	View	Location.View	Location, Tag, etc.
Datapoint visibility	Datapoint	View	Datapoint.View	Location, Tag, etc.
Datapoint command	Datapoint	Control	Datapoint.Control	DP name + DP commands
COP all	Control operation	All	All	-
COP admin	Control operation	System function	COP.Administrate	-
COP command	Control operation	Control	COP.Control	-

7.6.6 Effective Rights

Due to the number of possibilities for rights definition (e.g. directly for users) and the profile assignment (via users, user groups, user profiles, workstation profiles, rights profiles and function profiles), it is important to clarify the principles of profiles and rights definition.

Rights of a user:

- A user has the profiles and rights of its group as well as his own rights.
- It is always one user profile active which the user can select, if required.
- If a user registers at a workstation, he will have the merged amount of his own profiles and rights as well as those of the workstation in this **Session**.
- Only one workstation profile is always active which the user can select if desired (the workstation profiles assigned to the user only have the purpose to limit their use for these workstations).
- In case of all other rights and profile assignments, it is always a merged amount of rights.



The rights definition principle in WinGuard with prioritized allowances and prohibitions will delete all rules that might be contradictory!



Special case:

If no rights have been defined for a user and his user profile (also via the user group, no active rights and function profiles), he will implicitly have all rights!

The rights of the workstation and of the workstation profile will not be applied in this case! In addition, all assigned function and rights profiles will be ignored.

A function profile can be assigned to different profiles so that there can occur apparently contradictory definitions. Thus, in an extreme case, the same function profile might be assigned both to the workstation as well as to the workstation profile and to the user, the user group and even to the user profile and, in addition, be assigned via LDAP.



*As a principle, the setting for **first assignment** will prevail, i.e. if a function profile has been actively assigned once, it will remain active even if it is assigned in an inactive way and vice versa!*

Sequence of evaluation for assignment of function profiles:

- Profile for user
- Profile for user group
- Profile for workstation
- Profile from LDAP
- Profile from workstation profile
- Profile from user profile

7.6.7 Hint for Projection

In a projection, if certain layers of graphics are to be invisible for some profiles because they contain control elements, for example, you can achieve this through the definition of respective rights. It is

necessary, however, that these layers use uniform names and that these names are only used for such layers. Through the definition of rights it is then possible to allow or to prohibit the display of these layers (depending on the name of the layer) in all graphics for certain profiles.

Example:

- **Object type** Graphic
- **Function group** View
- **Function / Right** Object.View
- **Layer** Name of the Layer

7.7 Lists

Lists primarily serve to define selection elements for user entries, but can also be used to define context variables and are thus utilized for internal text control. A list may contain any number of text entries in a freely defined order. Lists are used in the following places.

- **Selection Field (Text)**

A list can be assigned to any selection field. Users can select any entry in the list.

- **Check Box (Text)**

A specific list entry can be assigned to any marking field. User select the entry through activation of the field.

- **Archive**

In the archive, users can search for specific elements by selecting a list and an entry.

User entries from lists are stored in the form, **List/Entry**. Thus even identical text entries in separate lists are recognized as different user entries.

Using the menu command, **Other|Lists...** the dialog, **Edit Lists** is opened. Lists can be maintained and edited there.

7.7.1 Edit Lists

After opening the dialog (menu command: **Other|Lists...**) the definition of the first found list (provided there is one) is displayed. Via the selection list, one of the already existing lists can be chosen. The respective editing functions are located on the right side of the dialog.

In order to edit the lists defined in the system, select the menu command, **Other|Lists**.

▼ Dialog: Edit Lists

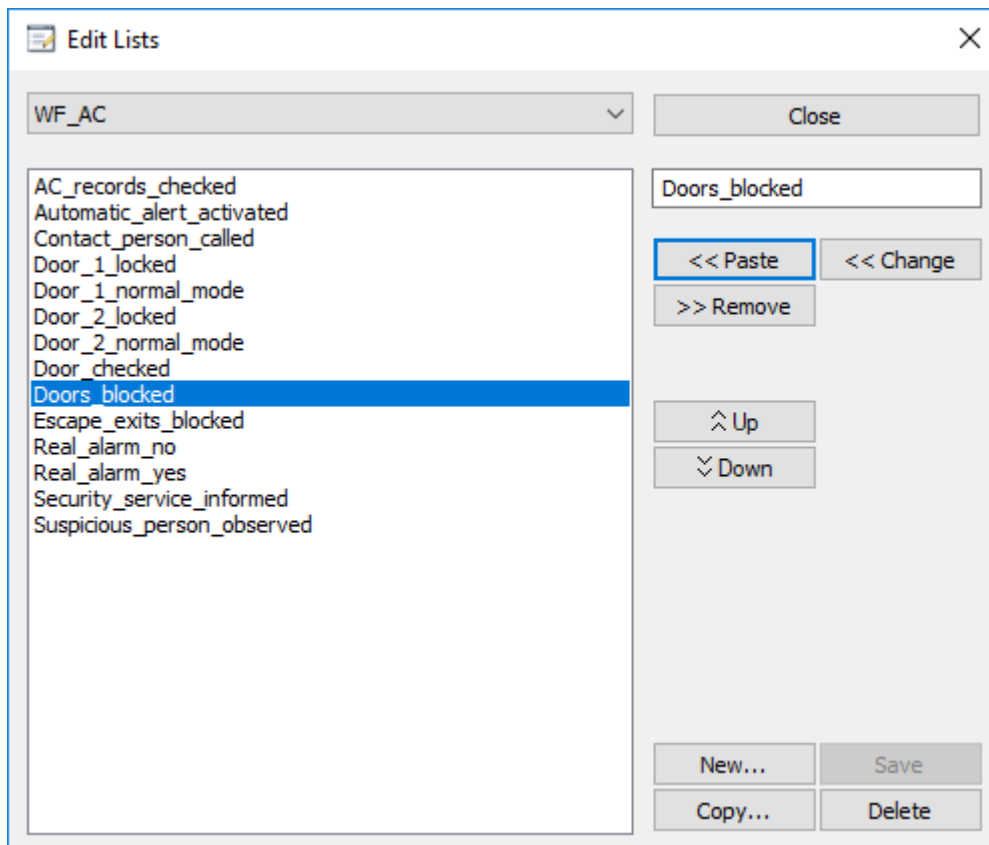


Figure 195: Edit Lists

▼ Functions: Dialog

Button **Close**

This function closes the dialog. If changes have not yet been saved, a confirmation dialog is displayed which gives you the option of accepting or discarding the latest changes.

Button **New...**

With this function, a new, empty list can be created. First, the dialog, **Lists** is opened to define the list name. If changes have not yet been saved, the system will ask you if you would like to do so now.

... - enter the name of the new list.

Button **Save**

This function saves the current list

Button **Copy...**

With this button, a copy of the current list is created. The dialog, **Lists** is opened to enter the name. If changes have not yet been saved, the system will ask you if you would like to do so now.

... - enter the name of the new list.

**Delete**

With this button, the currently selected list is immediately deleted.

**There is no prior confirmation!****▼ Data section: Dialog****(Lists Selection)**

Using the selection list (top left) an existing list can be selected. The respective definition is then shown in the display field below for further editing. If changes have not yet been saved, a confirmation dialog is displayed which gives you the option of accepting or discarding the latest changes.

... - select a list for editing.

**(Display Field)**

In this display field the elements of the selected list are shown. By selecting an entry, the text to be edited is copied into the respective editing field on the right.

... - select the list element to be edited.

**(Entry Field)**

In this field, you can define or change a list element.

... - define or change the text of a list entry.

**<< Insert**

When clicking on this button, the text from the entry field is inserted in the list directly after the currently selected entry.

**>> Remove**

The selected entry is removed from the list.

**<< Change**

When clicking on this button, the selected entry in the list is replaced with the text from the entry field.

**⤴ Move up**

When clicking this button, the selected entry is moved up by one position.

**⤵ Move down**

When clicking this button, the selected entry is moved down by one position.

7.8 Tags

Tags are available as freely definable marking elements (labels) in WinGuard and can be used for different system objects. Thus it is possible to use tags to additionally classify the corresponding objects in order to be able to select these, e.g. via filters. The tags can be freely defined by the user, grouped and structured hierarchically. Using tags, it is thus possible to structure objects in a user-defined way and to group them to "concrete" overlapping subsets. This can be helpful in order to e.g. define special behavior for a subset of objects, such as e.g. rights for specific datapoints, etc. The assignment of several tags to one object, e.g. datapoint or location, is possible, furthermore the selection of several tags for filtering. If you have defined hierarchical structures for locations or datapoints, the tags of an object can also be used to filter the subordinated objects. So this tags must not be assigned directly to subordinated objects.

Tags are stored as so-called string IDs at the objects. Such a string ID consists of letters and numbers and, if required, of one or several points (.) for hierarchic structuring. However, it is not possible to freely enter the string IDs at the objects, but they have to be selected from the number of pre-defined IDs. It is possible to assign a text name to each string ID that will be displayed during selection.

Use or assignment of tags:

- Location definitions (observe inheritance to datapoints and events!)
- Datapoint definitions (observe inheritance to events!)
- Rights definitions (activities)
- Definition of conditions in texts

Temporary or interactive use of tags:

- Filter function (Datapoints, locations, event archive)
- Display via variables in texts and graphics
- Dynamic assignment to events

Using the menu command **Other|Tags...** the dialog **Edit tags** will be opened where the tags can be managed and edited. It is then possible to assign tags at various locations (datapoint, location, forms, filters, rights, etc.) via a corresponding selection element.



The linkage between tags and objects has currently been realized in a "loose" way, i.e. if a tag is deleted from the definition, its ID will not be automatically removed from the objects, conditions, definitions, etc. Using the maintenance function, such assigned but not anymore definable tags can be removed from the objects!



*Currently, only **Datapoints** and **Locations** can be provided with tags, but tags can also assigned dynamically (by command) to events!*

7.8.1 Edit Tags

After opening the dialog (menu command: **Other|Tags...**), the defined tags are displayed in a corresponding list. Via the selection in the list, it is possible to chose one of the already defined tags. On the right side of the dialog, there are the corresponding editing functions. The functions Delete and New are also available via a context menu of the list.

▼ Dialog: Edit tags

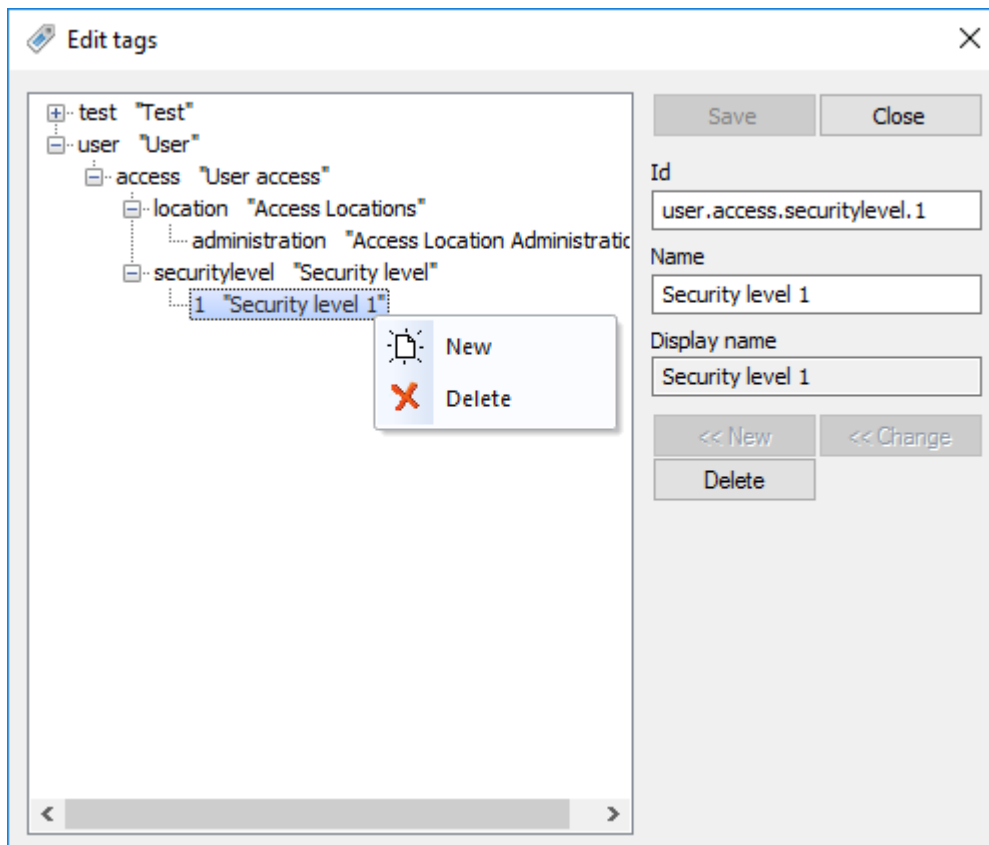


Figure 196: Edit tags

▼ Functions: Dialog

Button

Save

Using this function, the current tags are saved. The button is only active if changes have been made in the dialog.

Button

Close

This function closes the dialog. If changes have not been stored yet, a corresponding request dialog will be displayed in which you can take over the last changes or reject them.

Button

<< New...

Using this function, a new tag can be created. To activate the function, a new ID has to be defined first, whereas the ID may not be defined already.



If the entered ID contains invalid characters, an error message will be displayed!

Button

<< Change

Using this function, the current tag (ID and name) will be changed. To activate the function, an existing ID has to be changed first, whereas the ID may not be defined already.



If the entered ID contains invalid characters, an error message will be displayed!



There is no check where this tag ID is already used and the tag will be changed after confirmation - might lead to function loss!

Delete

Using this button, the currently selected tag will be deleted directly.



There is no check where this tag ID is already used and the tag will be deleted after confirmation - might lead to function loss!

▼ Data section:

ID

As a unique, freely definable identification, the ID represents the tag. It is a so-called string ID. Allowed characters are number, the Latin alphabet, trays (-), underlines (_), space characters and points (.). However, points have a special function, the hierarchic structure is implicitly defined by using them.

Example: **users.access.securitylevel.1**

Here, the parent elements **users**, **users.access** and **users.access.securitylevel** only serve as grouping and do not represent any assignable tags. It is only possible to assign those tags that do not contain any children elements, thus, in this example only **users.access.securitylevel.1**.

However, for filtering, the groupings can be used to search for all subordinated tags jointly.

... - indicate the day.



Via the alphabetic sorting of the IDs, the later sorting of the tags for display with display name is also defined!

Name

The name is an optional, freely selectable display name for the tag. Names do not have to be unique and the use WinGuard text keys ([...]) is possible. Tags are always displayed with their display name, only in this dialog, the IDs are displayed too.

If no name has been defined for a tag, the display name will be identified as follows:

- First of all, it will be searched for a user string with the scheme **[tag.<ID>]** (in the example above thus **[tag.users.access.securitylevel.1]**) and, if available, this one will be used.
- If neither an explicit name nor a direct user string is available, the display name of the parent element (if available) will be used and the own ID will be attached, in fact:
 - if the parent name is a defined string separated by space characters
 - if the parent name ends with an ID, separated by a point
 - if no parent element is available, only the own ID

... - if required, enter the name/key for the display name of the tag.

Display name

In this field, the current display name will be directly displayed and you can immediately check your definition.

7.9 Segments

Using segmentation, the existing data of network systems can, if required, be split in partial amounts (called segments). The segments defined there can be assigned to different objects. Events might also be assigned to a segment, depending on the triggering datapoint, location or interface.

In order to segment a system, the required system definitions will be created in the system. Then, data sets and files can be assigned to those defined segments.

If a workstation has a segment assignment, only those data objects will be available at this workstation that belong to one of the assigned segments as well as all data objects without any segment assignment. This also applies to the workstations themselves except the servers, were all segments are available anytime, independent of their indication in the workstation definition.

For segment assignment to the stations, it has to be considered that subordinated stations can never have more or different segment data compared to the station which is superordinated to them in the network. If the superordinated station does not receive any data for a segment, no data can be further distributed to the subordinated station.

The editing of segment definitions is, similar to the assignment of data objects to segments, only possible if a user has the rights for editing of segments.

Using the menu command **System | Segment...**, the window **Segments** is opened. First of all, the [table view](#)⁵⁷⁷ will be displayed in which all segments defined in the system are listed. To view or edit a data set, it can be changed to the [Form view](#)⁵⁷⁷. In both views, new segments can be created or deleted, but editing is only possible in form view.

The following data objects can be assigned to segments:

- Workstations (several segments can be assigned here)
- Locations
- Interfaces
- Datapoints
- Graphics
- Texts
- Persons
- Events (are automatically assigned to the segment of the triggering datapoint, location or interface)



In segmented systems, data maintenance is only possible at the stations which do not have a segment assignment, i.e. that retrieve all project data!

Only exceptions are graphics and texts located in a appropriated segmented folder.



At the up to three servers, all segments are available anytime, independent of their indication in the workstation definition!

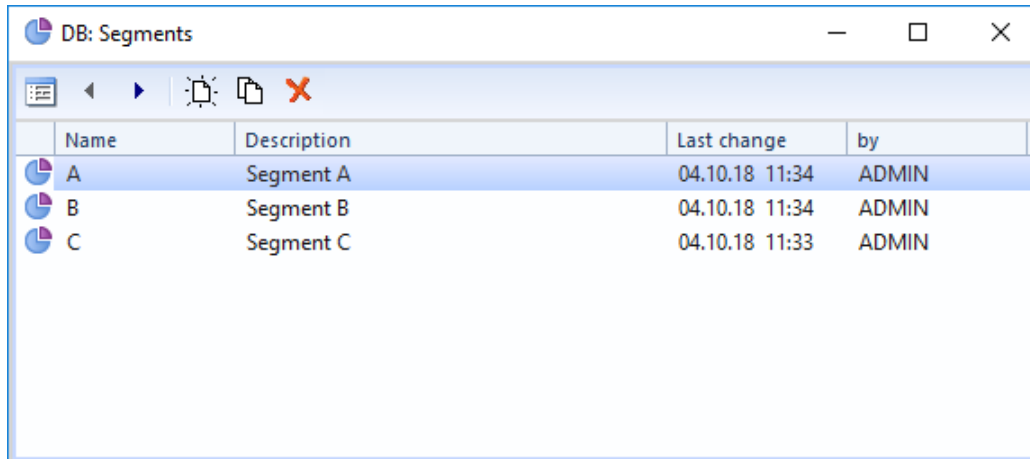


*The functionality **Segmentation** is only available in case of corresponding licensing. In addition, the function can be explicitly deactivated via the settings!*

7.9.1 Table View

In the table view, all defined segments are listed. For each data set, the columns of the table contain the contents of the fields Name, Description, etc. By double-clicking on one of the entries or by selecting an entry and clicking on the button [Form view](#)^[577], the editing window can be opened. Further information regarding the contents of the particular columns can be found in the section [Form view](#)^[577].

Window: Segments - Table View



Name	Description	Last change	by
A	Segment A	04.10.18 11:34	ADMIN
B	Segment B	04.10.18 11:34	ADMIN
C	Segment C	04.10.18 11:33	ADMIN

Figure 197: Segments - Table View

Functions: Toolbar - Table View



Form View

This function switches the window to form view.



Previous / Next Record

With these functions the previous / next record is selected.



Changes are accepted without further confirmation!



New

With this function a new record is created.



Copy

This function creates a copy of a selected record.



Delete

With this function the selected record is deleted.

7.9.2 Form View

The form view displays an editing window in which the data for a segment can be entered or changed. Definition sections for the name, label and a description are available. New segments can be created or existing ones can be deleted. The definition of the assignment of the segments to the different objects is realized in their respective form views (editors).

▼ Window: Segments - Form View

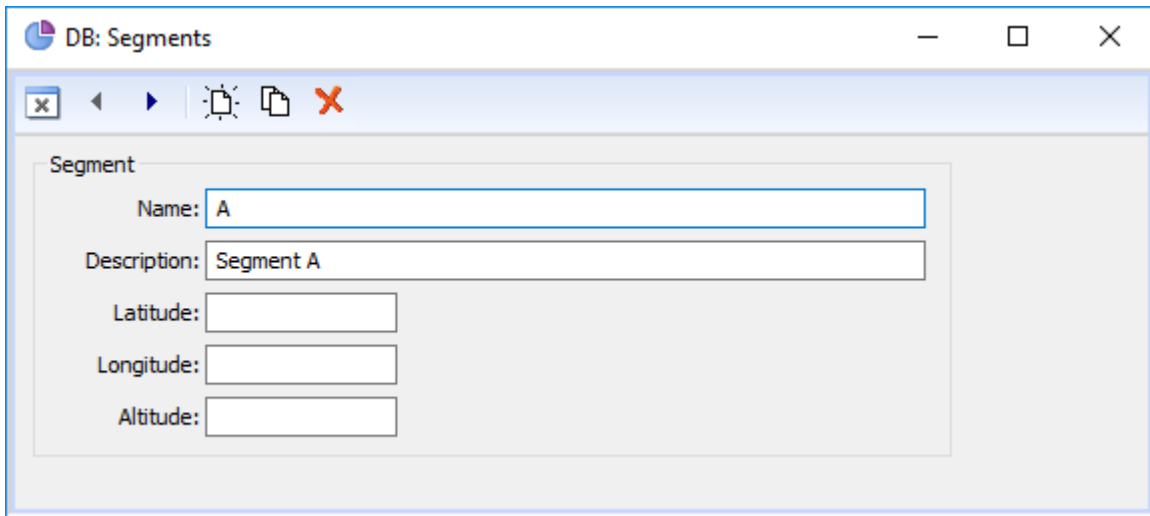


Figure 198: Segments - Form View

▼ Functions: Toolbar - Form View

The functions of the toolbar are different depending on changing of data. For example functions like **OK** or **Cancel** are only visible after changes have been made.



Back (Table View)

This function switches back to table view.



OK

This function save the actual definitions (same as save changes) and switches back to the table view.



Cancel

This function ignore all changes without a call back and switches back to table view.



Previous / Next Record

With these functions the previous / next record is selected.



Changes are accepted without further confirmation!



New

With this function a new record is created.



Copy

This function creates a copy of a selected record.



Delete

With this function the selected record is deleted.



Undo

With this function the last change(s) can be undone / reversed.

**Save changes**

With this function the current record is saved.

▼ Data section: Segment**Name**

Here, the unique (full) name of the segment is defined.

blank (default) - enter the name of the segment.

Description

Here, an additional description for the segment can be defined.

blank (default) - enter the description for the segment.

Latitude / Longitude (GPS coordinates)

Here, the geographical latitude and longitude for the segment can be defined.

blank (default) - enter the coordinates for the segment if applicable.

Altitude

Here, the geographical altitude of the segment can be defined.

blank (default) - enter the altitude for the segment if applicable.

7.10 Customizer

To a large extent, our partners are able to modify the system to meet their requirements. For this purpose, an additional tool - the **Customizer** - is available. In addition to determining the color scheme of the interface and the splashscreen, various icons and graphics can be individually customized. You also have the option of creating different design themes that can then be selected via the settings.

In addition to the familiar **CST** file format, in which various definitions, icons, and graphics are compressed in a file, the Customizer also writes and reads another format, in which the definitions are stored in a **XML** file and the icons and graphics are established as separate files in the folder. This allows for convenient graphics editing with other tools also outside of the Customizer.

CST-files created with the current Customizer are unsigned, but can be directly tested with WinGuard. If such an unsigned **CST** file is used, a corresponding notice appears on the WinGuard user interface. **CST** files can only be signed by Advancis.



For additional information about the Customizer please refer to your sales partner!

7.11 Translations

The language of the WinGuard program interface can be switched for runtime and be defined differently for every user. To achieve this, all fixed texts in the program are already translated into various languages.

With user-defined translations, the multi-language capability reaches down to the data level. Documents, file names, database fields - almost all texts and designations used by the program can be configured in multiple languages with little additional effort.

Instead of plain text, so-called text IDs are entered in the desired locations. A text ID is any designation in brackets such as **[bn.close]**, **[dict.cmd.Abort]** etc. For each text ID, in turn, a plain text in the respective language is entered in the translation table. All texts of the program can be used in the same manner as the self-defined IDs. Many translations are thus already available.

In the program interface, the user does not see the **text IDs**, only the translations in the respective language.

Example:

Text ID	DE	EN
[bn.close]	Schließen	Close
[dict.cmd.Abort]	Abbrechen	Abort
[sys.msg.start.checklisense]	Lizenz prüfen	Check license
...

User-defined translations not only serve to achieve multi-lingual capability, but also serve as a means of centrally defining terms in single language projects so that they can be centrally modified later.

In addition to the existing translation tables of the system, interfaces, etc., users can also define their own tables. This translation table is saved for every language separately in a file with the name **User_xx.lng** in the subfolder **Files** in the **Data Folder**. The **xx** is replaced by the respective language abbreviation (**de**, **en**, etc.).

In order to create or edit translations, select the menu command **Other|Translations...** to start the program Localizer. Using this program, which is included in the WinGuard installation, the respective files can be created or edited.

7.11.1 Localizer

The Localizer is a specially-developed tool to allow WinGuard and dedicated modules to be translated into any desired language, to align existing language versions, and to create user-defined [translations](#)



In the work area of the Localizer, it is possible to edit the translation tables of several languages simultaneously, to search for specific records, and to copy text IDs for use in WinGuard. If the Localizer is started from WinGuard, it works in a special mode. Only the user-defined translations can be edited and only the text IDs contained in WinGuard are displayed for selection.

When editing language resources with the Localizer, you can also specify a comparison file. As a general rule, the latest completely translated version of the the German language file is used as this file is continually updated. Through the comparison of the current state with the reference state of the language comparison file, new and changed entries are recognized. These are highlighted in color. In this manner, potential resources that need to be adjusted are easily recognized and the updating effort is reduced to a minimum.

For specific information about the functionality of the Localizer and how to create translations, please see the help section of the Localizer.

Application: WinGuard - Localizer

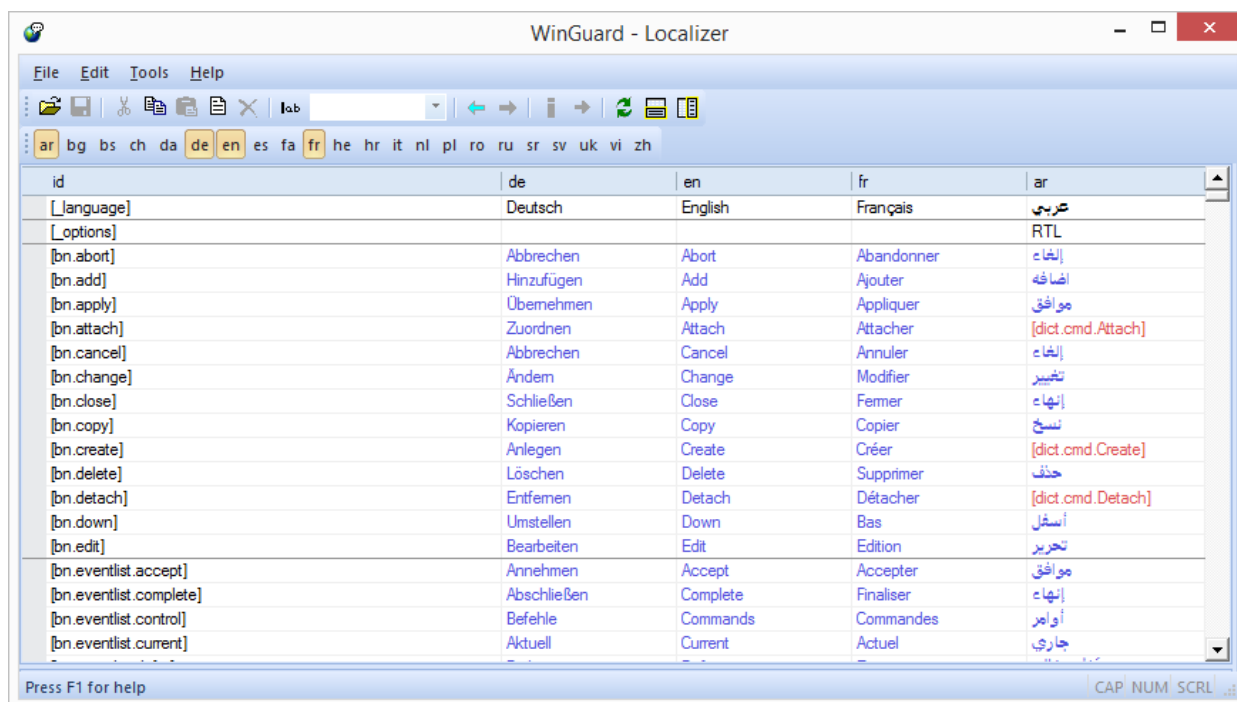


Figure 199: WinGuard - Localizer

7.12 Calendar

In WinGuard, the calendar is part of the time functions and serves to tell the system which days are workdays. The calendar data is used to differentiate between weekdays and non-workdays for the execution of [automatic actions](#)¹⁰⁵⁷.



*The availability of the function depends on the license module **Scheduler!***

7.12.1 Edit Calendar

In the dialog **Calendar** the calendar pages of the months of the selected year are displayed. If you click on a specific date, it changes its color from black to red and vice versa. Days indicated in red are work-free days and all others are workdays. With the **Fill** button the dialog **Enter Free Days** is opened, via which certain weekdays can be automatically entered as work-free days in the calendar.

The dialog **Calendar** can be accessed via the menu command **Other|Calendar...** .

▼ Dialog: Calendar

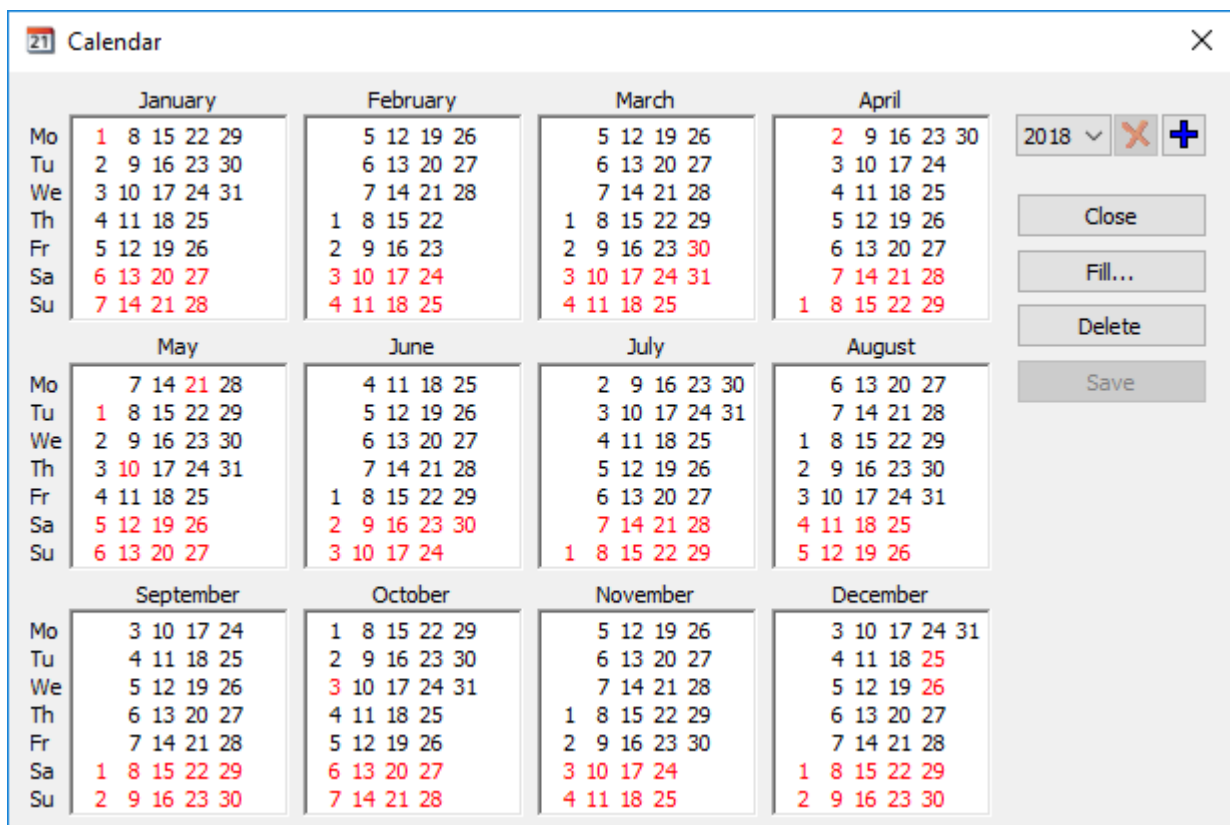


Figure 200: Calendar

▼ Functions: Dialog

Button **Close**

With this function the dialog is closed. If changes have not yet been saved, the system will display a respective confirmation box.

Button **Fill...**

With this function the dialog **Enter Free Days** is opened.

Button Delete...

This function deletes all days entered as free days in the selected year (without prior confirmation)!

Button Save

With this function the current changes to the calendar are saved.

Data section: Dialog

(Calendar sheet with 12 months)

Here you can define workday and work-free days for the respective days (toggle function workday / work-free day).

... - select the workday/work-free days.

(Year)

Here you select the year displayed or to be edited on the calendar. If changes have not yet been saved, a corresponding confirmation box is displayed.

... - select the desired year.

X (Delete calendar definitions)

With this function the calendar for the selected year can be deleted following respective confirmation.

+ (Add calendar definition)

This function opens the dialog **Add Year**. By entering a year, the respective calendar is established and directly selected.

Dialog: Enter Free Days

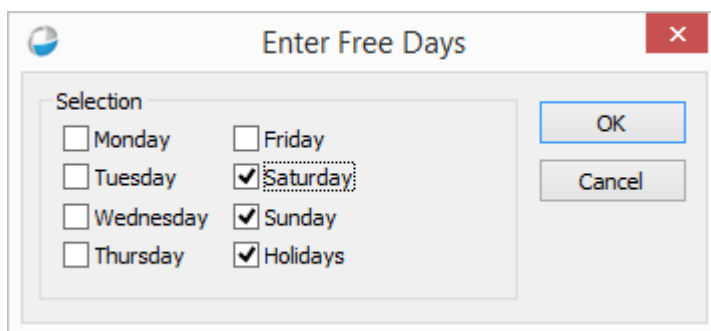


Figure 201: Enter Free Days

Individual weekdays can be selected as workdays or work-free days. Sunday is defined as a work-free day as a standard. Via the check box **fixed Holidays** all uniform German holidays can be entered. WinGuard recognizes New Year's, Easter, May 1, Pentecost, October 3, and the Christmas Holidays (December 25 and 26). Regional holidays must be entered manually.

7.13 Schedules

Schedules are part of the time functions and serve to define various sections of time. For example, work times and work-free times (when a building is empty for instance) can be defined, as well as service and shift schedules. Depending on the time, during events, for example, varying measures can be defined for different periods of time.

WinGuard can maintain an unlimited number of schedules and up to twelve time segments can be defined for each schedule. These time segments are then used for the definition of the individual time periods of single days.

Via conditional elements of the [Type Schedule](#) ¹⁰⁵³, you can review if the current point in time is in a certain time section of a schedule. Depending on that information, different information can be displayed or varying actions can be executed.

Schedules thus allow you to configure the actions of the system differently depending on the time.



*The availability of the function depends on the license module **Scheduler!***



When you have established a new schedule, you should first define all required time segments!

7.13.1 Edit Schedules

Using the menu command **Other|Schedules...** you can access the dialog **Edit Schedules**, which allows you to create and edit schedules. Via the selection fields along the upper edge, you can select the schedule, month, and year. The respective month is directly displayed and can then be edited.

In the day header, the days of the month are displayed with the respective day of the week. Days defined as **work-free days** in the [calendar](#) ⁵⁸³ are indicated in red. When you open the dialog, the current day is displayed. You can select another day by clicking on the field that contains the date.

You can copy the definition of a day by clicking on the date and moving it per drag&drop to another date.



Please remember to define the schedules in time for the next year!

If the calendar is not defined, all days will be working days!

If the schedule is not defined, schedule section 1 is used for all sections and all days (0-24h)!

▼ **Dialog: Edit Schedules**

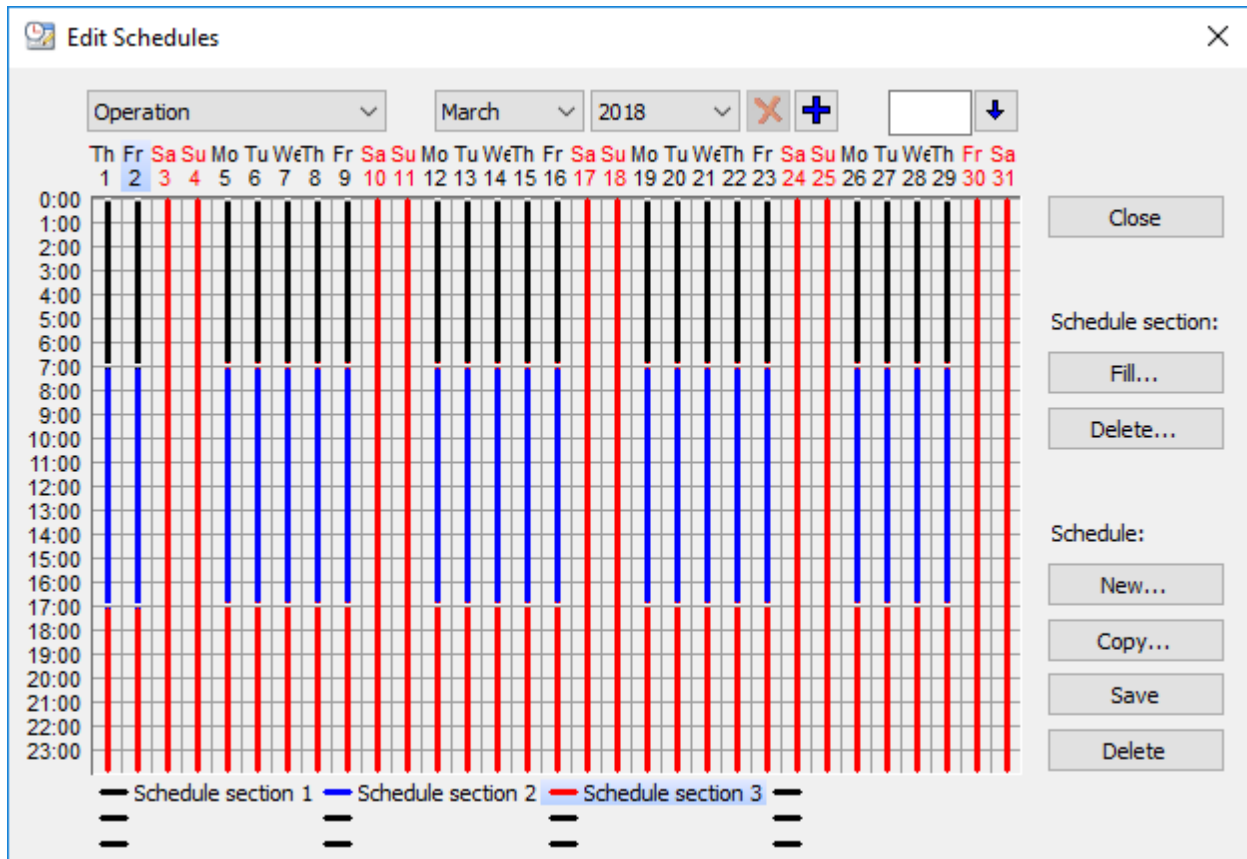


Figure 202: Edit Schedules

▼ **Functions: Dialog**

Button **Cancel**

Close the dialog without prior confirmation. No changes are made.

▼ **Functions: Editing**

▼ **(Schedule)**

Here the schedule that is to be displayed and edited is selected. If no schedule has been defined, a new one must first be created.

... - select the desired schedule.

▼ **(Month)**

Here you can select the month for which the schedule should be displayed and edited.

... - select the desired month.

▼ **(Year)**

Here you select the year for which the schedule should be displayed and edited. If changes have not yet been saved, the system will display a respective confirmation box.

... - select the desired year.

 **(Delete schedule for selected year)**

With this function the schedule for the selected year can be deleted after appropriate confirmation.


 **(Add year)**

This function opens the dialog **Add Year**. By entering a year here, the corresponding calendar is created and directly selected.

 (Time)

Specification of the time for the starting point of a schedule section (24-hour clock).

... - enter the desired time.

 *Relates to the marked schedule section of the twelve sections below the schedule and the marked day.*


You have the option of entering the time in the format [HH:MM] or [HH.MM]. For times on the hour, a number between 0 and 23 can be entered (24-hour clock)!

 (Set time)

Time (entry field left) as starting point on the marked day for the marked schedule section.

 (Schedule time / days)

In this field, the definitions for the individual days can be edited graphically.

 *Simply drag a schedule section with the left mouse key held down to the respective time of the desired day!*

 (Schedule section 1 .. 12)

By double-clicking on one of the schedule sections, the dialog **Schedule section** is opened for the definition of the various schedule sections.

... - select the desired schedule section.

 **Functions: Buttons - Schedule Section** **Fill...**

Via this function, the dialog **Fill Period** is opened (please see: [Fill Period in Time Table](#)⁵⁸⁹).

 Delete...

This function opens the dialog **Delete Period** via which the definition of individual days, months, or even a whole year can be deleted (please see: [Delete Period in Time Table](#)⁵⁹¹).

 **Functions: Buttons - Schedule** **New...**

This function opens the dialog **Schedule** via which the name for a new schedule can be defined. A schedule with the chosen name is created. The schedule contains three sections, but only the first section is inserted into the schedule.

 Copy...

This function opens the dialog **Schedule** via which the name of the new schedule can be defined. A current copy of the schedule with the chosen name is created.

**Save**

The changes made in the displayed schedule are accepted.

**Delete**

This function deletes the currently displayed schedule following respective security questions.

Handling

Below the schedule you will find a legend in which the twelve schedule sections are displayed with name and corresponding bar color. You can select a section by clicking on the respective field in the legend. This field is then highlighted in gray. If an already marked field is clicked, the dialog **Schedule Section** is opened in which the name and the color of the section can be defined. First, all schedule sections that are to be used in the time table should be defined.

Schedule sections are defined via their starting point. A schedule section ends either because of the starting point of the next following schedule section or because of the year's end. Since every point in time has to be assigned to a schedule section, the schedule section from the start of the calendar year to the first starting time - provided there is one - is always referred to as schedule section 1.

There are several ways in which you can insert or move the starting time of a schedule section in the time table:

Drag & Drop

Drag&drop with the mouse is one option. To insert a new schedule section, first click on a schedule section below the schedule and hold down the left mouse key. When you move the mouse pointer into the schedule, the display of the mouse pointer changes. At the point at which you release the mouse, you insert the starting time of the schedule section in the schedule. You can change the starting time of a schedule section in the same manner. To do this, you simply click on the respective starting point in the schedule and then move it to the desired position while holding down the left mouse key. If you move the mouse outside of the schedule and release the left mouse key, the schedule section is deleted from the time table.

Direct Entry

First, mark the schedule section and day with the mouse. Then enter the time in the entry field on the upper right in the format **hh:mm** or **hh.mm** (also for example **12:15** or **12.15**). If you now click on the button next to it (blue error pointing down) or press the enter key, you will insert a schedule section (starting point) on the selected day at the respective time.

To move a schedule section, first mark the respective starting point by clicking on it with the mouse. The time is displayed in the entry field when this is done and you can change it there. When you click the button or press the enter key, the schedule section is changed accordingly. You can also delete a schedule section (starting point) by pressing the delete key.



Schedule section definition via starting points affects the copying and deleting of schedule sections because in actuality, not the sections but rather the starting points are copied or deleted.

For example, if you copy the schedule section definitions of a day whose first starting point was not 12:00am (0:00) to another day, both days start with the schedule section with which the respective previous day ends - and that could be vastly different schedule sections. If this is not desired, every day should be assigned a starting point of 12:00 am (0:00)!

7.13.2 Define Schedule Sections

The dialog **Schedule section** is used to define the name and the color of a schedule section.

▼ Dialog: Schedule section

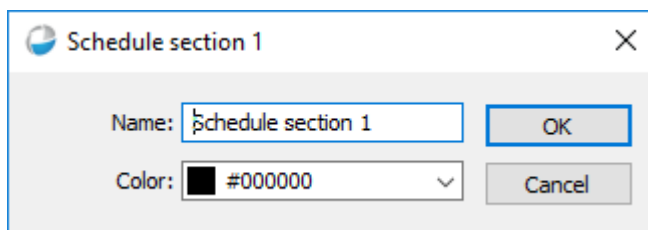


Figure 203: Schedule Section

▼ Functions: Dialog



OK

Directly executes the respective change with the selected parameters.



Cancel

Closes the dialog without prior confirmation. No changes are saved.

▼ Data section: Dialog

Name:

Here the name of the schedule are defined.

Schedule section 1 ... (Default) - define the schedule name.

Color:

Here the color of the schedule are defined.

... - select or enter the color for this section.

(RGB value: 3 hexadecimal values, each between 00 and ff - e.g. #B2B2B2)

7.13.3 Fill Period in Schedule

Defining a schedule for a whole year would be very tedious if you had to enter the respective settings for each day manually. However, the sequence of periods usually repeats itself in a certain daily or monthly rhythm. It is therefore possible to have the periods of the schedule fill automatically and to transfer the definition of the currently selected day, or several days starting with the currently selected day, to other periods.

In the dialog [Edit Schedules](#)⁵⁸⁵, first select a day whose definitions you wish to copy or after which you

wish to copy the definitions of several days! Then click on the button **Fill**! The dialog **Fill Period** is then opened.

In the filling range, you can determine for which timeframe you want to copy the definitions of the current day or the series of days. Periods can be updated into the future or back into the past to cover the entire filling range. The fields in the **Fill mode** section allow you to determine which information is copied in which manner.

▼ Dialog: Fill Period

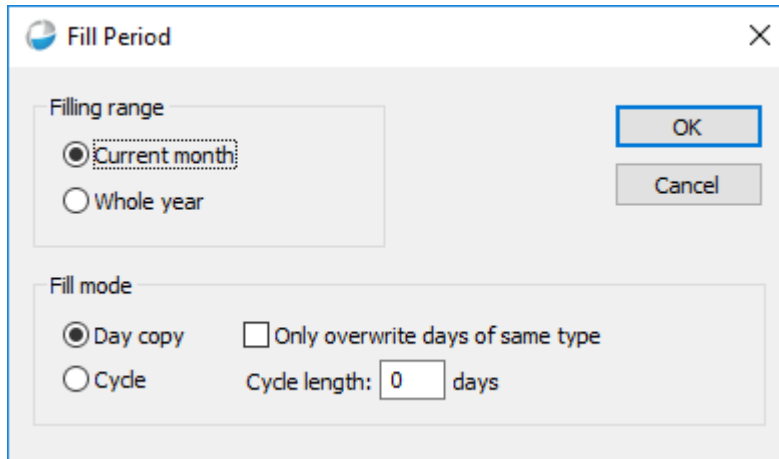


Figure 204: Fill Period

▼ Functions: Dialog

Button

OK

Directly executes the respective action with the selected parameters.

Button

Cancel

Closes the dialog without prior confirmation. No changes are made.

▼ Data section: Filling range

The options for the filling range define if the data should be accepted only for the selected month or for the whole year.



Current month

Active (Default) - only data for the currently selected month are adopted.



Whole year

Active - the information for the entire year is adopted.

▼ Data section: Fill mode

The parameters for the fill mode determine how the data should be adopted (day dependent or cycle dependent).

Day copy

Active (Default) - the definition of the current day is copied.

i All days in the selected filling range are filled according to the current definition of the day!

Only overwrite days of same type

If this additional option is selected, the definitions are only adopted on days that are defined like the current day - workday or work-free day.

Active - only days of the same type are defined.

Inactive (Default) - all days are defined.

i Workdays and work-free days are defined in the calendar!

Cycle

Active - the definition of the currently selected day and the following days starting with the currently selected day are copied in a cycle as defined in the entry field **Cycle length**.

Cycle length (days)

Here the number of days (starting with the marked day) for a cycle are defined.

0 (Default) - the cycle of days is inactive.

... - enter the length of the desired cycle.

7.13.4 Delete Period in Schedule

In order to delete the definitions for certain periods, click the button **Delete** in the dialog [Edit Schedules](#)⁵⁸⁵. The dialog **Delete Period** is opened.

▼ **Dialog: Delete Period**

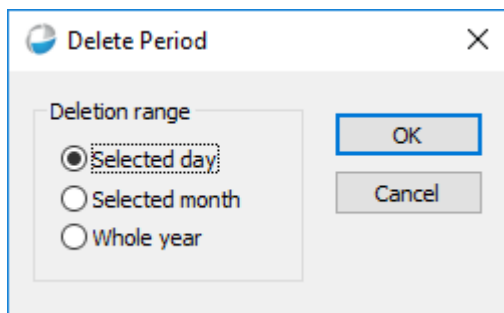


Figure 205: Delete Period

▼ **Functions: Dialog**

Button **OK**

Directly executes the respective action with the selected parameters.

Button **Cancel**

Closes the dialog without prior confirmation. No changes are saved.

▼ **Data section: Deletion range**

These options of the deletion range define what data should be deleted.

- Selected day**
Active (Default) - the definition of the selected day is deleted.
- Selected month**
Active - all entries of the displayed month are deleted.
- Whole year**
Active - the entries for the entire year are deleted.

7.14 Timer

Using timers, processes can be generally monitored with regard to time and notifications in the course of time can be pre-defined. All timers follow a uniform principle. They are identified by a name, possess a defined runtime (duration), can be started and stopped and pass through two definable escalation levels with note and warning before they expire. For Note, Warning and Expiry, different sound notifications can be configured.

Timers can be completely pre-defined, whereas the definitions are managed just like other data objects, i.e. there is a list and a form. Upon start of a timer, a timer instance is created. Specific characteristics (such as e.g. the runtime) can, as an option, still be overwritten.

Currently, timers are only used within the scope of event processing. A timer is always started for a definite event and remains linked to it. The start is realized via the script command **Control timer**, e.g. automatically upon event reception or later within the workflow. It is also possible to start several different timers for the same event.

Events can be filtered according to timers and their states. the status of the timers is visualized in special columns of the event list. For the currently selected event, the state of the next expiring timer can also be visualized and controlled via a special button in the toolbar.

Using the menu command **Other|Timer...**, the window **DB:Timer** is opened. First of all, the [Table view](#)⁵⁹³ is displayed in which all timers defined in the system are listed. For display or editing of a data set, it can then be switched to the [Form view](#)⁵⁹⁴. In both views, new timers can be created or deleted, however, editing is only possible in the form view.



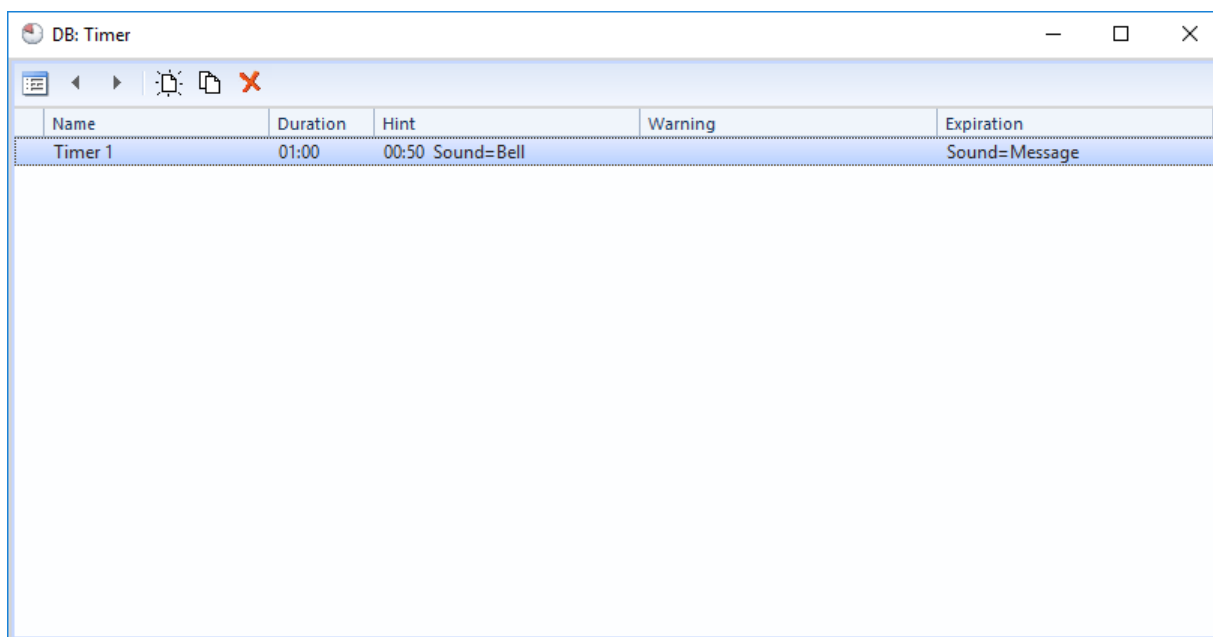
*The availability of the function depends on the license module **Scheduler!***

7.14.1 Table View

All defined timers are listed in the table view. For each data set, the columns of the table contain the contents of the fields Name, Duration, Note, etc. By double-clicking on one of the entries or by selection of an entry and clicking on the button [Form view](#)⁵⁹⁴, the editing window can be opened.

In the columns Note, Warning and Expiry, the corresponding characteristics are displayed in a combined way in the format **<Time period> Sound:<Sound>**. If one of the indications is not available, it will be omitted completely. Further information with regard to the contents of the single columns can be found in the section [Form view](#)⁵⁹⁴.

▼ Window: Timer - Table view



Name	Duration	Hint	Warning	Expiration
Timer 1	01:00	00:50 Sound=Bell		Sound=Message

Figure 206: Timer - Table view

▼ Functions: Toolbar Table view



Form View

This function switches the window to form view.



Previous / Next Record

With these functions the previous / next record is selected.



Changes are accepted without further confirmation!



New

With this function a new record is created.



Copy

This function creates a copy of a selected record.



Delete

With this function the selected record is deleted.

7.14.2 Form View

In the form view, an editing form is displayed in which the data for the timers can be entered or changed. Definition sections for the Name, Duration, Sounds, etc. are available. Here it is also possible to create new timers or to delete existing ones.

▼ Window: Timer - Form view

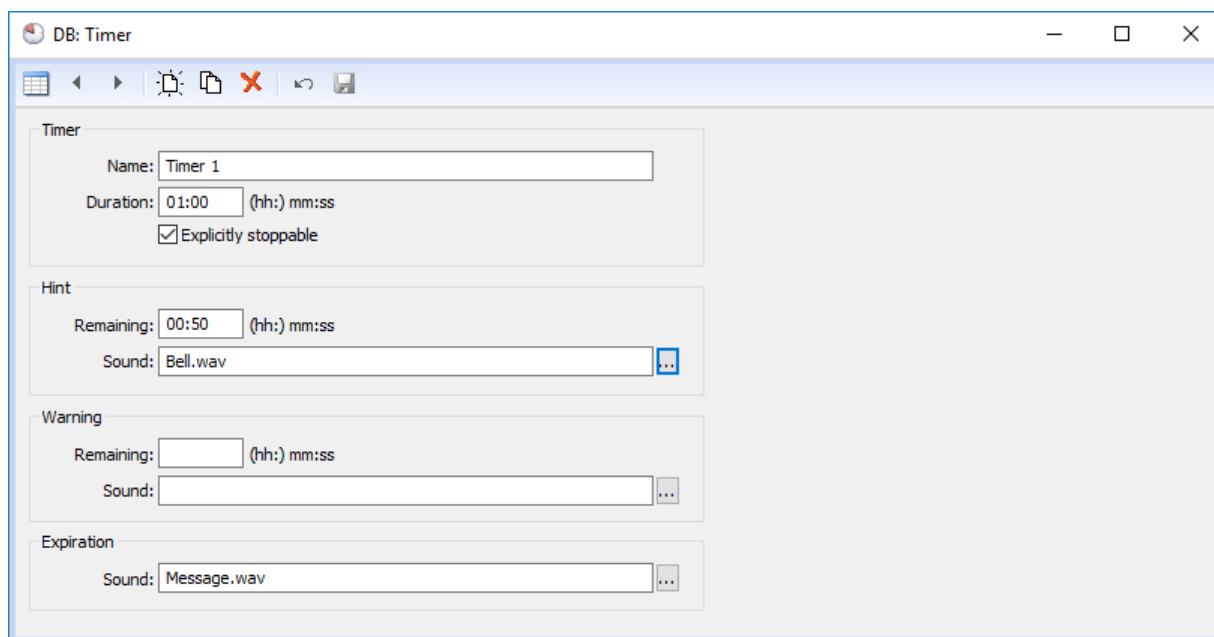


Figure 207: Timer - Form view

▼ Functions: Toolbar Form view



Table View

This function switches the window to table view.



Previous / Next Record

With these functions the previous / next record is selected.



Changes are accepted without further confirmation!



New

With this function a new record is created.



Copy

This function creates a copy of a selected record.



Delete

With this function the selected record is deleted.



Undo

With this function the last change(s) can be undone / reversed.



Save changes

With this function the current record is saved.

▼ Data section: Timer

Name

The name of the timer is defined here (max. 100 characters).
... - indicate the name of the timer.

Duration ... (hh):mm:ss

The time period from start to end of the timer is defined here. The indication is made in the format (hhh:)mm:ss, whereas the duration has to be a value greater than 0.
... - indicate the duration (>0).



Explicitly stoppable

This option defines whether the timer can also be terminated explicitly.
inactive (default) - the timer cannot be terminated explicitly.
active - the timer can be terminated explicitly.

▼ Data section: Note / Warning / Expiry

Remaining ... (hh):mm:ss

The time period for playing the note/warning sound before expiry of the timer is defined here. The indication is made in the format (hhh:)mm:ss, whereas the time has to be greater than 0, however also shorter than the duration.

Blank/0 (default) - the note/warning sound is not active

... - indicate the note/warning time (duration > ... >0).



This definition is not available in the data section Expiry!

Sound

Here, the sound for Notes/Warning/Expiry is defined. As an alternative, the selection of a sound file can be realized via the file selection dialog.

Blank (default) - no sound will be played.

... - if required, indicate name and path of the sound file.



(Sound selection)

Via this function, the file selection dialog for selection of the sound file is selected. .

... - if required, select the name and path of the sound file.

7.15 Sensor Types

When defining sensor types, a datapoint category, an alias name, and a symbol can be assigned to every sensor type. The name of the sensor type in connection with its datapoint serves as a reference. The alias name is used in the place of the actual name in instances such as event display.

Sensor types are created for a specific datapoint category. However, it is also possible to establish general sensor types for all datapoint categories together. When editing a datapoint, only the sensor types defined for that datapoint are selectable, as well as all general sensor types.

Via the menu command **System | Sensortypes...** you can open the window **DB:Sensor type**. You will first see the [Table View](#)⁵⁹⁷ which lists all sensor types defined in the system. To view or edit a record, it is necessary to switch to the [Form View](#)⁵⁹⁸. New sensor types can be set up or deleted in either view, but editing is only possible in Form View.

A respective sensor type can be assigned to every datapoint and each individual sensor. Generally, datapoints have freely-selectable text descriptions. If a sensor type is defined with the respective reference, then a datapoint or sensor can use the associated symbol without any further entries. This means that you can indirectly assign a respective symbol to datapoints/sensors in this manner.

When a datapoint or sensor is placed into a graphic per drag&drop from the Explorer bar, it is inserted there and the assigned symbol of the respective sensor type is used for representation.

Via the definition of a special sensor type with the name **default**, it is possible to globally define a symbol that can be used for all non-defined sensor types. Otherwise, a simple black dot is used to represent this type of sensor.



In case symbols of sensor types are changed after correspondingly linked objects have been defined in graphics, the initial symbol assignments in the graphics will remain unchanged if the referencing of the symbol graphic is realized via the symbol file!



After changing the definition of sensor types, the datapoint editor should be restarted so that the current changes of the sensor types are available there!

7.15.1 Table View

All defined sensor types are listed in the table. The table columns contain the content of the following fields for every record: name, Display name, etc. By double-clicking on a record or by selecting a record and then clicking on the button [Form View](#)⁵⁹⁸ the editing window can be opened. Additional information about the content of the individual columns can be found in the section [Form View](#)⁵⁹⁸.

▼ **Window: Sensor types - Table View**

Name	Display name	Last change	by
FAS	FAS	21.11.14 14:39	Andy
Flashlight	Flashlight	20.11.14 10:29	Andy
HDD	HDD	21.11.14 14:39	Andy
MFA	MFA	21.11.14 14:39	Andy
OSD	OSD	21.11.14 14:39	Andy
BC	BC	21.11.14 14:40	Andy
IAC	IAC	21.11.14 14:40	Andy
IMD	IMD	21.11.14 14:40	Andy
MC	MC	21.11.14 14:40	Andy
Assault Alarm	Assault Alarm	20.11.14 10:53	Andy
Handset	Handset	20.11.14 10:54	Andy
Area	Area	20.11.14 11:01	Andy
Air Conditioner	Aircon	20.11.14 11:02	Andy
Digital Video Recorder	DVR	20.11.14 11:05	Andy
Fence Zone	Fence Zone	20.11.14 11:05	Andy

Figure 208: Sensor type - Table View

▼ **Functions: Toolbar - Table View**



Form View

This function switches the window to form view.



Previous / Next Record

With these functions the previous / next record is selected.



Changes are accepted without further confirmation!



New

With this function a new record is created.



Copy

This function creates a copy of a selected record.



Delete

With this function the selected record is deleted.

7.15.2 Form View

After the function **New** or **Edit** has been used or a double click on a list element has been executed, the form view is opened. Here you can define sensor types with type, name, alias, and a symbol.

The name of a sensor type must be distinct within a datapoint category. However, sensor types with the same name can exist for different datapoint categories. If the same name is defined for both a datapoint category and a general sensor type, the datapoint name will have priority.

If the name **Default** is selected for a sensor type, this will be special. This sensor type will not be available for selection when editing datapoints, but is used implicitly for sensor types that do not have their own definition.



As an option, a default sensor type can be defined either separately for each datapoint category or globally (without any category) as a general sensor type!

Window: Sensor type - Form View

Figure 209: Sensor type - Form View

Functions: Toolbar - Form View

The functions of the toolbar are changing depending on the current status of the window. For example functions like **OK** or **Cancel** will only be visible after changes have been made.



Back (Table View)

This function switches back to table view.



OK

This function save the actual definitions (same as save changes) and switches back to the table view.



Cancel

This function ignore all changes without a call back and switches back to table view.



Previous / Next Record

With these functions the previous / next record is selected.



Changes are accepted without further confirmation!

**New**

With this function a new record is created.

**Copy**

This function creates a copy of a selected record.

**Delete**

With this function the selected record is deleted.

**Undo**

With this function the last change(s) can be undone / reversed.

**Save changes**

With this function the current record is saved.

▼ Data section: Sensor Type

**Category:**

Here you select the datapoint category for which the sensor type shall be defined.

Blank (default) - this sensor type applies to all datapoint categories.

... - select the desired datapoint category.

Name:

In this field, you can define a name (text for display) of the sensor type (please also see **Name as**) (required).

Blank (default) - enter the desired name.

Default - this definition serves as preset for the respective sensor types.

Name as:

The text defined here is also used for display. This replaces the entry for **Name** in case the variable Sensor type is used in a text or graphic (optional).

Blank (default) - enter the desired alias name.

Symbol:

You can assign a symbol to the sensor type via this selection field. This symbol will then be available for all datapoints with this sensor type and will be used for display of a datapoint in graphics, for example, if it is placed in a graphic by drag&drop.

Blank (default) - no symbol is assigned to the sensor type.

... - select the desired symbol or enter the symbol name directly.

**- (Symbol selection)**

With this function the explorer is opened.

(Symbol view)

In this field the currently selected symbol is displayed.



In case symbols of sensor types are changed after correspondingly linked objects have been defined in graphics, the initial symbol assignments in the graphics will remain unchanged if the symbol graphic is directly assigned to a symbol file!

7.16 Animation Schemes

The purpose of animation schemes is to determine the colors and actions of animated objects and buttons in graphics. Every animation scheme has up to 10 different color entries. In addition to the color, you can also define if the display should flash periodically for each entry.

In most applications, animation schemes are utilized to define the various datapoint states. They are then used in the display of the corresponding symbols in the graphics. Flashing only applies to graphics displayed in the so-called state mode.

The meaning or utilization of the selected color depends on the subsequent application of the animation scheme:

- **Datapoint states**
For the animation of datapoint states, the entries define the color of the respective states.
- **Datapoint values**
For the animation of analog datapoints (values), entries 0-4 define the color of the value ranges.
- **Buttons**
For the coloring of buttons, entries 0-5 define the color of the buttons.



For graphics displayed in event mode, the display elements (symbols) are always flashing. The flashing is the result of the color change between the current state and the state, silence!

7.16.1 Edit Animation Schemes

You can open the dialog, **Edit Animation Scheme** via the menu command **Other|Animation Schemes**. Using the settings defined here, the display actions of datapoints in graphics can be defined.

Using the selection field at the top of the dialog, the animation scheme that is to be edited is selected. You can select from all animation schemes already defined in the system. Presets for animation (default animation) can be defined in the settings under [Graphic](#)⁴⁸⁵. The flashing mode is only applicable to the animation of datapoint states. In the settings for **normal** flashing and **fast** flashing, flashing is the result of changing color between the color entry 0 and the color of the current state.

▼ Dialog: Edit Animation Schemes

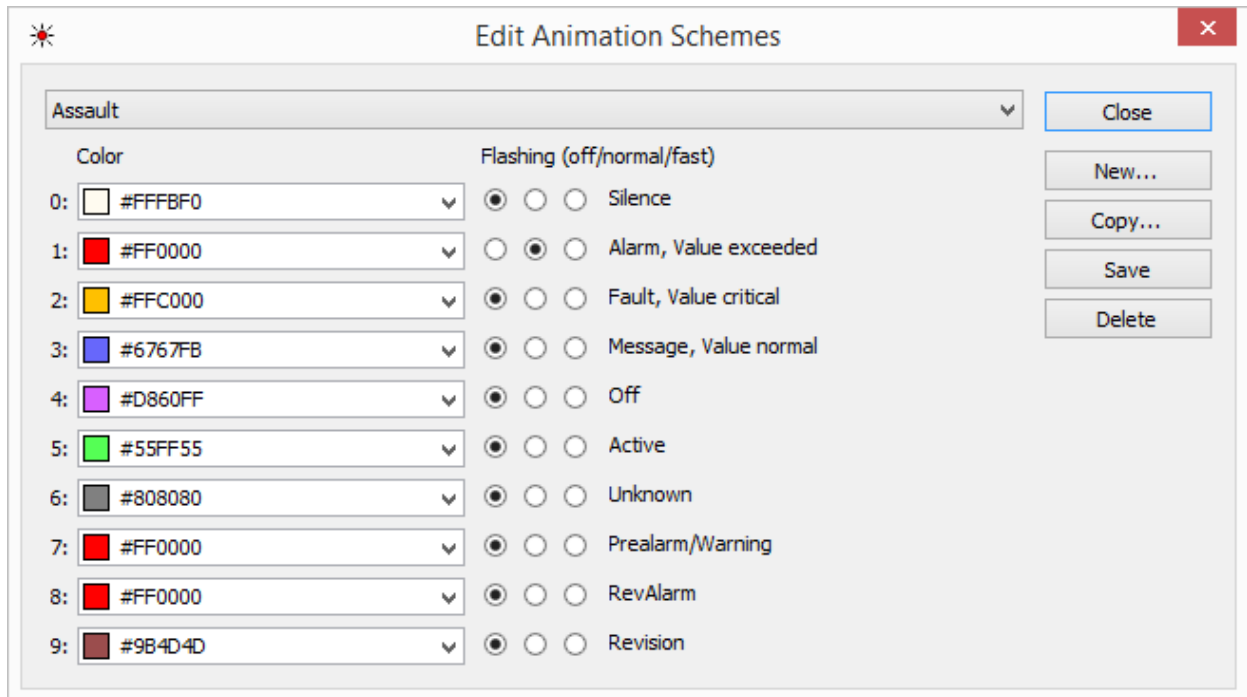


Figure 210: Edit Animation Schemes

▼ Functions: Dialog

Button Close

This function closes the dialog. If changes have not been saved, the system will ask you if you would like to do so now.

Button New...

This function opens the dialog, **Animation Scheme** via which the name for the new animation scheme can be entered. Subsequently, the new animation scheme is created with the system presettings. If changes to the current scheme have not been saved, the system will ask you whether you would like to do so now.

Button Copy...

This function opens the dialog, **Animation Scheme**, via which the name of the new animation scheme can be entered. A copy of the selected animation scheme is then created under the new name. If changes to the current scheme have not been saved, the system will ask you if you would like to do so now.

Button Save

This function directly saves the current changes.

Button Delete

This function deletes the selected animation scheme following confirmation.

▼ **Data section: Dialog**

▼ (Animation Scheme)

Here you can select an already defined animation scheme. If changes to the current scheme have not been saved, the system will ask you if you would like to do so now.

▼ Color (0 ... 9)

Here the colors for the corresponding state types of linked graphic objects is defined (please also see Settings: [Graphic](#) ⁴⁸⁵).

#aabbcc - select the colors for the respective state types.

(RGB value: 3 hexadecimal values, each between 00 and ff - e.g. #B2B2B2)

Flashing - off / normal / fast (0 ... 9)

These options determine the flashing action for individual states during **state display** of linked graphic objects. Select the desired option here.

Off (default) - flashing is turned off.

Normal - normal flashing (approx.. 1 x /second).

Fast - fast flashing (approx. 2 x /second).



These settings are only applicable for the state display!

▼ **The meaning of the state color depends on their use.**

#	Datapoint State	Datapoint Values	Button
0	Silence	Background	Text color
1	Alarm	Value exceeded	Bright light color
2	Fault	Value critical	Light color
3	Message + armed	Value normal	Surface
4	Off + off + disarmed + lock	-	Shadow color
5	Active	-	Dark shadow color
6	Unknown	-	-
7	Pre-alarm + Warning	-	-
8	RevAlarm + RevFault + RevMessage	-	-
9	Revision	-	-

7.17 Layouts

In WinGuard, layouts are used to define and configure the user interface. Different layouts can be defined for individual users and workstations (via profiles). With the help of layouts, displays are flexible and vary according to specific responsibilities for normal operation and event display.

A layout can divide a display surface into various subsections, and each subsection can be defined with its own properties, ID, and content. These contents can again be layouts that in turn, have their own subsections, etc. This allows for the display of content ranging from simple to complex.

The definition for the use of layouts is determined primarily in the system settings and the script for event display. However, you always have the option of displaying layouts, dynamically changing layouts, or showing new content using commands. You can find additional information in the operating section under [Layouts](#)¹³⁸.

Using the menu command **Other|Layouts...** you can open the window of the layout editor where you can interactively configure layouts.

7.17.1 General

In addition to the properties defined via the ID, individual properties can also be defined for panes. These properties affect not only on the pane itself, but also the layout components contained in that pane.

The layout structure is organized in such a way that certain layout components such as tab, bar, popup, and display always have a fixed, directly-subordinated area. This area cannot be directly split. Here we refer to it as the fixed offspring area. The ID of such a fixed offspring area is the same as the ID of the superordinated layout component and the properties of the area are also adopted for the superordinated component.

Thus, the title defined for the pane is also adopted as the title of the tab, bar, or popup. If the area is defined as "cannot close" or "cannot move" it is actually the superordinated component that cannot be closed or moved, etc.

In part, identical settings to those made for panes or popups can be defined for contents, such as prevent closing, prevent moving, and the definition of the titlebar. In this case, these properties overwrite those defined for a pane or a popup, in accordance with certain rules. This establishes a quasi chain of definitions for properties (document - content - area) in which the properties can overwrite one another.

Min/max properties continue to be passed along in the layout. For example, this makes it possible to define min/max sizes for the split as well as the two resulting areas, the areas in turn can display content that also has a defined min/max size, or contain splits or popups with their own min/max size, etc. In this case, the aggregate min/max size is calculated from all entries and the respective greatest minimum and the smallest maximum are expressed.

The predefined Displays 1...4 present a special case. Here the title always consists of the program name, display name, or defined title for the display. The title from the content is not adopted. However, for dynamically opened displays, the area and content entries are adopted.

Depending on the selected definition, panes as described above can be used for various purposes. Thus you create a quasi **display surface** through a fixed area with an ID that remains fixed in the user interface. You can place or remove any content there. Such an area is really recognized as an addressable area of the program interface.

However, if you instead create an area that can be freely manipulated, has no ID, or predefined content, for example as a tab, this area is not recognized as a surface, but as content that is displayed within another area.



Because of the high number of possible definitions and configurations, you can create constructs that later do not seem to be very intuitive to users. It is therefore important to carefully plan a suitable layout and pane structure.

7.17.2 Editing

The display area of a layout can be divided into various subsections using functions. For example, an area can be simply split or can be subdivided using tabs, bars, or popups.

- Split** A split divides an area into two parts separated by a splitter.
- Tab** Tabs arrange subsections with a corresponding tab bar. Only the subsection of an active tab is visible.
- Bar** Bars can be used to arrange subsections. However, bars in a layout can be moved so that several subsections are visible at one time.
- Popup** Popups are subsections that cover the actual area in part or entirely. They are displayed like windows and can be handled as such, but they are limited to the size of the area.



When saving layouts, their signature is removed!

7.17.2.1 Form View

After opening of the window (menu command: **Other|Layouts...**), the definition of the first found layout is displayed. Via the selection list at the left top margin of the window, the layout to be edited can be selected. All layouts defined in the system will be offered for selection. In case no layout has been defined yet, both the display and the selection list will be empty (<New layout>). In this case, it is only possible to create a new layout or to close the window. The layouts are stored in the project directory Files resp. have to be available there.

The window has a local symbol bar via which the layout to be edited can be selected by using the selection list at the left side. In the workspace of the window, the currently selected layout will be displayed and changes of the layout definition can be made via the context menu or by drag & drop.

The layout editor has, similar to the graphic or text editor, two different work modes, the edit mode and the test mode between which it can be switched by using a corresponding function in the toolbar.

In edit mode, the contents of the panes will not be displayed, instead information with regard to the defined content will be displayed. All panes containing a sub layout have an additional frame so that they will not be covered by the contained sub panes. The embedded sub layouts can be edited directly and stored separately. This can be used to transfer contents and structures between layouts. At the top margin of each pane, additional local function elements can be found. Using the selection box at the top left, the ID of the area can be directly selected. The selection box at the top centre can be used to switch or store the displayed sub layout, if necessary.

In test mode, the layout will be displayed almost in the same way as during the later display on the user interface, with displayed contents. However, only a limited further editing of the layout is possible here. For example, splitters can be moved, popups can be placed and drag & drop operations can be executed. An operation of the layout (e.g. via addressing of the areas) is not possible in test mode.

▼ **Window: Layout - ... (edit)**

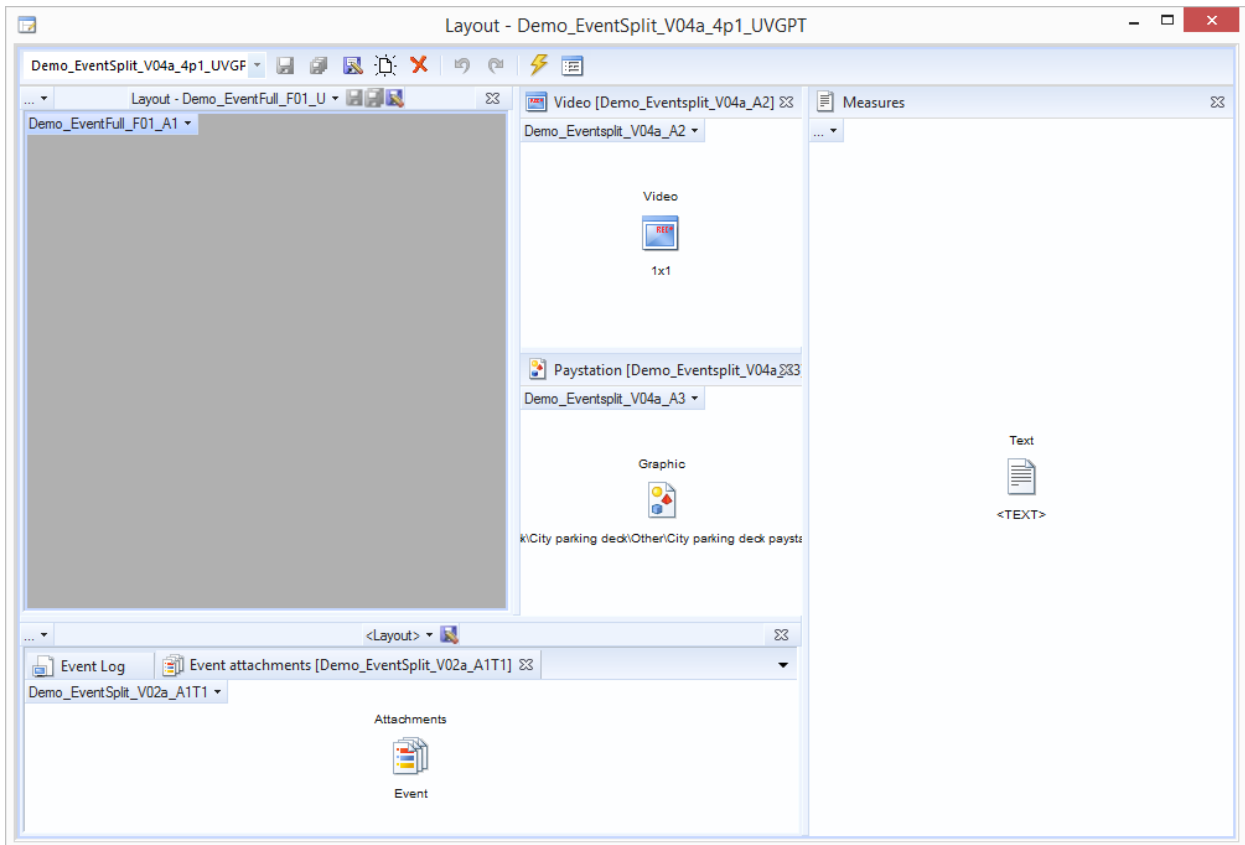



Figure 211: Edit layout

▼ **Functions: Toolbar**



(Display resp. loading of a layout)

The name of the opened layout will be displayed here. If the layout is signed, this will be marked by the symbol .

One of the available layouts can be selected and opened via the selection function.

Name (default) - if necessary, select the desired layout.



Save

Saves the current layout. For new layouts, it is additionally required to enter the name.

Name - if necessary, enter the name for the new layout.



Save all

Saves all opened resp. changed layouts.
(if, for example, another layout is used in a layout pane)



Save under

Saves the layout under a new name after confirmation.

Name - enter the name for the layout.

**New**

Creates a new layout, if necessary after confirmation (in case a layout is already in process) in the processing pane.

**Delete**

Deletes the selected layout after confirmation.

**Undo <Alt>+<Undo>**

This function will undo the last change(s).

**Redo <Ctrl>+V**

The last change done by Undo will be redone again.

**Toggle test mode**

With this function, the layout editor can be switched between edit and test mode.

**Properties**

This function opens the dialog for editing of the properties.

Context menu: Panes

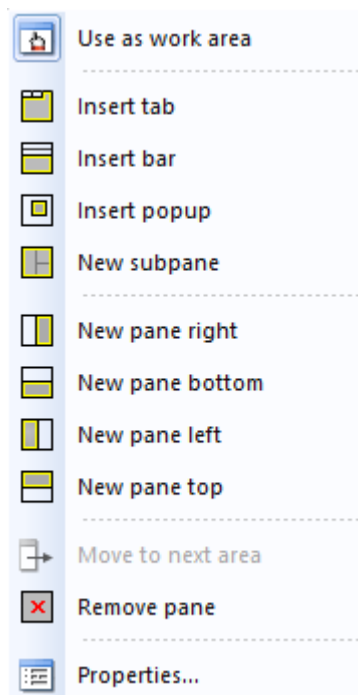
















Figure 212: Edit layouts

Functions: Context menu - Panes

**As work area**

The selected pane will be defined as active work area, i.e. that content will be displayed without target Id in this area.

-  **New Tab**
Inserts another tab in the selected pane resp. parallel to the selected tab.
-  **New Bar**
Inserts another bar in the selected pane resp. parallel to the selected bar.
-  **Change to tabs**
Changes the arrangement in the pane from bars to tabs.
-  **Change to bars**
Changes the arrangement in the pane from tabs to bars.
-  **New Popup**
Inserts a popup into the selected pane.
-  **New subpane**
A content that contains exactly one subpane is inserted as layout into the selected pane.
-  **New pane right**
A new, empty pane is created to the right of the selected pane.
-  **New pane bottom**
A new, empty pane is created under the selected pane.
-  **New pane left**
A new, empty pane is created to the left of the selected pane.
-  **New pane top**
A new, empty pane is created above the selected pane.
-  **To previous pane**
The selected pane is moved to the previous pane within the display (only for display in test mode).
-  **To next pane**
The selected pane is moved to the next pane within the display (only for display in test mode).
-  **Remove pane/object**
The selected pane resp. the object is removed without confirmation.
-  **Properties**
This function opens the dialog for editing of the properties.



In addition to normal drag & drop, it is also possible to change the contents of two panes by simply clicking on the content and moving it!

7.17.3 Layout Properties

Via the dialog, **Properties Layout**, you can edit settings for the directly or indirectly selected areas/objects as well as the layout itself. Depending on the selected elements, only respective tabs and therefore varying definitions are possible. For example, in an area that does not have a split, the respective tab, Split, is not available.

You can define an icon and a title for the layout document. These are also displayed in the area if the layout is shown as content and no other explicit definitions have been made. If no title is defined for the document, the layout name is used as the title of the document.

For display in the subsections, the defined contents are used by default. If other contents are currently defined for the respective areas, then those are active.

Using the context menu of the individual areas, you can open the dialog, **Properties Layout**, via the menu item, **Properties**.

▼ Dialog: Properties Layout - General Functions


These functions are located in the lower section of the dialog and are available independently of the individual definition areas.

(Permanent Acceptance)

With this function a permanent adoption of the settings can be activated. This means that every change is accepted immediately (after quitting the respective field).


Active (default) - changes are immediately (permanently) accepted.

Inactive - changes are accepted via the button, **Accept**.

 *If this function is active, the function, **Accept**, is always inactive!*

Accept

With this function, settings that have been defined are accepted.

 *The function is only active following changes and only then if the function, **Permanent Acceptance** is not active!*

Help

With this function, you can access the WinGuard help section.

7.17.3.1 Layout Tab

In the **Layout** tab of the dialog, **Properties Layout**, information such as name and signature is displayed for the selected layout. Additionally, a title with respective settings can be defined here. Optionally, layouts can also be defined as a unit for display. For these kinds of layouts, the target for a drop or a split is not a subsection, but the total area of the layout. The idea for such a layout is to quasi define a compiled document that can consist of various contents put together.

▼ **Dialog: Properties Layout - Layout Tab**

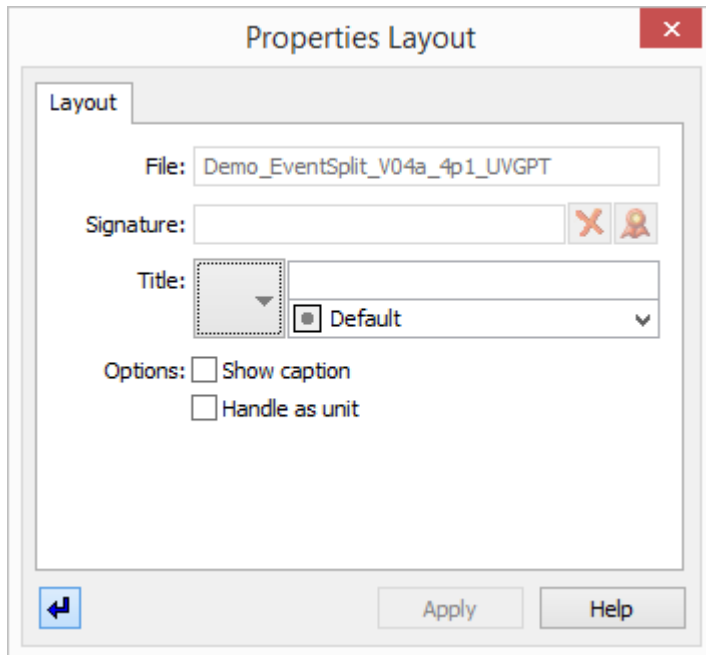


Figure 213: Properties Layout - Layout Tab

▼ **Settings: Layout Tab**

File:

Here the name of the currently edited layout is displayed.

Signature:

Here, the signature of the layout is displayed, provided there is one. For unsigned layouts, the field remains blank.



- (Delete signature)

With this function, an existing signature can be deleted.



This function is only available with appropriate licensing!



- (Sign layout)

With this function, layouts can be signed.



This function is only available with appropriate licensing!

Title:

With the three following elements, a title for the layout can be defined. The tile can then appear as the respective area header during display (for example, on the respective tab).

- (Icon)

Using this selection list, an icon can be assigned to the title.

Blank (default) - no icon is displayed.

... - select an icon for the title bar if applicable.

- (Text)

Here you can define the title (text).

Blank (default) - the name of the layout is displayed as title.

... - enter the title for the layout if applicable.

 - (Color)

Here you can assign a color to the title. Select a color from the list or enter the desired color code.

Default (default) - the default color scheme of the system is used.

... - select the desired color.

(RGB value: 3 hexadecimal values, each between 00 and ff - e.g. #B2B2B2)

Options:

Using the two following options, respective title properties can be determined.

 - Show caption

Here you can determine if the title should be displayed according to the definition.

Inactive (default) - the title is not displayed.

Active - the title is displayed accordingly.

 - Handle as unit

Here you can determine if the area should be handled as a unit. For instance, this determines if, upon activation, the entire area with all subsections or only the addressed area is used for display.

Inactive (default) - only the respective named area is used.

Active - the entire area is used.

7.17.3.2 Split Tab

A split divides a display area into two subsections that are separated by a splitter. By moving the splitter, you can modify the division of the split. You can define the width of the splitter individually for every splitter in layouts. This is helpful when creating complex documents that were defined as a layout unit and allows you to achieve visual cohesion of all components (no visual separation of components). A 0-size splitter cannot be grabbed by the mouse and moved. Additionally, you can enter settings for the division of the panes and their size limitations.

Each of the two subsections of a split can again be split into two subsections, etc. This allows users to create any desired window configuration.

In the **Split** tab of the dialog, **Properties Layout**, various properties regarding the appearance, actions, and divisions of a selected pane/area are defined.



Please note that depending on approach when splitting, (if something was first horizontally and then vertically divided) the split that is generated acts differently when the splitter is moved!

▼ **Dialog: Properties Layout - Split Tab**

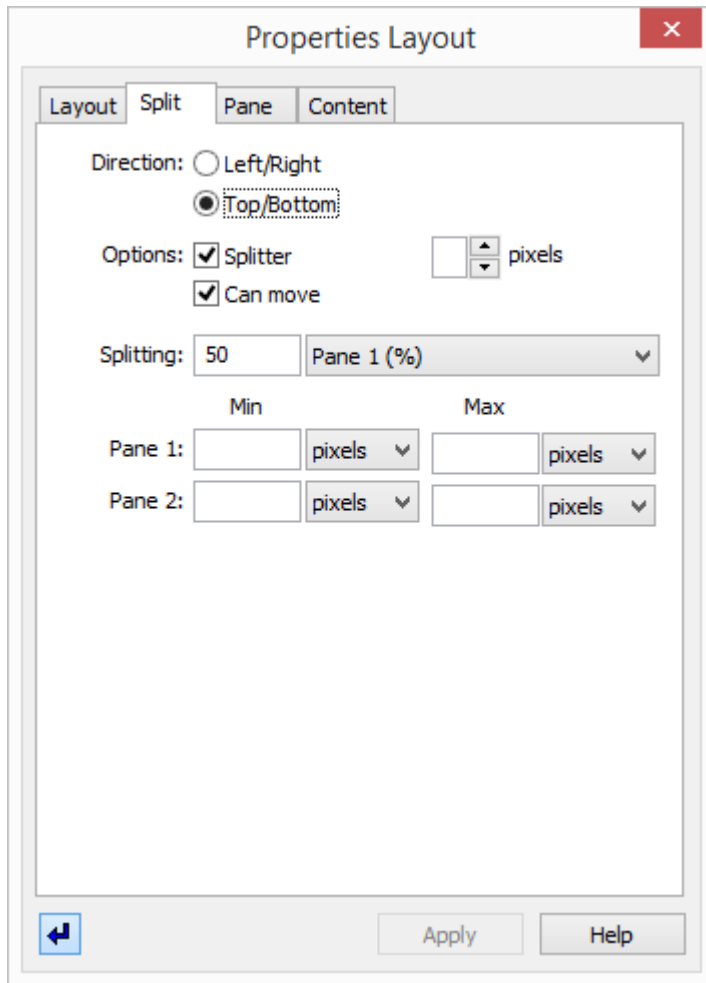


Figure 214: Properties Layout - Split Tab

▼ **Settings: Split Tab**

- **Direction:**
This options determines a horizontal split or a vertical one.
Right/Left (default) - splitter (division) is vertical.
Top/Bottom - splitter (division) is horizontal.
- Options:**
The following three options pertain to properties of the splitter.
- ☑ **- Splitter (visible)**
This option determines if the splitter is visible during display.
Active (default) - the splitter is visible in the selected width.
Inactive - the splitter is **not** visible.

▲ - Pixel

▼ Here the width of the splitter (in pixel) can be defined using the arrow keys. The selected value (blank or 1 - 8) is displayed.

Blank (default) - the default width is used.

... -select the width of the splitter if applicable.

- Can move

This option determines if the splitter can be moved during display.

Active (default) - the splitter is movable.

Inactive - the splitter is **not** movable.

Splitting:

The split can be explicitly defined with the two following elements.

- (Value)

Here the respective value can be defined.

50 (default) - enter the value for the desired split.

 *The application of the value depends on the next selection, the type of split!*

▼ - (Type of split)

Via this selection list, the type of split is defined. The value (**X**) is defined under **Splitting**.

Pane 1 (%) (default) - pane 1 is **X** % wide, Pane 2 is variable.

Pane 1 (pixel) - Pane 1 is **X** pixel wide, Pane 2 is variable.

Pane 2 (pixel) - Pane 2 is **X** pixel wide, Pane 1 is variable.

Min / Max - Pane 1 / Pane 2

With this setting, the limits for the maximum and minimum size (split-related, width or height) of the two panes can be defined. Additionally, you can select the unit (**pixel** or **%**).

Blank (default) - the respective limits are not active.

... - enter the desired limits if applicable.

▼ **Pixel (default)** - the defined limits are applied in pixel.

% - the defined limits are applied in %.

7.17.3.3 Popup Tab

Popups are subsection that cover the display area either in part or entirely. They are displayed like windows and can be handled accordingly (change size, maximize, etc.). As opposed to displays, however, they can only exist within the display area and cannot be moved outside of it.

In the **Popup** tab of the dialog, **Properties Layout** various properties regarding the appearance and actions of the selected popup can be defined. These include title, position, size, etc.

▼ Dialog: Properties Layout - Popup Tab

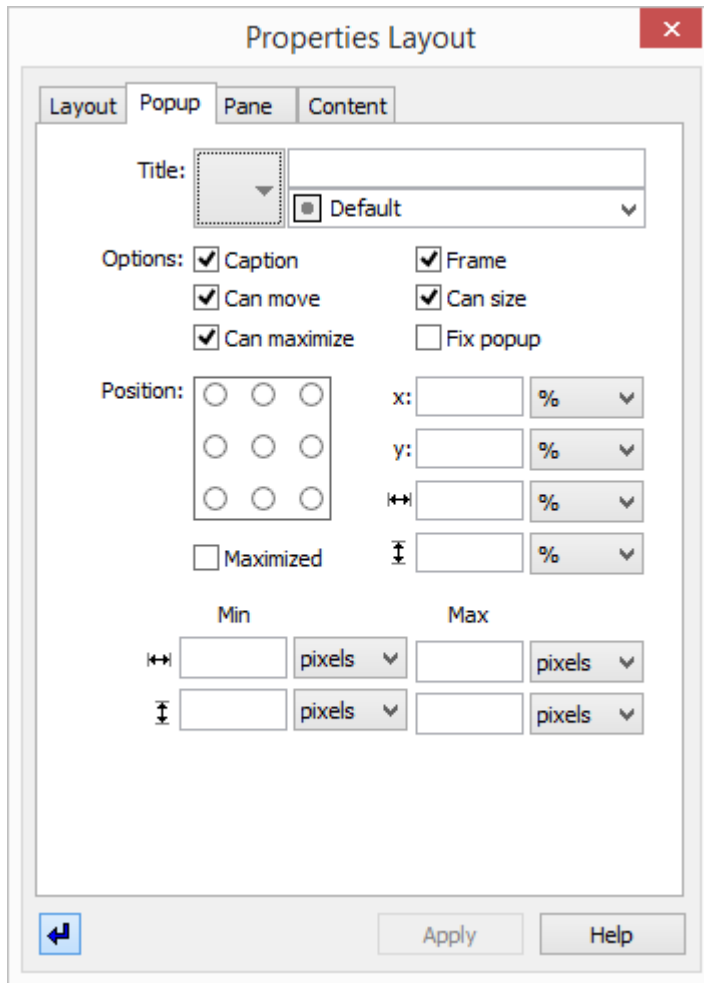


Figure 215: Properties Layout - Popup Tab

▼ Settings: Popup Tab

Title:

Using the three following elements, a title for the popup can be defined. The title then appears as a pop-up header during display.

- (Icon)

With this selection list, a title can be assigned to the title.

Blank (default) - no icon is shown.

... - select an icon for the titlebar.

- (Text)

Here you can define the title (text).

Blank (default) - the name of the layout is used as a title.

... - enter a title for the popup.

- (Color)

Here you can assign a color to the title. You can choose a color from the selection list or enter the respective color code.

Default (default) - the default color scheme of the system is used.

... - select the desired color.

(RGB value: 3 hexadecimal values, each between 00 and ff - e.g. #B2B2B2)

Options:

Via the two following options, specific title properties can be defined.



- Caption

Here you determine if the caption/titlebar of the popup should be displayed.

Active (default) - the caption is displayed accordingly.

Inactive - the caption is **not** displayed.



- Frame

Here you determine if the frame of the popup should be displayed.

Active (default) - the frame is displayed accordingly.

Inactive - the frame is **not** displayed.



- Can move

Here you determine if the popup can be moved.

Active (default) - the popup can be moved.

Inactive -the popup **cannot** be moved.



Generally only effective if the caption is also displayed!



- Can size

Here you determine if the size of the popup can be changed.

Active (default) - the size of the popup can be changed.

Inactive - the size of the popup **cannot** be changed.



Generally only effective if the frame is also displayed!



- Can maximize

Here you determine if the popup can be maximized (the maximum size is the size of the respective display).

Active (default) - the popup can be maximized.

Inactive - the popup **cannot** be maximized.



Generally only effective if the titlebar is displayed as it contains a corresponding button!



- Fix popup

Fixed popups remain intact if the content is changed in the pane.

Active - the popup is shown as a fixed popup.

Inactive (default) - the popup is shown "normally".

Position

Using these settings, the position of a popup when opened can be defined. You can select from fixed, predefined positions or define a position freely. Free size definition is also available. The anchor point for the position is always upper left.


Blank (default) - the popup is positioned in the center of the display and its height and width correspond to 50% of the display area.

- Predefined Positions

Here, a total of nine predefined positions are available for selection. If a position is selected, positions previously defined with **x** and **y** are removed.

top left, top middle, top right, center left, ..., bottom right.

... - select a position if applicable.


 *By double-clicking on a selected position, it is deselected again!*

- x / y:

With these settings, the position of the popup can be explicitly defined. Additionally, you can choose between the units (**pixel** or **%**).

Blank (default) - no function.
... - enter the desired position.

Pixel (default) - the defined value is applied in pixel.
% - the defined value is indicated in %.

 *If you first select a predefined position and then additionally enter values for **x** and **y**, then these values are recognized as an offset to the predefined position!*

- Width/ Height

With these settings, the size (width and height) of the popup can be defined. Additionally, the units (**pixel** or **%**) can be selected for these entries.

Blank (default) - no function.
... - enter the desired width and height.

Pixel (default) - the defined value is indicated in pixel.
% - the defined value is applied in %.

- Maximized:

This option determines if the popup should open as maximized.

Active - the popup is displayed as maximized when opened.

Inactive (default) - the popup is displayed according to the settings.

Min / Max - Width / Height

With these settings, the limits for the maximum and minimum size (width and height) of the popup can be determined. Additionally, you can choose between the units (**pixel** or **%**).

Blank (default) - limits are not active.
... - enter the desired limits.

Pixel (default) - the defined value is applied in pixel.
% - the defined value is applied in %.

7.17.3.4 Pane Tab

Here, a pane is a field within the user interface (comparable to an embedded window) that can be addressed via a freely-defined ID and in which contents can be displayed (please see: [Areas](#)⁶³³).

In the **Pane** tab of the dialog, **Properties Layout**, various properties for the selected pane can be defined. For example, here you can assign a pane **ID** with which the pane can be subsequently addressed. Via the definition of a corresponding function, the pane can be specified further. Using the options, additional settings for the actions or display of the pane (for example, close, drag&drop, size, etc.) can be defined.

▼ Dialog: Properties Layout - Pane Tab

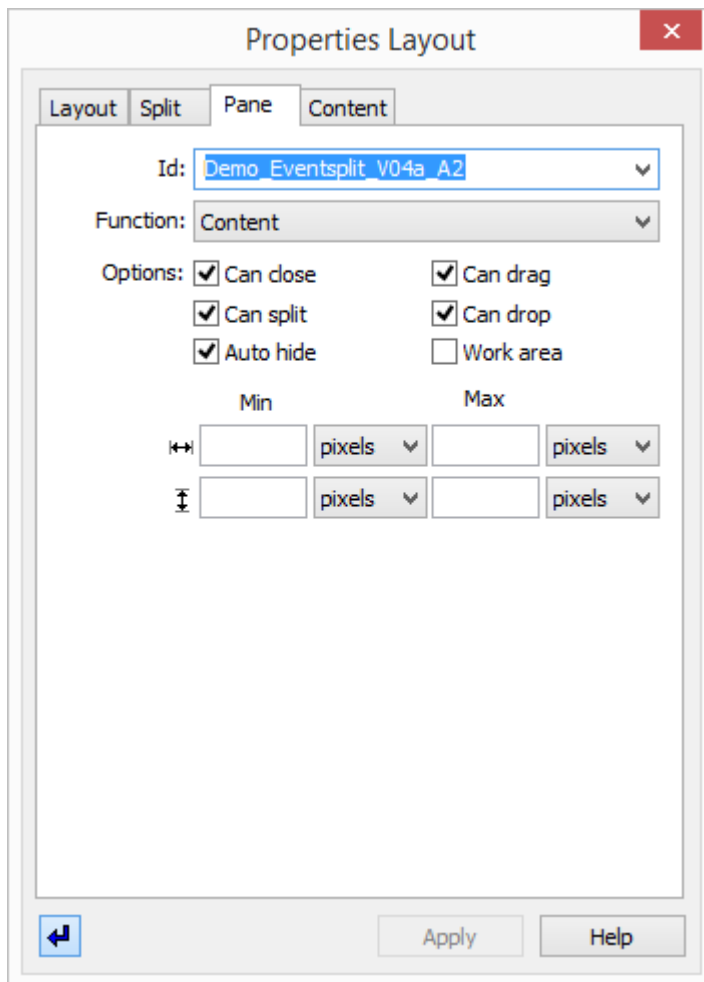


Figure 216: Properties Layout - Pane Tab

▼ Settings: Pane Tab

▼ Id:

Here you can define a pane ID for your pane. Alternatively, an already-defined pane ID can be assigned to the pane. With this ID, the pane can be subsequently addressed or filled with content.

Blank (default) - no ID is assigned to the pane.

ID - enter an ID or select an existing one.



When you define a new pane ID, you will be automatically asked whether it should be saved directly under [Panes](#)⁶³³!

▼ Function:

Here you can further specify the functions for drag&drop and other UI operations of the selected pane.

Content (default) - the pane is bound to the content. With a split, the pane is reduced in size and the new pane is located parallel to the original one. With a drop, the previous pane moves to the inside, parallel to the dropped content.

Pane - with a split, the pane is also reduced in size. But dropping occurs into the pane, the outer most pane and its properties remain intact. This setting is recommend for all addressed panes.

Split pane - the split is also carried out here on the inside, so that the outermost boundaries and properties remain intact under the same **ID**. The pane bascially never changes its boundaries. This setting should be used for the outermost areas of windows or popups so that their ID always remains intact.

Fixed pane - corresponds to the split pane. Fixed panes can be neither closed nor moved. If these operations are allowed, they only apply to the content. The pane always remains fixed in the same place with the same boundaries and properties.

Options:

The six options available here determine the actions/functions for the operation of the pane.



- Can close

This option determines if the pane can be closed during display by the user.

Active (default) - the user can close the pane.

Inactive - the pane **cannot** be closed.



With fixed panes, only the content can be closed!



- Can split

This option determines if the pane can be split during display. Depending on the pane type, the split occurs outside or inside the pane.

Active (default) - the user can split the pane.


Inactive - the pane **cannot** be split.

- **Auto hide**

The pane and the object contained therein (tab, bar, popup, subsections) is automatically hidden if only empty content is available, or all subsections do not have any content and all subsections should be hidden automatically.

Active - the pane is automatically hidden (provided it is empty).

Inactive (default) - the pane is always visible.


 *Fixed panes are never hidden!*

- **Can drag**

This option determines if the pane (including content) can be detached or moved via drag&drop or menu command from the user interface.

Active (default) - the pane can be detached or moved.

Inactive - the pane cannot be **detached** or moved.

 *With a fixed pane, only the content is moved!*

- **Can drop:**

This option determines if a content can be inserted into this pane. Depending on pane type, dropping occurs inside or outside.

Active (default) - the pane allows the insertion of other areas/content.


Inactive - the pane does **not** allow the insertion of other areas/content.

- **Work area**

This option determines if the pane should be used as a work area. If such a pane is visible within the actual work area, it becomes a workarea itself.

Active - the pane is explicitly defined as a work area.

Inactive (default) - the pane is not explicitly defined as a work area.

 *Only a pane within a layout should have this property!*

Min / Max - width / height

With these settings, you can define the boundary values for the max/min size (width and height) of the pane. You can select the units (**pixel** or **%**) for these entries.

Blank (default) - boundary values are not active.
... - enter the desired limits.

Pixel (default) - the defined boundary value in pixel is used.
... - the defined limit in % is used.

7.17.3.5 Content Tab

The content of a pane determines the information that should be displayed there. These definitions are used as presettings and can be changed during display if necessary.

In the **Content** tab of the dialog **Properties Layout**, the various definitions for content in the selected element are made. Here is where you can select a content type for the pane. Depending on content type, other parameters for definition may be required. Additionally, here you can also define a title and other options for the content of the pane (for example, close, drag&drop, size, etc.).

If the setting **auto** is selected for event-related content, the result depends on the context. During event display from panes with event contents outside or in panes with event related content inside, the

content is activated on an event-related basis. Otherwise the content is not event related. Event related means, for example, that the respective contents are displayed with a frame corresponding to the event color and when the event view is closed, they are closed as well.

As a rule, **auto** is the standard setting, especially for layouts with predefined contents. Whether or not such contents in a layout are displayed on an event-related basis depends in this case on whether the entire layout is activated on an event-related basis or not.

You can select from the following types:

- Blank
- Layout
- --- (like blank)
- Application window
- Gadget
- Graphic
- Text
- System log
- Video
- History
- Attachments
- Videos
- Document
- Website

For almost all types, additional parameters such as file name, filter, monitor number, etc. are required for definition.

▼ Dialog: Properties Layout - Content Tab

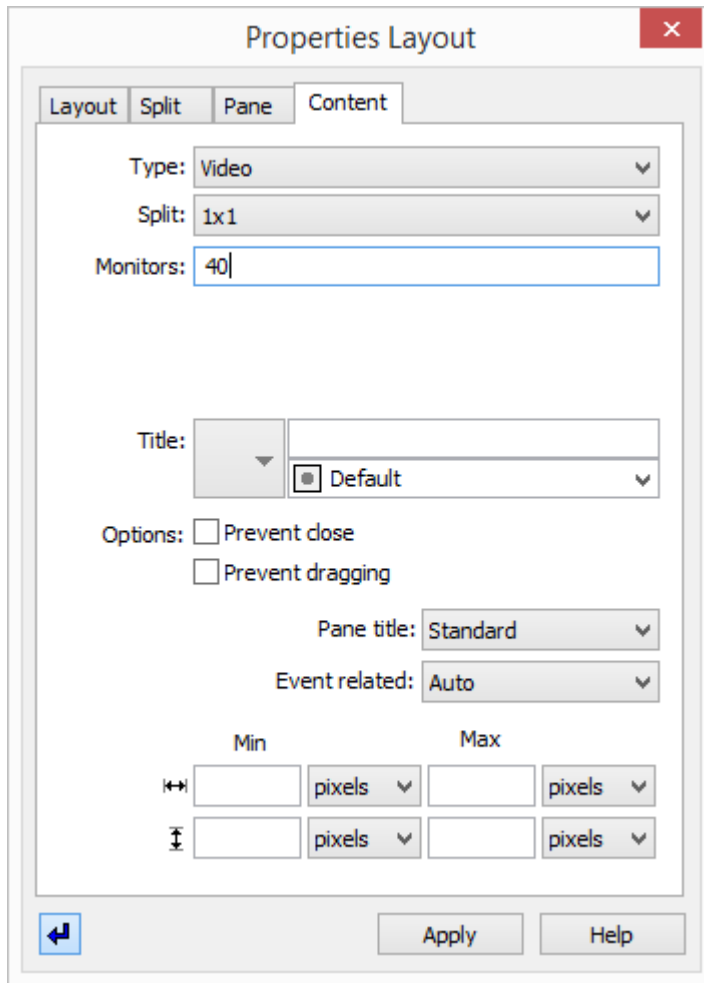


Figure 217: Properties Layout - Content Tab

▼ Settings: Content Tab (General)

Here the general settings for the content definition of panes is described. Specific settings for individual content types follow separately in the subsequent sections.

▼ **Type:**

This selection defines the type of content for the section.

Blank (default) - no content has been defined - the section remains empty.

Layout - a(nother) layout can be selected.

Application window - a WinGuard window can be selected.

Gadget - a gadget (e.g. a clock) can be selected.

Graphic - a graphic can be assigned.

Text - a text module (.WGT) can be assigned

System protocol - the system protocol is assigned.

Video - this section is used for video display.

History - one or several history diagrams can be defined.

Attachments - this section serves to include event attachments.

Documents - this section serves for document display.

Website - this section serves for display of websites.

- (Parameter)

Depending on the type selected, additional parameters may be required for definition!

Title:

Using the three following elements, a title for the content can be defined. This title serves as a header during display (for example on a respective tab).

- (Icon)

With this selection list, an icon can be assigned to the title.

Blank (default) - no icon is displayed.

... - the selected icon is displayed in the titlebar.

- (Text)

Here you can define the title (text).

Blank (default) - the name of the layout is displayed as title.

... - this text is displayed as title of the layout.

- (Color)

Here a color can be assigned to the title. Please use the selection list or directly enter a color code.

Default (default) - the default color scheme of the system is used.

... - select the desired color.

(RGB value: 3 hexadecimal values, each between 00 and ff - e.g. #B2B2B2)

Options:

These two options available here define the actions/functions for operating the content.

**- Prevent close**

This option determines if the content can be closed by the user during display.

Active - the user **cannot** close the content.

Inactive (default) - the pane can be closed.

**- Prevent dragging**

This option determines if the content cant be freed or moved from the surface.

Active - the content **cannot** be detached or moved.

Inactive (default) - the content can be detached or moved.

Title required:

This option determines if a titlebar is required. If possible, the title of the tab, bar, popup, or window is used. If you select **Standard** not titlebars are displayed for layout or video contents, but they are for all other contents.

Standard (default) - titlebars are displayed depending on content.

Yes - titlebars are fundamentally displayed.

No - titlebars are **not** displayed.

Event related:

This option determines if the content should be activated on an event-related basis.

Auto (default) - automatic decision for activation.

Yes - activation is event related.

No - activation occurs without being related to an event (context).

Min / Max - width / height

With these settings, you can determine the max/min size (width and height) of the content. Additionally, you can choose between the units **pixel** or **%**.

Blank (default) - the respective size limits are not active.

... - enter the desired limits.

Pixel (default) - the defined limit is applied in pixel.

... - the defined limit is applied in %.



Content parameters have priority over definitions of layouts or panes!

Content type: Blank

If a pane does not have any content assigned to it, then it remains empty and may become invisible during display. If a pane has a name (ID), you can assign content to it anytime later during display.

Content type: Layout

With the content type layout, panes can be assigned layouts as content. The panes of layouts, in turn, can again contain layouts.

Layout

You can select from all the layouts that are located in the project subfolder, **Files**.

Blank (default) - no function.

... - select a layout if applicable.

Content type: Application window

With this content type you can assign windows with internal functions to panes as content. Additional parameters can also be defined.

Application window

You can select from all application windows in WinGuard:

Application window	Parameter
View: Report	Report name
View: Route cards	-
DB: Automatic actions	-
DB: Workstations	-
DB: Users	-
DB: Panes	-
DB: Datapoints	-

DB: Locations	-
DB: Persons	-
DB: Profiles	-
Editor: Graphic	File name (incl. path)
Editor: Layouts	Layout name
Editor: Text	File name (incl. path)
Event: Archive	-
Monitor: Network	-
Monitor: Interface	Interface number
Log: Interface	-
Log: System	-
Log: States	-

Blank (default) - no function.

... - select an application window.

Parameters

Here you can define additional information to retrieve the window, for example the name of a graphic when opening the graphic editor (see table above).

Blank (default) - no function.

... - enter the desired parameter if applicable.

▼ Content type: Gadget

With this content type, special functions can be assigned as content to panes.

Application window

Currently only one gadget is available for selection:

Blank (default) - no function.

Clock - select a gadget if applicable.

Parameters

Here you can define additional information for retrieving the gadget, such as background color, design, etc. of the clock.

Blank (default) - no function.

... - enter the desired parameters if applicable.

▼ Content type: Graphic

With this content type, graphics can be directly assigned to panes as content. Via additional functions graphics can be selected or defined by parameters.

**Graphic**

Here a graphic can be defined with respective parameters for display in the pane.

Blank (default) - no function.

... - enter a graphic directly or select one. Variables such as <GRAPHIC1>, <LOCATIONGRAPHIC>, etc. are also possible.

**(File selection)**

Using this function the dialog **Select Graphic** is opened.

... - select a file if applicable.

**(File parameters)**

Using this function the dialog **Parameters for Graphic** is opened.

... - select the parameters if applicable.

▼ Content type: Text

With this content type, texts (.WGT) can be directly assigned to panes as content. Via additional functions texts can be selected or defined by parameters.

**Text**

Here a text can be defined with respective parameters for display in the pane.

Blank (default) - no function.

... - enter a text directly or select one. Variables such as <TEXT>, <TEXTMACRO1>, etc. are also possible.

**(File selection)**

Using this function the dialog **Select Text** is opened.

... - select the file if applicable.

**(File parameters)**

Using this function the dialog **Define parameters for text** is opened.

... - select the parameters if applicable.

▼ Content type: System log

With this content type the system log can be directly assigned to panes as content. Via additional functions parameters for display can be defined.

**Filter**

Here you can define the filter for display of the system log.

< Hours = 1 (default) - the selection is limited to the last hour.

... - enter the parameters directly or select them.

**(Filter parameters)**

Using this function the dialog **System log filter** is opened, where the respective parameters such as source, incident, columns, etc. can be defined.

Event related

With this option the system log can be limited to event-related information. This means that only records generated in the context of an event are displayed.

Active (default) - the display is event related.

Inactive - all records corresponding to the filter are displayed.

▼ Content type: Video

With this content type video display elements can be assigned to panes as content.

 Split

Here you can define the window configuration (Split) of the video display area/pane.

You can select from: **1x1, 2x2, 3x3, 4x4, 5x5, 6x6, 1+5, 1+7, 1+12, 2+8, 2x1, 3x2, 4x3, 5x4, 6x5, 1+2, 1+3, 1+8, 2+4**

1x1 (default) - only one video element (monitor) is displayed.

... - select the desired split if applicable.

 Monitors

Here monitor numbers for the individual video display areas/panes can be sequentially defined (for example: 11, 12, 20, 24).

Blank (default) - no assignment of monitor numbers.

... - enter the desired monitor numbers separated by a comma.



▼ Content type: History

With this content type History diagram windows can be directly assigned to panes as content. Via additional functions the datapoints that are to be displayed can be defined.

i Only datapoints of the category: **value** are available for selection!

 (Datapoints)

In this list the selected datapoints that are to be used in the History diagram are shown. The order reflects the order for display in the pane.

  **(Move)**

Using these two functions the selected datapoint can be moved/positioned respectively in the list.

Blank (default) - no function.

... - select the desired datapoints.

 **(Add datapoint)**

Via this function a context menu for the selection of measurement datapoints is opened (both single and multi-selection is possible). When you quit the selection, the respective datapoints are accepted and added to the list.

 **(Remove datapoint)**

Using this function a selected datapoint can be removed from the list. Removal occurs without further confirmation.

▼ Content type: Attachments

With this content type the list of attachments can be assigned to panes as content. No additional parameters are required.

▼ Content type: Videos

With this content type the video archive list can be assigned to panes as content (comparable to the table view from video archive). No additional parameters are required.

▼ Content type: Document

With this content type documents can be directly assigned to panes as content. As additional parameters, only the respective file name is required. For display the respective application for the file type is started.

File

Here a document file for display in the pane can be defined.

Blank (default) - no function.

... - enter a file directly or select one if applicable.



(File selection)

Using this function the dialog **Select File** is opened.

... - select a file if applicable.

▼ Content type: Website

With this content type websites can be directly assigned to panes as content, provided that the website is accessible to all workstations.

URL:

Here you can define a respective destination address for access to a website.

Blank (default) - no function.

... - enter a web address if applicable.

7.17.4 Controlling Target Panes

For the control of layouts, the selection of a target pane is required in several places. In the simplest cases, a target pane is identical to a pane ID. But you also want to have the option of not always having to replace pane content entirely. In some cases, you may want to display the content in an additional tab, or perhaps in a completely new opened display window.

In order to uniformly design the structure of all layout operations in the form of **Content** → **Target** and also to combine more complex operations in one command, the term **Target** was conceived. The target definition can thus also contain required operations so that the target pane can be created in the first place.

Such a complex layout command then actually has two components:

- Structural Change (for example, open tab)
- Content activation (place content in the pane of a new tab)

A target pane is always displayed in the form of a string. The basic format of a target pane entry is:

< Pane ID> [/<ParamId>=<ParamValue> [/<ParamId>=<ParamValue> ...]]

In the simplest case, the string is identical to a pane ID. In more complex cases, it contains additional parameters that describe the operation that is to be executed. Parameters are only entered if they deviate from the default values. In most cases, only one or two parameters need to be entered even for more complex commands, which experienced users could do via manual entry in the edit field. Similar to the familiar graphic file selection with parameters, you also have the option of entering the parameters in a separate **entry dialog** for every target pane entry field.

▼ Dialog: Target pane

Information about the target pane properties are documented in the pre defined sections (see: [Layout Properties](#) ⁶⁰⁹).

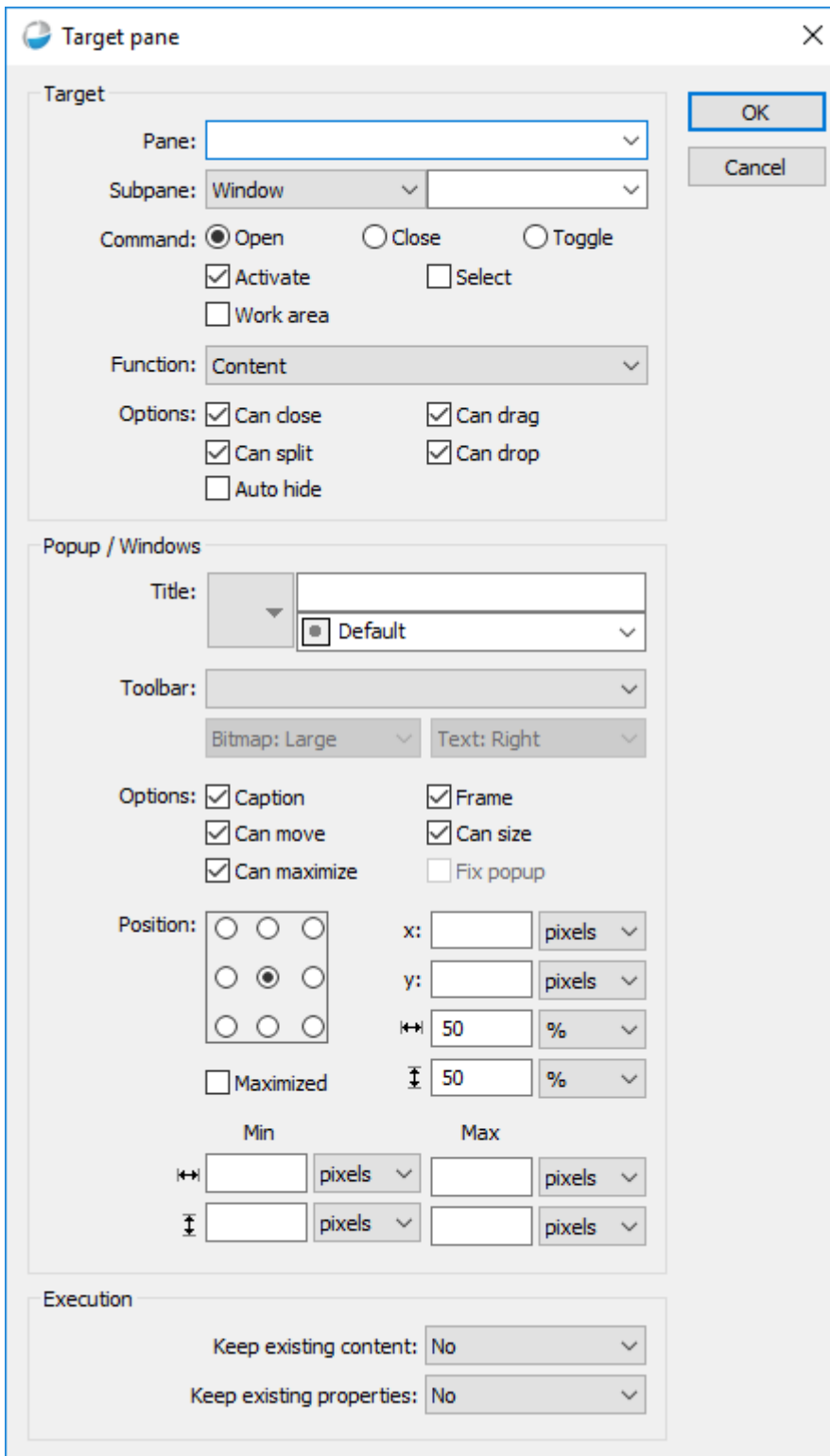



Figure 218: Properties Target pane

Here is a list with special entries for the pane ID:

Pane ID	Description
<Blank>	Addresses the current work area.
.	Addresses the currently selected pane. If no pane is selected, the command is not executed.
..	Addresses the pane that is superordinated to the currently selected pane. If no pane is selected, the command is not executed.
<Display1> ... <Display4>	Addresses one of the four definable displays (<Display1> = main window)
<Screen1> ... <Screen8>	Addresses one of the 8 screens (in commands for the placement of windows)  <i>The screen IDs are not available in the selection list for the pane IDs. Screen IDs must always be entered manually.</i>

Here is a list of all possible parameters:

Parameter	Default	Description
/tab=<Pane-ID>	No tab	Addresses the tab with the respective pane ID. If no pane ID is entered, it is dynamically generated from the context. Without additional <i>/cmd</i> entry the tab is opened. Additional Parameters: <i>/title /cmd /cancel</i>
/bar=<Pane-ID>	No bar	see tab description above for bar Additional Parameters: <i>/title /cmd /cancel</i>
/popup=<Pane-ID>	No popup	see tab description above for popup Additional Parameters: <i>/title /cmd /cancel /canmove /cansize /canmaximize /hascaption /hasframe /ismaximized /pos /size /inpane /minsize /maxsize</i>
/wnd=<Pane-ID>	No Wnd	see tab description above for Wnd Additional Parameters: <i>/title /cmd /cancel /canmove /cansize /canmaximize /hascaption /hasframe /ismaximized /pos /size /minsize /maxsize</i>
/title=<Name>	Content-Title	Optional title name. With <i>/title=</i> you can force a blank title.
/icon=<Name>	Icon ID	Optional icon.
/color=<Name>	Color ID	Optional color, either the string ID of a defined system color or a hexadecimal RGB color value <i>#rrggbb</i> .
/cmd=<Command>	open	<Command>= <i>open, close, toggle</i>
/activate=<0/->	1	Only entry of /activate leads to /activate=1
/select=<0/->	0	Only entry of /select leads to /select=1
/cancel=<0/1>	1	<i>0=no, 1=yes</i>

/candrag=<0/1>	1	<i>0=no, 1=yes</i>
/canmove=<0/1>	1	<i>0=no, 1=yes</i>
/cansize=<0/1>	1	<i>0=no, 1=yes</i>
/canmaximize=<0/1>	1	<i>0=no, 1=yes</i>
/hascaption=<0/1>	1	<i>0=no, 1=yes</i>
/hasframe=<0/1>	1	<i>0=no, 1=yes</i>
/max=<0/->	0	<i>0=no, 1=yes</i>
/activate=<0/1>	1	<i>0=no, 1=yes.</i> New window is to be activate.
/pos=<fixpoint>, <offset_x>, <offset_y>	center	<fixpoint>= <i>1..9</i> or <i>topleft, topcenter, topright, midleft, center, midright, bottomleft, bottomcenter, bottomright</i> , <offset_x>, <offset_y> are pixel entries (without augmentation) or percentages (with augmentation "%")
/size=<size_cx>, <size_cy>	50%, 50%	<size_cx>, <size_cy> are pixel entries (without augmentation) or percentages (with augmentation "%")
/minsize=<min_cx>, <min_cy>	None	<min_cx>, <min_cy> are pixel entries (without augmentation) or percentages (with augmentation "%")
/maxsize=<max_cx>, <max_cy>	None	<min_cx>, <min_cy> are pixel entries (without augmentation) or percentages (with augmentation "%")
/inpane=<0/->	0	Only entry of <i>/inpane</i> leads to <i>/inpane=1</i>
/splitarea=<0/->	0	Only entry of <i>/splitarea</i> leads to <i>/splitarea =1</i>
/area=<0/->	0	Only entry of <i>/area</i> leads to <i>/area =1</i>
/fixarea=<0/->	0	Only entry of <i>/fixarea</i> leads to <i>/fixarea=1</i>
/workarea=<0/->	0	Only entry of <i>/workarea</i> leads to <i>/workarea=1</i>
/autohide=<0/->	0	Only entry of <i>/autohide</i> leads to <i>/autohide=1</i>
/usecontent=<0/1/2>	0	Existing Contents 0=do not use, 1=use always, 2=use if content type is the same
/useprops=<0/1/2>	0	Existing Contents: 0=do not use, 1=use always, 2=use when window/popup is open

For clarification, here are a few examples:

Example	Description
A	The indicated content is activated in the pane with the ID A as content.

A /tab=B	The indicated content is activated in the pane with the ID A in the tab B. If no such tab exists, it is opened.
A /tab=B /cmd=close	In the pane with the ID A, the tab with the ID B is closed.
A /tab /canclose=0	In the pane with ID A the content is activated in a new tab without a specific ID. The new tab cannot be closed by the user.
A /popup=B /pos=midright /size=20,100%	In the pane with the ID A, the indicated content is activated in the popup with the ID B. If such a popup is not available, it is opened on the right edge of the window with a width of 20 pixel and full window height.
A /popup=B /cmd=set /pos=midright /size=20,100% /cansize=0	In the pane with the ID A, the popup B with a width of 20 pixel and full window height is moved to the right edge of the window. A manual change in size is no longer possible.



Not every parameter is relevant in every context. Irrelevant parameters are simply ignored. If the same parameter is entered several times, the first entered value is used!



Intricate structure commands are not possible (/popup in /bar etc.). If /tab, /bar, or /popup are there simultaneously, the first entry is used!

7.18 Panes

A pane is a field within a user interface (comparable to an embedded window), that is addressable via a freely-defined ID and that can display contents.

With the ID, the system maintains various information about the pane during runtime. This may include current content, whether or not the content is event related, etc. Panes with the same ID always receive the same content when they are opened.

But a pane is not required to have an ID. If a pane does not have an ID, information is instead stored in the content of the next superordinated pane with an ID, or, if the pane is part of a named layout, within the data structure of this layout.

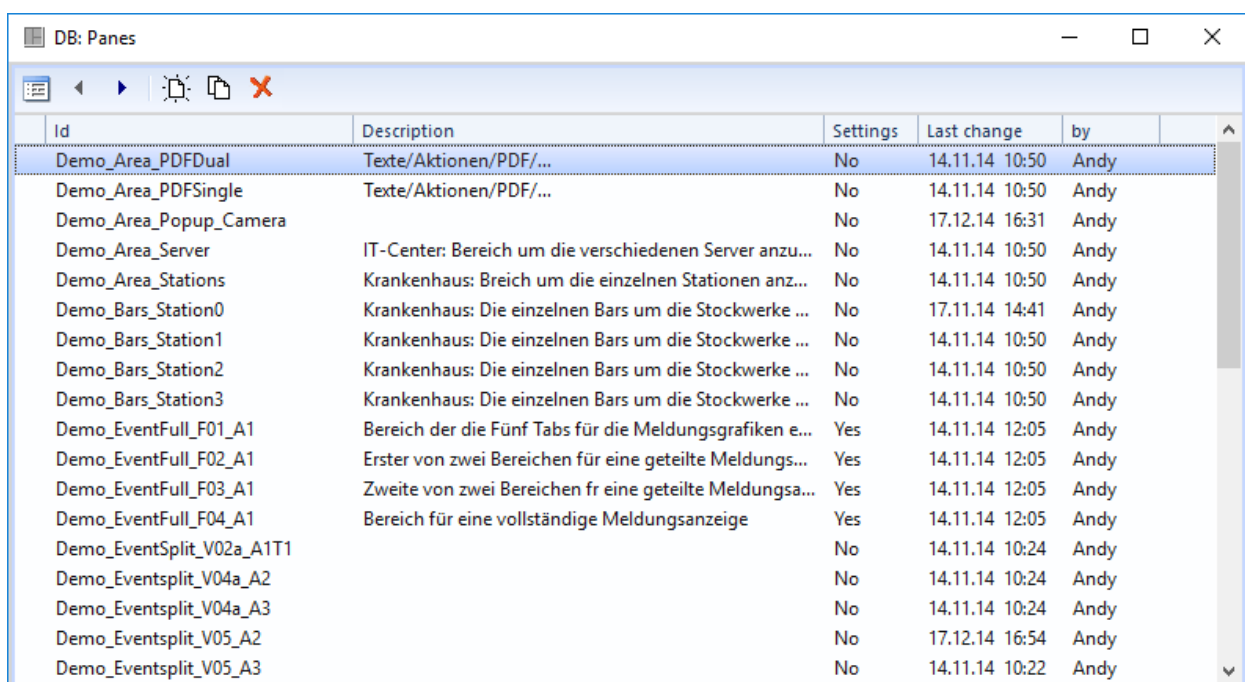
IDs used in the system can be maintained as datasets under **Other | Panes...** . For every defined ID, you can determine if its content should also be configurable via the settings.

All defined IDs are available via a selection list for the respective elements. If an unknown ID is entered, it is automatically saved as a dataset after confirmation.

7.18.1 Table View

In the table, all panes defined in the system are displayed. Here, panes can be newly created, copied, and deleted. By double-clicking on an entry or by selecting an entry and then clicking on the button, [Form](#)^[634], the editing window can be opened. For additional information on the content of the individual columns please see the section, [Form](#).

Window: Panes - Table View



Id	Description	Settings	Last change	by
Demo_Area_PDFDual	Texte/Aktionen/PDF/...	No	14.11.14 10:50	Andy
Demo_Area_PDFSingle	Texte/Aktionen/PDF/...	No	14.11.14 10:50	Andy
Demo_Area_Popup_Camera		No	17.12.14 16:31	Andy
Demo_Area_Server	IT-Center: Bereich um die verschiedenen Server anzu...	No	14.11.14 10:50	Andy
Demo_Area_Stations	Krankenhaus: Breich um die einzelnen Stationen anz...	No	14.11.14 10:50	Andy
Demo_Bars_Station0	Krankenhaus: Die einzelnen Bars um die Stockwerke ...	No	17.11.14 14:41	Andy
Demo_Bars_Station1	Krankenhaus: Die einzelnen Bars um die Stockwerke ...	No	14.11.14 10:50	Andy
Demo_Bars_Station2	Krankenhaus: Die einzelnen Bars um die Stockwerke ...	No	14.11.14 10:50	Andy
Demo_Bars_Station3	Krankenhaus: Die einzelnen Bars um die Stockwerke ...	No	14.11.14 10:50	Andy
Demo_EventFull_F01_A1	Bereich der die Fünf Tabs für die Meldungsgrafiken e...	Yes	14.11.14 12:05	Andy
Demo_EventFull_F02_A1	Erster von zwei Bereichen für eine geteilte Meldungs...	Yes	14.11.14 12:05	Andy
Demo_EventFull_F03_A1	Zweite von zwei Bereichen fr eine geteilte Meldungs...	Yes	14.11.14 12:05	Andy
Demo_EventFull_F04_A1	Bereich für eine vollständige Meldungsanzeige	Yes	14.11.14 12:05	Andy
Demo_EventSplit_V02a_A1T1		No	14.11.14 10:24	Andy
Demo_Eventsplit_V04a_A2		No	14.11.14 10:24	Andy
Demo_Eventsplit_V04a_A3		No	14.11.14 10:24	Andy
Demo_Eventsplit_V05_A2		No	17.12.14 16:54	Andy
Demo_Eventsplit_V05_A3		No	14.11.14 10:22	Andy

Figure 219: Panes - Table View

Functions: Toolbar - Table View




Form View

This function switches the window to form view.

◀ ▶ Previous / Next Record

With these functions the previous / next record is selected.

 *Changes are accepted without further confirmation!*



New

With this function a new record is created.



Copy

This function creates a copy of a selected record.



Delete

With this function the selected record is deleted.

7.18.2 Form View

In form view, an entry form is displayed in which you can enter or change information about the definition of a pane. Entry elements for the various definitions such as ID and description are available.

▼ Window: Panes - Form View

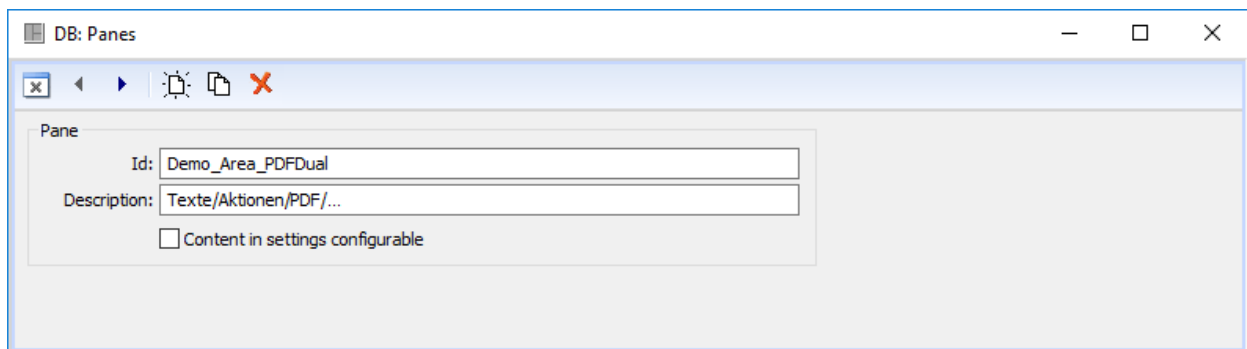


Figure 220: Panes - Form View



Back (Table View)

This function switches back to table view.



OK

This function save the actual definitions (same as save changes) and switches back to the table view.




Cancel

This function ignore all changes without a call back and switches back to table view.

◀ ▶ Previous / Next Record

With these functions the previous / next record is selected.

 *Changes are accepted without further confirmation!*



New

With this function a new record is created.

**Copy**

This function creates a copy of a selected record.

**Delete**

With this function the selected record is deleted.

**Undo**

With this function the last change(s) can be undone / reversed.

**Save changes**

With this function the current record is saved.

▼ Data section: Pane**ID**

Here you define the distinct name of the pane.

Blank (default) - entry required!

Description

Here you can define other, general information about the pane.

Blank (default) - optional

**Content configurable in settings**

This option determines if this pane is included in the system settings under content for direct definition.

Inactive (default) - the pane is **not** directly definable.

Active - the pane is directly definable.

7.19 Overlays

Using overlay definitions, layouts and contents for labelling of windows can be freely defined. They are created and edited via the dialog **Define overlays**. The definitions created in this way can then be selected in the settings for configuration of window labellings.

Currently, only labelling in video windows can be configured via overlays. In the settings, the pre-settings and the additionally available overlays are defined. In the VideoManager, the user has the possibility for each window to switch between the available overlays.

An overlay definition describes positioning of overlay elements for a window type, for each element with:

- Element type
- Option
- Format
- Position
- Offset
- Direction
- Font
- Visibility

In addition, it is defined in the definition whether there shall be an info section at the upper and/or bottom window margin. These sections will not be overwritten by content. In addition, the order of display is defined by the order of the defined elements. Each definition has a unique name (for each window type) and is stored as separate XML file in the data directory.



For WinGuard, positioning always relates to the full window area of the monitor, however, for display by the video interface, it relates to the section of the displayed video image. Upon defining overlays, this should be considered in order to avoid overlappings!

7.19.1 Define overlays

Via the menu command **Others|Overlays...**, the dialog for definition of the overlays is opened. Using the selection of the type (currently only video) and the further selection of a name, the corresponding data will be displayed in the table. In this table, the single information can be edited. Right to the table, there are additional editing functions for Adding, Deletion and Moving of the single elements. In addition, in the section **Info section** and **Margin**, further settings for definition of the overlay are available.

▼ **Dialog: Define overlays**

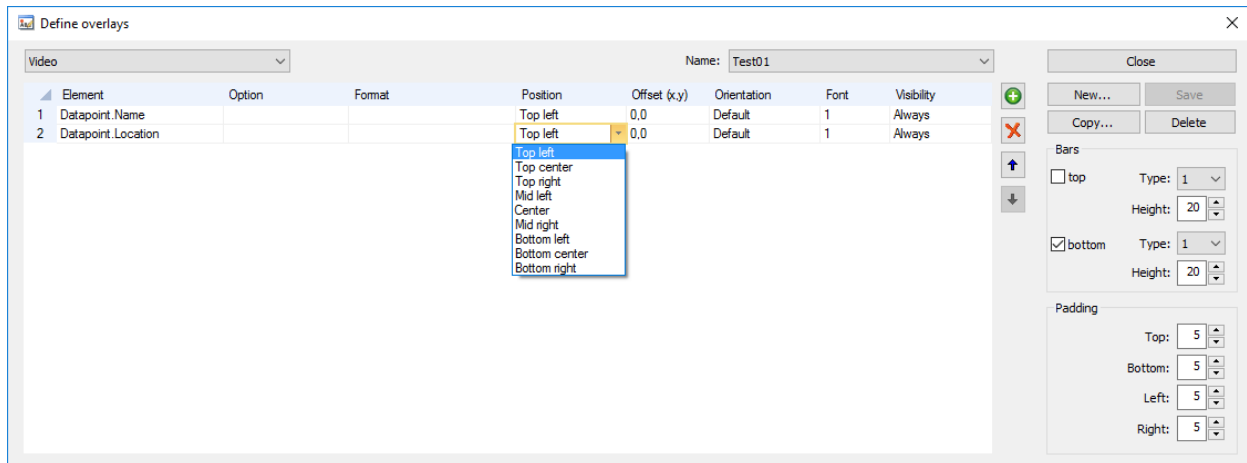


Figure 221: Define overlays

▼ **Functions: Dialog**

Button **Close**

This function closes the dialog.

i *If changes have not been saved yet, a corresponding query dialog will be displayed in which you can take over or discard the latest changes!*

Button **New...**

Using this function, a new overlay definition can be created.

i *After activating the function, a dialog for entry of the name is displayed!*

Button **Save**

Using this function, the current overlay definition is saved.

i *The button is only active if changes have been made to the dialog!*

Button **Copy**

Using this function, a copy of the current overlay definition can be created.

i *After activating the function, a dialog for entry of the name is displayed!*

Button **Delete**

Using this button, the currently selected overlay definition can be deleted after corresponding confirmation.

▼ Data section: (Selection)

▼ (Window type)

At the top left side, there is the field for selection of the window type. If the selection is changed, the content of the selection field **Name** is updated correspondingly for the window type and the first entry is selected.

... - select a window type.

i Upon changing the selection of window type or name, it will first of all be asked whether the current overlay definition shall be saved in case this has been changed before!

i Currently only the window type **Video** is available!

▼ Name

All available overlay definitions for the currently selected window type are available here. The selected overlay definition is currently edited. If there is no overlay definition available yet, the selection field is blank.

... - if required, select a name.

i The name of an overlay has to be unique for each window type, i.e. overlays for different window types must not be named identically. Upon selection of overlays in the settings, only the definitions for the suitable window type will be displayed!

i As the name of the overlay definition is used as part of the file name, only characters can be used that are admissible in a file name. The length of the name is defined correspondingly by the maximum length of a file name (incl. path)!

▼ Data section: (Table)

In the table, the information defined for the overlay is displayed. Some of the definitions can be directly edited here, depending on the element.

Element

The name of the corresponding element type is displayed here.

i Element types can be contained repeatedly in a definition, either with a different option or format so that separate elements for pan, tilt and zoom could be inserted etc.!

Option

If required, an option, e.g. the number for a text macro, can be indicated or selected.

- **Macro number**

Definition of the number of the text macro to be displayed.

A value ≥ 1 has to be entered. If the corresponding text macro is not available, the column content remains blank.

- **Tag Filter**

A tag filter can be indicated here so that all tags that correspond to the filter will be listed in the column, separated by commas. In contrast to the other tag filtering, all tags which correspond to at least one filter entry will be displayed. Without indication of a tag filter, all assigned tags will be displayed.

... - if required, indicate an option or select one.



Options are not available for all elements!



Format

As an option, a formatting of the content depending on the element type can be executed here.

- **String**

A string with the variables **<0>** that stands for the actual content. Using this string, the information can be placed behind the label, e.g. **Location: <0>**. If the variable is blank, nothing will be displayed (e.g. no description will be set in the datapoint).

- **Time**

A string with the format indications of the settings such as **MM.DD.YY**. Using the identifiers **<DateLong>**, **<TimeShort>** etc., the standard formats defined in the settings can be used. If not format is indicated explicitly, the default format **<DateShort>** **<TimeShort>** will be used. The character (%) must not be used.

- **Location**

A string with the variables **<0>**, **<1>**, **<2>** etc. **<0>** stands for the total location. The numbers represent the corresponding hierarchy part of the location. The text of this hierarchy level is displayed as a replacement for the variable. Without indication or in case of **<0>**, the total location will be displayed separated by commas.

- **PTZ**

In a string with the variables **<P>**, **<T>** und **<Z>**, these represent the values of **Pan**, **Tilt** and **Zoom**. Without indication, PTZ will be displayed as **P:<P> T:<T>, Z:<Z>**. **<P>** is always displayed with three digits, **<T>** is always displayed with 2 digits and **<Z>** with one decimal.

- **Size**

In a string with the variables **<X>**, **<Y>**, these represent the corresponding size values. Without indication, the size will be displayed as **<X>, <Y>**.

... - if required, indicate the formatting.



Position

The position defines where the element is drawn. The other settings such as **Offset** and **Alignment** relate to the position defined here.

The following can be selected: **Top left, Top middle, Top right, Middle left, Middle, Middle right, Bottom left, Bottom middle, Bottom right**.

... - if required, select a position.

Offset (x,y)

Using Offset, the coordinates of the element can be adapted with regard to the selected position. The offset is indicated in the format „<x>, <y>“, whereas <x> is the offset in horizontal direction from left to right and <y> is the vertical direction from top to bottom.

... - if required, indicate an offset.

**Orientation**

Here, the text alignment for the overlay can be defined.

Default (Default) - the alignment depends on the position and, for left positions, it is at the left margin, for right positions, at the right margin, and centrally it is in the middle.

Left - Left-justified - default for the positions: Top/Middle/Bottom left.

Middle - Centered - Default for the positions: Top/Middle/Bottom middle.

Right - Right-justified. Default for the positions: Top middle/Middle/Top right.

... - if required, select the alignment.

**Font**

The font for the overlay can be defined here. The number of the font to be used for display can be selected from the settings. As <Default>, font 1 is used.

... - if required, select the font.

Visibility

It is possible to limit visibility to the context indicated here. In case of <Default>, the element is visible anytime.

The following can be selected: **Always, Archive, Live**

... - if required, select the visibility.



*If, for single elements in a context, no information is available, these are also not visible, e.g. the **Video.Play.Icon** will not be displayed in the **Live** context!*

▼ Data sections: (Table functions)

Right to the table, there are further functions for Adding, Deletion and Moving of the single elements.

**(Add column)**

Using this function, a context menu for selection of another element is opened. In the top part of the menu, the column types already contained in the definition are listed, in the same order as in the definition. For clarification, these are also marked by a green check mark. In the bottom part, there are the column types not used yet in alphabetical order. After selection of an entry, this column is added to the end of the list and can then be moved to the desired position.

... - if required, select another column type.



Elements can appear several times in an overlay definition, optionally with different option or format, in this way, separate date and time columns can be entered etc!

X (Delete column)

Using this function, the selected element is deleted without any further confirmation. If it was currently sorted according to distant columns, the next (or, in case this is not existing, the previous) column will be selected for sorting.

... - select the column type to be deleted before.

i The button is only active if a line/cell is currently selected!

↑ (Move column)

Using these functions, the selected element will be moved in the order, correspondingly to the top or to the bottom (if possible).

... - select the column type to be moved before.

i The button is only active if a line/cell is currently selected!

▼ Data section: Bars **Top / Bottom**

It is defined here whether bar sections at the top or bottom window margin are available. In addition, their height and type are defined. Three different type definitions are defined in the settings and can be selected here.

inactive (default) - the display of the corresponding section is deactivated.

active - the bar section will be displayed.

▼ Type:

1 (default) - if required, select the corresponding type (1..3).

Height:

20 (default) - if required, select the height or enter it.

▼ Data section: Padding**▼ Top / Bottom / Left / Right**

It is possible to defined a margin in pixels for each of the four sides here. Default is a wraparound margin of 5 pixels.

5 (default) - if requierd, select the margins or enter them.

7.20 Columns

Using a column definition, the content, display and sorting of a list can be freely defined. Column definitions are created and edited via the dialog **Define columns**. In the settings, the created column definitions can be selected for configuration of lists.

A column definition is always made for a specific type of data object (data set), in the following this is shortly called **Data type**. Upon selection of column definitions in the settings, only the definitions of the suitable data type will be displayed.

Each data type has its specific amount of column types that are available for definition. In addition, a data type has a (string) Id that is e.g. used for creation of the file name.

Currently, column definitions can only be configured for the data type **Event** (i.e. event list and archive list). A column definition describes the tabular arrangement of columns of a data type, for each column with:

- Column type
- Option
- Format
- Title
- Width

In addition, the column definition also defines sorting at the start of display. Each column definition possesses a unique name (for each data type) and is stored as separate XML file in the file directory.

7.20.1 Edit Columns

Via the menu command **Others|Columns...**, the dialog for definition of columns for lists is opened. It is a modal dialog, i.e. if the dialog is opened, access to the rest of the user interface (UI) is not possible.

Using the selection of the data type (currently only event) and the further selection of a name, the corresponding data is displayed in the table. In this table, the single information can be edited.

The table has a simple selection so that only one cell or one line can be selected. A line can be selected via a click on the column number at the very left in order to e.g. move or delete the line. Even if only one field of a line is clicked, this line will be marked as selected.

Right to the table, there are additional editing functions for Adding, Deletion and Moving of the single elements. In addition, definitions for sorting of the columns are available.

▼ **Dialog: Define columns**

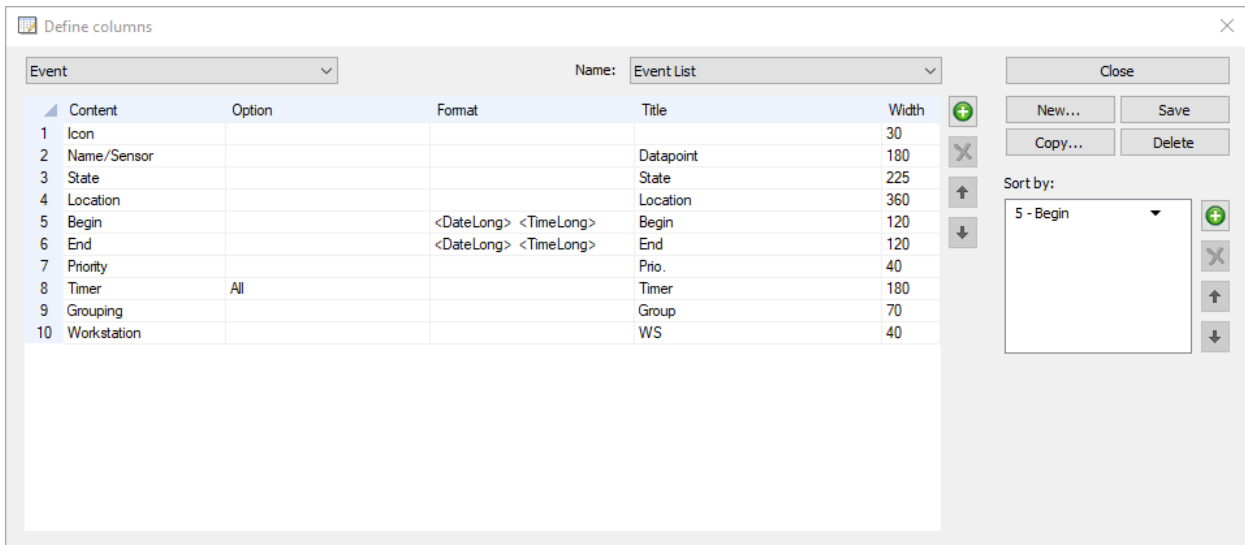


Figure 222: Define columns

▼ **Functions: Dialog**

Button

Close

This function closes the dialog.

i *If changes have not been saved yet, a corresponding query dialog will be displayed in which you can take over or discard the latest changes!*

Button

New...

Using this function, a new column definition can be created for the currently selected data type.

If changes to the current column configuration have been made before, it will first of all be asked whether these shall be stored. In another dialog, it will be asked for the name of the new column definition. The maximum length is 128 characters. If the name has already been assigned, it will be asked whether the existing column definition shall be overwritten. Finally, the column definition will be created including a default column definition depending on the settings and it will be selected directly. The button is only active if the right "Create.Object" is available.

i *After activating the function, a dialog for entry of the name will be displayed!*

Button

Save

Using this function, the current column definition is saved.

A newly created column definition is directly saved with the default configuration.

i *The button is only active if changes have been made in the dialog!*

Button

Copy

Using this function, a copy of the current column definition can be created.

The function behaves similar to the button **New**. Instead of the default configuration, a copy of the currently selected column definition is saved.

i *The button is only active if a column definition has been selected and if the right **Display.Object** is available!*

i *After activating the function, a dialog for entry of the name will be displayed!*

Button

Delete

Using this button, the currently selected column definition can be deleted after corresponding confirmation.

The next available column definition will be selected automatically or the previous will be selected, if no next column is available.

i *The button is only active if a column definition has been selected and if the right **Delete.Object** is available!*

▼ Data selection: (Selection)

▼

(Data type)

Using this selection, the data type of the column definition can be selected.

If the selection of the data type is changed, the content of the selection list for the name will be updated correspondingly for the data type and the first entry will be selected.

... - select a data type.

i *Upon changing the selection of the data type, it will first of all be asked whether the current column definition shall be saved in case it had been changed before!*

i *Currently only the data type **Event** is available!*

▼

Name

An already available column definition for the selected data type can be selected here.

The selected column definition will be currently processed. If no column definition is available yet, the selection list will be blank.

... - if required, select a name.

i *Upon changing the selection of the name, it will first of all be asked whether the current column definition shall be saved in case it had been changed before!*

i *The name of a column definition only has to be unique for each data type, i.e. column definitions for different data types can be named identically. Upon selection of column definitions in the settings, only the definitions of the suitable data type will be displayed!*

i *As the name of the column definition is used as part of the file name, only characters can be used that are admissible for a file name. The length of a name is defined correspondingly by the maximum length of a file name (incl. path)!*

▼ Data section: (Table)

In the table, the information defined for the column definition is displayed. Some definitions cannot be edited directly here. The sequence from top to bottom corresponds to the order in which the columns are displayed from left to right. The single fields of the table can partly be edited directly **In-Place**.

Content

Here, the name of the column type is displayed (not editable) which basically defines the content of the column.



Column types can appear several times in a definition, optionally with different option or format, e.g. separate columns could be entered for text macro 1-5 etc.!

Option

Using the option, parts of the content can be defined more in detail.
The option for editing is available for the following column types:

- **Macro number**

Definition of the number of the text macro to be displayed.

A value ≥ 1 has to be indicated. If the corresponding text macro is not available, the column content will remain blank.

- **Tag Filter**

A tag filter can be entered here. Then, all tags are listed in the column, separated by columns, that correspond to this filter. In contrast to the usual tag filtering, all tags are displayed that correspond at least to one filter entry. Without indication of a tag filter, all assigned tags will be displayed.

- **Timer**

It is possible to select a timer definition here or to enter a free name. In the column, only the timer with this name will be displayed. Without indication, always the active timer with the earliest expiry time will be displayed in the column.

... - if required, indicate an option or select it.

Format

An optional formatting for the column content can be defined here.
The format for editing is available for the following column types:

- **Location**

Here you can define the form of the location information. A string **<0>** means the total location and a string with the variables **<1>**, **<2>**, etc. means the related specific hierarchy part of the location. The text of this hierarchy level will then be used instead of the default variables.

- **Time**

A string with the format indications from the settings such as e.g. **MM.DD.YY**. With the indicators **<DateLong>**, **<TimeShort>** etc, the standard formats defined in the settings can be used. If no format is explicitly indicated, the default format **<DateShort>** **<TimeShort>** will be used.

... - if required, indicate a format or select it.

Title

A title for the column can be defined here.

If a title is indicated, this will be used. Otherwise a default title will be used. If the title has been changed and the default title shall be restored again, it is simply required to enter a blank title. If the default title is entered exactly, a blank title will be saved too which will also lead to the default title. If really a blank title shall be displayed, space characters can be entered in the title. The default title of the icon column is blank.

... - if required, indicate a title.

Width

The width of the column is defined in pixels here.

... - if required, indicate the width.

▼ Data section: (Table functions)

Using the keyboard as well as the functions at the right side of the table, the single contents of the column definitions can be edited.

**(Add column)**

Using this function, a context menu for selection of another column type is opened. In the top part of the menu, the column types already contained in the definition are listed, in the same order as in the definition. For clarification, these are also marked by a green check mark. In the bottom part, there are the column types not used yet in alphabetical order. After selection of an entry, this column is added to the end of the list and can then be moved to the desired position. Further information with regard to the available column types of the single data types can be found in the following section [Data type Event](#)⁶⁴⁷.

... - if required, select another column type.



Column types can appear several times in a column definition, optionally with different option or format, in this way, separate date and time columns can be entered etc!

**(Delete column)**

Using this function, the selected column type is deleted without any further confirmation. If it was currently sorted according to distant columns, the next (or, in case this is not existing, the previous) column will be selected for sorting.

... - select the column type to be deleted before.



The button is only active if a line/cell is currently selected!

**(Move column)**

Using these functions, the selected column type will be moved in the order, correspondingly to the top or to the bottom (if possible).

... - select the column type to be moved before.



The button is only active if a line/cell is currently selected!

▼ Data section: Sort by

Using the keyboard as well as the functions at the right side of the table, the sorting order of the column definition can be defined.

**(Add column)**

Using this function, a context menu for selection of another column is opened. In the menu, the columns not already contained in the sorting definition are listed, in the same order as in the column definition. After selection of an entry, this column is added to the end of the list and can then be moved to the desired position.

... - select an additional column for sorting.

**(Delete column)**

Using this function, the selected column is deleted without any further confirmation.

... - select the column to be deleted before.



The button is only active if a line is currently selected!

**(Move column)**

Using these functions, the selected column will be moved in the order, correspondingly to the top or to the bottom (if possible).

... - select the column to be moved before.



The button is only active if a line is currently selected!

**(Ascending/descending)**

Using these functions, the sorting of the selected column will be defined (ascending or descending).

... - select the sorting of a column.

7.20.2 Data Type Event

In the following tables, the available column types for the data type Event are listed. The first table shows the default column types and the second one shows the additionally available types.

▼ **Default Column types**

Column type	Title	Description
Icon	(blank)	Icon of the event with overlay. Usually this is the first column.
Name/Detector	Datapoint	Name of event (usually corresponds to the triggering datapoint), complemented by the detector number behind a '/' as separator. The detector number is only displayed if it does not correspond to 0.
State	State	Status text of event
Location	Location	Location indication of event
Start	Start	Time of event reception
End	End	Time of event end or '—'
Priority	Prio.	Priority of event
Timer	Timer	The respectively active timer of event. If not timer is active, this columns remains blank. <div style="background-color: #e6f2ff; padding: 5px; margin-top: 5px;"> <p>i <i>If the function is not used or in case of an archive list, this column will not be displayed!</i></p> </div>
Workstation	Workstation	Currently responsible workstation
Grouping	Group	As icon, the type (father or child) is displayed. For the father, in addition the total number of events in the groups incl. father. <div style="background-color: #e6f2ff; padding: 5px; margin-top: 5px;"> <p>i <i>If the function is not used, this column will not be displayed!</i></p> </div>

▼ **Additional column types**

Column type	Title	Description
Completed	Completed	Time of archiving.
Completed by	by	Code of the user that completed the event.
Accepted	Accepted	Time of acceptance.
Accepted by	by	Code of the user that accepted the event.
Attachments	Attachments	List of icons of the available attachment types (Report, Note, Graphic, etc.).
Description	Description	Description of the datapoint.
Bookmarks	Bookmarks	Displays by using an icon whether bookmarks and (indirectly) clips are linked to the event.
Use	Use	String-Id of the linked use, if required.
Group Id	Group Id	These group Ids all have events of a group (father and children). It corresponds to the Id of the father. In case of non-grouped events, this column remains blank.
Id	Id	Event Id, consisting of <Workstation number>-<sequential number for each station>.
Detector number	Detector	Number of the triggering detector or blank, if no detector has triggered.
Detector type	Detector type	Detector type of triggering datapoint or detector (if available).
Name	Name	Name of event. Usually this is the name of the triggering datapoint.
Interface	Interface	Name of the interface of the triggering datapoint.
Tags	Tags	Listing of assigned tags separated by comma.
Text macro	Text macro #	Content of a text macro.

7.21 Menus

The menu located on the upper edge of the main window provides central access to WinGuard functions. Here you have the option to define various menus for the different user and workstation requirements. You can use all system commands as well as user-defined commands. You can create and edit these menus using the respective editing window. In the section, [Settings](#)⁴⁰⁴, the menus are then assigned to the respective profiles. System users will find varying menus in their environment depending on their responsibilities.




You can define menus for the following system areas:

- Main Window

Via the menu command, **Other|Menus...** the dialog, **Edit Menu** is opened. Menus can be edited and maintained there.

7.21.1 Edit Menu

After opening the dialog (menu command: **Other|Menus...**) the definition of the menu found first is displayed. Using the selection list located in the upper left edge of the dialog, you can select the menu you wish to edit. All menus defined in the system are made available to you. If no menus have been defined, the display and selection list are empty. Your only options available then are creating a new menu or closing the dialog. The functions on the right side of the dialog supply the necessary elements to create or edit menus.

The selected menu is shown in the display area on the left. These entries usually contain a sub menu, which is indicated by the symbol . By clicking on the symbol, or double-clicking on a menu, the entries of the sub menu are also blended in. Here, too, entries that contain a sub menu are indicated with the symbol , etc. You can close a branch of the menu tree by clicking on the symbol  or double-clicking on the respective entry. The currently selected menu entry is highlighted and the definition is displayed in the editing area on the right. If an element of the menu tree is selected, you can also select the entry using the arrow keys.

If a **&** is indicated in front of a letter, that letter is subsequently underlined during menu display and the activation of **<Alt>**. If you then press this letter key on the keyboard, the respective function is directly executed.

▼ Dialog: Edit Menu

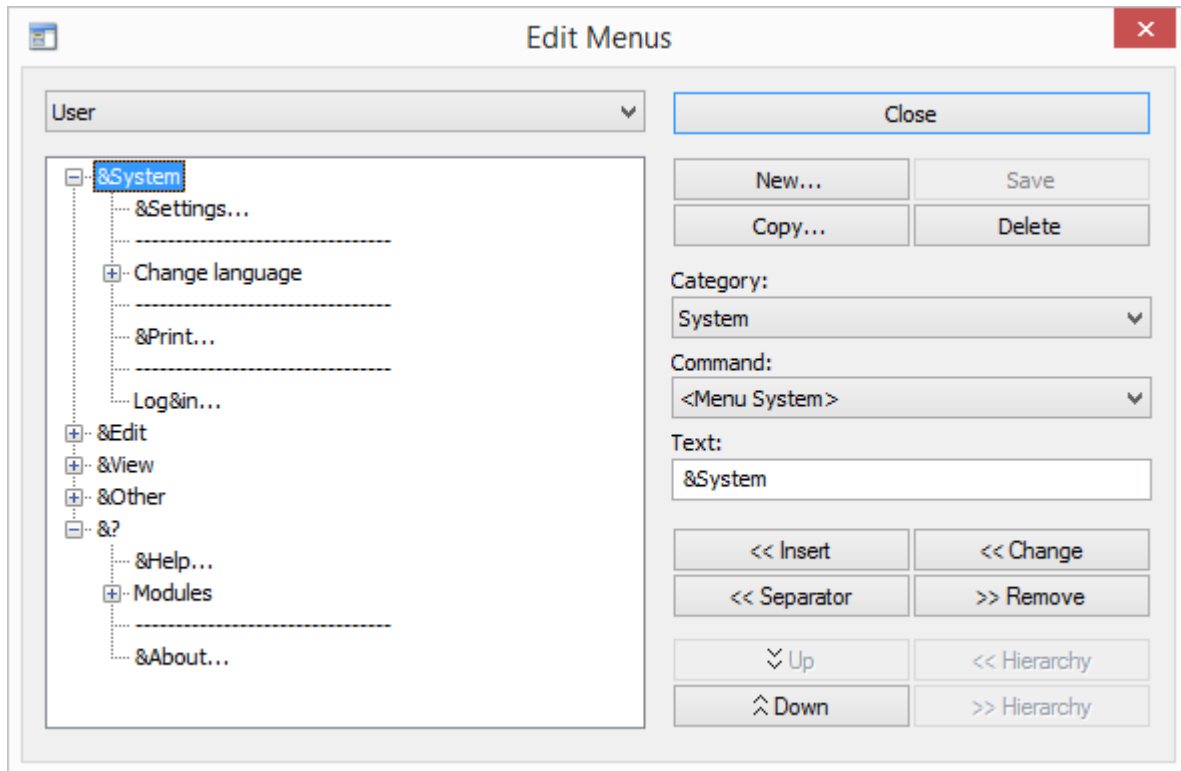


Figure 223: Edit Menu

▼ Functions: Dialog

- | | |
|--------|--|
| Button | Close
Closes the dialog. If changes have not yet been saved, a confirmation dialog is displayed which gives you the option of saving or discarding the latest changes. |
| Button | New...
Creates a new menu. The dialog, Menu , is opened to enter the name.
Name - define the name of the new menu. |
| Button | Save
By clicking on this button, you save the currently displayed menu with all changes. |
| Button | Copy...
By clicking this button, you create a copy of the currently selected menu. The dialog, Menu , is opened to enter the name.
Name - define the name of the copied menu. |
| Button | Delete
By clicking on this button, you can delete the currently displayed menu after confirmation. |

▼ **Data section: Dialog**

(Menu Selection)

Using the section list, you can select an already existing menu. The respective menu definition is then shown in the display for further editing.

Menu - select the name of the menu.

(Display Field)

Display area showing the menu items assigned to the menu.

Menu item- name of the selected menu item.

Category

All available commands are divided into categories from which you can select one here. The subordination corresponds to the main menu items in the standard menu. You can find a brief description of the categories and commands in the command overview. In addition to the pre-defined program commands, you can also select from [user-defined commands](#)⁶⁶¹ that are located in the category, "user defined".

Category - select the command category.

Command

In the selection field the commands of the selected category are made available. Entries in angle brackets „<Menu ...>“ represent a complete sub menu with all commands contained therein.

Command - select the desired command.

Text

In the entry field, enter the text for the menu item. As a guideline, a standard text depending on the selected command is shown. In order to make this menu item retrievable via keyboard, the symbol **&** must be inserted in front of the respective letter of the text. If a **graphic** is to be used as text and this menu item is to be retrieved via the key combination **<Alt>+<G>**, you must enter **&graphic**.

Name - define the display name of the command.

<< Insert

When clicking on this button, a new menu item according to the specifications entered in the dialog fields is inserted directly after the currently selected menu item on the same level.

<< Change

With this button, you change the selected menu item according to the specifications entered in the dialog fields.

<< Separator

With this button you can insert a separation line below the currently selected menu item. You can change the hierarchy level of a menu item later. This may be required, for instance, when you wish to add a new sub menu.

Button

>> **Remove**

When you click on this button, the currently selected menu entry including all sub menus is removed.

Button

^ **Move up**

When clicking this button, the selected menu item, within the entries that are on the same level, is moved up by one position.

Button

<< **Hierarchy**

By clicking on this button, the selected menu entry is moved one level up in the menu tree. The entries below this item are also moved up one level.

Button

v **Move down**

When clicking on this button, the selected menu item is moved down by one position.

Button

>> **Hierarchy**

With this button, you move menu item selected in the menu tree one level down. The defined menu entries below this item are also moved one level down. The moved entry becomes a sub entry of the item directly above it. If such an item is not available, the function cannot be accessed. You can change the order of the menu items within the same level later.



*While changes to a menu only take effect after clicking the button **Save** and do not take effect if the dialog is ended via the button **Close** the creation, copying, and deleting of menus is always executed immediately.*

7.22 Toolbars

Toolbars provide convenient access to WinGuard functions. You have the option of defining a variety of toolbars to meet the varying requirements of users and workstations. Both system commands and user-defined commands can be utilized. Toolbars are created and edited in respective editing windows. In [Settings](#) ^[404], the toolbars are then assigned to the respective profiles. Users will thus find varying toolbars in their environment, based on their area of responsibility.

You can define toolbars for the following system areas:

- Main window
- Event list left
- Event list right
- Event display
- VideoManager

The dialog **Edit Toolbars**, where toolbars can be maintained and edited, is accessed via the menu command **Other|Toolbars...**

7.22.1 Edit Toolbars

After opening the dialog (menu command: **Other|Toolbars...**) the definition of the first located toolbar is initially displayed. Using the selection list at the upper left edge of the dialog, you can select the toolbar you wish to edit. You can select from all defined toolbars in the system. If no toolbars have been defined yet, the display and the selection list are empty. Your only options then are to create a new toolbar or close the dialog. The functions on the right side of the dialog provide the necessary elements for creating and editing toolbars.

In the display section, the selected toolbar is shown. In the left column, the button with which it is indicated in the toolbar is displayed. The next column shows the assigned command. With the option fields (small/large) you can determine the size of the buttons in the toolbar. With the definition elements in the right part of the dialog, you can define the entries in the toolbar. The order of the entries can still be changed later.

Settings to display the logo in the toolbar of the main window can be defined in the Settings under [Desktop](#) ^[442] / Display# / Toolbar (please also see: [Operation](#) ^[127] - [User Interface](#) ^[129] - [Toolbar](#) ^[133]).

▼ Dialog: Edit Toolbars

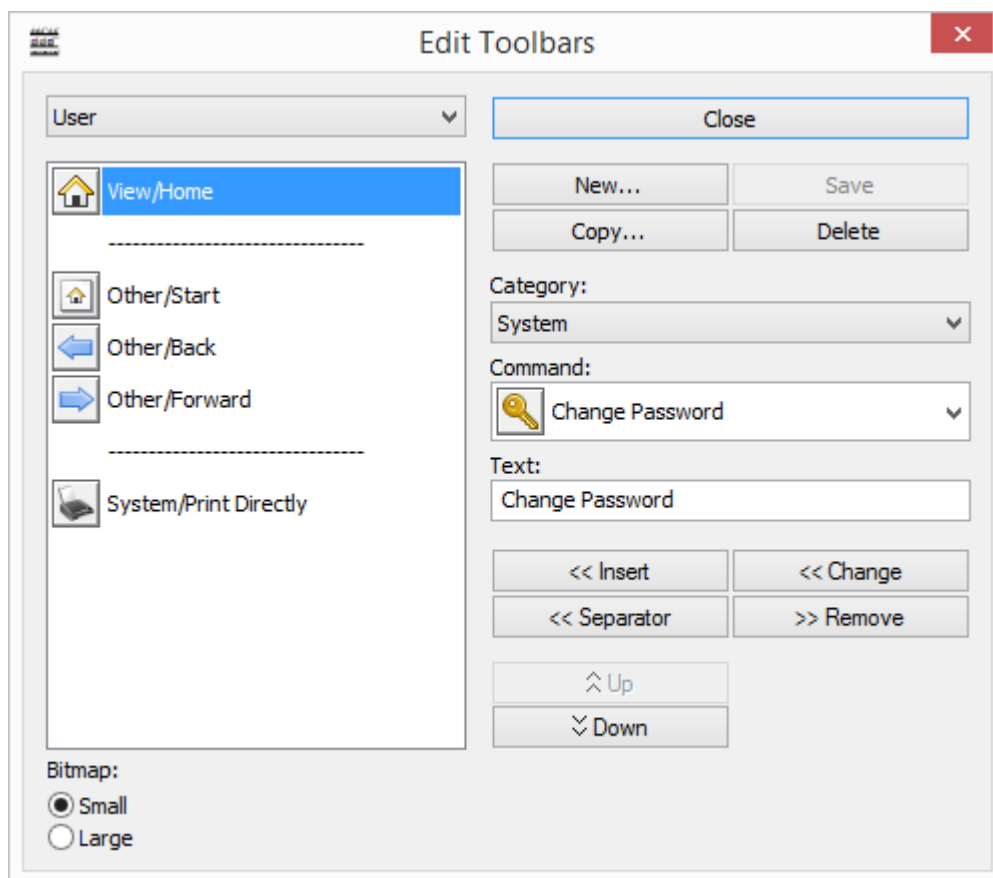


Figure 224: Edit Toolbars

▼ Functions: Dialog

Button

Close

Closes the dialog. If changes have not yet been saved, a respective confirmation box appears which gives you the option of saving or discarding the latest changes.

Button

New...

Creates a new toolbar. The dialog **New Toolbar** to enter the name and a template (another toolbar) is opened.

... - define the name of the new toolbar.

Button

Save

By clicking this button you save the currently displayed toolbar with all changes.

Button

Copy...

With this button you create a copy of the currently selected toolbar. The dialog **Toolbar** is opened to enter the name of the copied toolbar.

... - define the name of the copied toolbar.

Button

Delete

Via this button you can delete the currently displayed toolbar after answering appropriate security questions.

▼ **Data section: Dialog**

▼ **(Toolbar selection)**

Using the selection list you can select an existing toolbar. The respective definition is then shown in the display field for further editing.

Blank (default) - select the name of the toolbar.

(Display field)

Display area showing the functions assigned to the toolbar.

... - select the desired function.

▼ **Category**

The available commands are subdivided into categories and you can select one here. The division corresponds to the main menu items in the standard menu. A brief description of all categories and commands can be found in the Command Overview.

In addition to the pre-defined program commands, all [user-defined commands](#)⁶⁶¹ are available to you (category: **user defined**).

... - select the function category.

▼ **Command**

In this display field the commands/actions of the of the selected category are available. The respective symbol is displayed next to the name.

Action - select the desired action.

Text

Enter the text for the toolbar entry in this entry field. As a template, the standard text associated with the selected command is entered.

... - define the display name of the action.

<< **Insert**

When clicking this button, a new entry according to the specifications made in the dialog is inserted into the toolbar directly after the currently selected entry.

<< **Change**

With this button you change the currently selected entry according the specifications made in the dialog fields.

<< **Separator**

With this button you can insert a separator (line) after the currently selected entry.

>> **Remove**

By clicking this button, the currently selected entry is removed from the toolbar.

⤴ **Move up**

When clicking on this button the selected entry in moved up by one position.

⤵ **Move down**

When clicking this button the selected entry is moved down by one position.

Bitmap small / large

Here you can define the size of bitmaps to be used.

small - the buttons are displayed with small bitmaps.

large - the buttons are displayed with large bitmaps.



*While changes to toolbars are only accepted after the **Save** button has been activated and no changes take effect when the dialog is closed via the **Close** button, creating, copying, or deleting a toolbar is always executed immediately.*

7.23 Shortcut Keys

Shortcut keys provide another important option for accessing WinGuard functions. Through the definition of shortcut keys, commands can be executed with the entry of just one key. You have the option of defining various datasets with shortcut keys to meet the differing requirements of users and workstations. Both system commands and user-defined commands are available.

The shortcut can be created and edited with the respective dialog. In [Settings](#)^[404], these datasets are then assigned to the respective profiles. Users of the system will find different key functions in their environment based on profile assignments.

The dialog **Edit shortcut keys** can be opened via the menu command **Other|Shortcut keys...** There the shortcut keys can be managed and edited.

7.23.1 Edit Shortcuts

After opening the dialog (menu command: **Other|Shortcuts...**) the first located record is initially displayed. With the selection field in the upper edge of the dialog, the shortcut dataset to be edited can be selected. All shortcut records in the system are available for selection.

In the list, the entries of the currently selected shortcut record are displayed including key combination and assigned command.

▼ Dialog: Edit Shortcuts

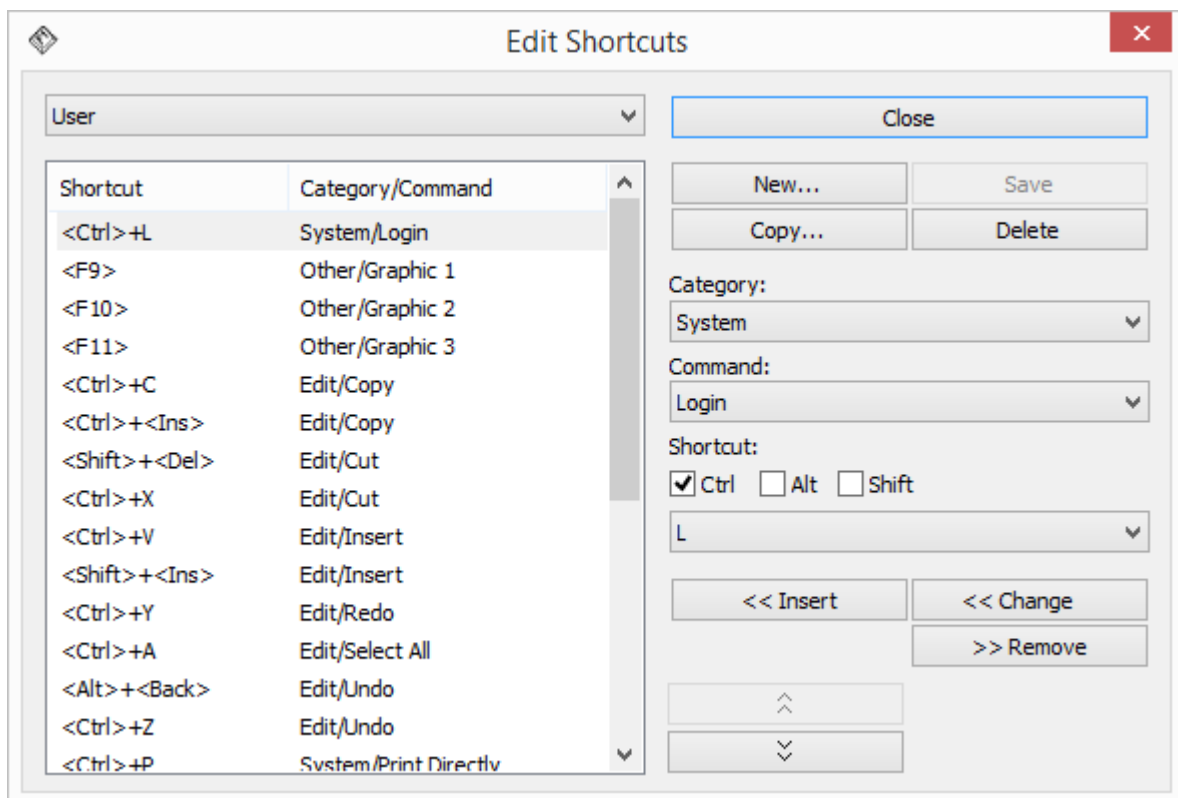


Figure 225: Edit Shortcuts

▼ Functions: Dialog

Button

Close

With this function the dialog is closed. If changes have not yet been saved, a respective confirmation box appears which gives you the option of accepting or discarding the latest changes.

Button

New

This function creates a new shortcut record that contains the preset definitions of the system. A dialog to enter the name then opens.

... - define the name of the new record.

Button

Save

By clicking on this button, you save the currently displayed shortcut record with all changes.

Button

Copy

With this button, you create a copy of the currently selected shortcut record. A dialog to enter the name is then opened.

... - define the name of the copied record.

Button

Delete

With this button you can delete the currently selected record following respective confirmation.

▼ Data section: Dialog

▼

(Selection of shortcut in table)

Using the selection list you can select an existing shortcut record. The respective definition is then shown in the display field for further editing.

... - select the name of the desired shortcut record.

(Display field)

Here the display field is shown with a table for the assigned definition.

... - select the desired definition.

▼

Category

The available commands are subdivided into categories from which you can select one here. The categorization corresponds to the main items in the standard menu. A brief description of all categories and commands can be found in the [Command Overview](#).

In addition to the predefined program commands, all [user-defined commands](#)⁶⁶¹ for menu definition are also available to you.

... - select the command category if applicable.

▼

Command

In this selection field, the commands or actions of the selected category are available.

... - select the desired command if applicable.

Shortcut

Here you can define the key combination for the individual commands.

- (<Ctrl> / <Alt> / <Shift>)

Using the check boxes, you can indicate if the desired key must be pressed in combination with the <Ctrl>-, <Alt>- or <Shift> key to execute the command. Any combination of these three keys is acceptable, allowing for a large number of possible key combinations (optional).

... - select the additional key if applicable.

- (Shortcut)

Here you determine the key for execution of the defined function.

... - select the desired key.

Button

<< Insert

When clicking on this button a new entry according to the specifications in the dialog fields is entered directly after the selected entry.

Button

<< Change

With this button you modify the currently selected entry according to the entries in the dialog fields.

Button

>> Remove

When clicking on this button, the currently selected entry is removed from the table.

Button

⤴ (Move up)

When clicking on this button the selected entry is moved up by one position.

Button

⤵ (Move down)

When clicking this button the selected entry is moved down by one position.



While changes to a shortcut record are not accepted until the **Save** button is clicked and changes are not effective if the dialog is closed via the button **Close**, creating, copying, or deleting shortcut records is always executed immediately.

7.24 Commands

When defining menus, toolbars, and shortcuts, you assign a command to the entries. Available commands are divided into different categories. You can modify the menu texts and symbols assigned to the predefined commands. Additionally, you can also establish user-defined commands in the category **user-defined**.

Using the menu command **Other|Commands...** the dialog, **Edit Commands** is opened. There you can manage and edit commands.

7.24.1 Edit Commands / Buttons

After opening the dialog (menu command: **Other|Commands...**) the definitions of the user-defined commands are first displayed. You can select one of the available command categories via the selection list, **Category**. The categories correspond to the main menu items in the WinGuard standard menu.

In the categories, you will find the commands that you can also retrieve via entries in the respective menu, such as additional commands that relate to the same field. The category, **user-defined**, is initially empty. In this category, you can set up your own commands that are then made available in menus, toolbars, or shortcuts.

To determine the properties of a command, use the functions **New** or **Change** to open the dialog, **Define Command**. With the help of this dialog, which contains the tabs **General** and **Animation**, the respective data can then be defined.

▼ Dialog: Edit Commands/Buttons

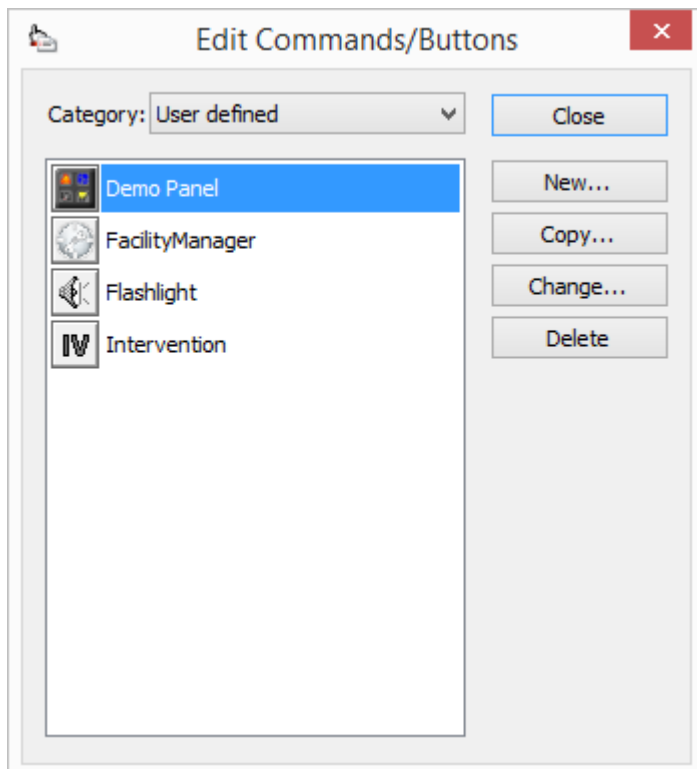
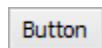


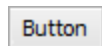
Figure 226: Edit Commands/Buttons

▼ Functions: Dialog



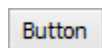
Close

This function closes the dialog. If changes have not yet been saved, a respective confirmation dialog appears that allow you to either accept or discard the latest changes.



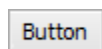
New...

This function creates a new user-defined command.
The dialog, **Edit Commands** is opened for the definition of the command.



Copy...

With this button, you create a copy of the currently selected command. It is inserted directly behind the currently selected entry and the name is expanded with a + .



Change...

This function opens the dialog, **Edit Commands**, to edit the command.



Delete

With this button, the currently selected command is immediately deleted without prior confirmation.

▼ Data section: Dialog



Category

Using the selection list, you can select an existing command category. The respective definition is then shown in the display field for further editing.
... - select the command category if applicable.



(Display field)

Here is the display area that shows the available commands.
... - select the desired command for editing if applicable.



The commands: Copy, Delete, and Close take effect immediately - without confirmation - meaning that they are always executed directly!

7.24.2 Define Commands

You can get to the dialog, **Define Command**, via the functions **New** or **Change** from the dialog, **Edit Command**. Using the tabs **General** and **Animation**, you can define the respective data.

▼ Dialog: Define Command - General Tab

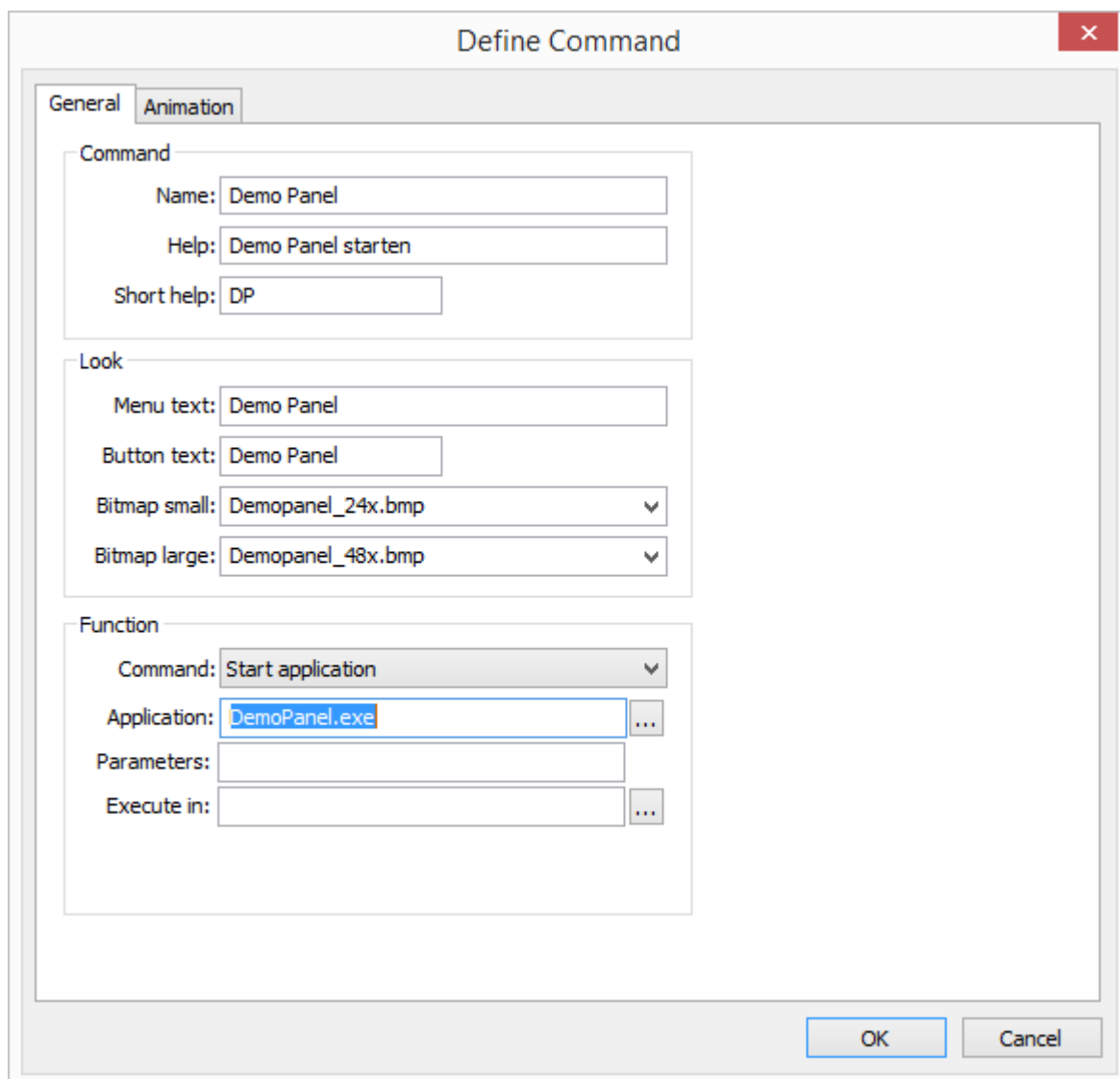


Figure 227: Define Command - General

▼ Functions: Dialog

Button **OK**

This function closes the dialog and transfers the changes made to the dialog, **Edit Command**.

Button **Cancel**

This function closes the dialog **without** transferring any changes made to the dialog **Edit Command**.

▼ General Tab: Data section - Command

In this area, you can define general information such as the name or the help text.

Name

For user defined commands, enter the desired name of the command here. You cannot change the name of predefined commands.

... - define the command name.

 Help

In this field, enter the help text that is to be displayed in the status bar when a user positions the mouse pointer over a menu entry or button with this command.

Blank (default) - optional

 Short help

The brief help text entered here does not have a function in the current program version.

Blank (default) - optional

▼ General Tab: Data section - Look

In this section you can define how the command should be displayed in the menu and in the toolbar.

 Menu text

In this field you can enter the specifications for the text with which the command is to be entered in a menu. You can still change the specifications later when you insert the command into a menu. If you would like to retrieve a menu entry also via a key, you must insert a **&** in front of the respective letter. For example, if the menu entry, **Fax**, should also be retrievable via the key, **<F>** then you would enter **&Fax**.

Blank (default) - optional

 Button text

Here you define the presettings for the text that should be shown on the assigned button in the toolbar. You can still change the text later when you enter the command in a toolbar.

Blank (default) - optional

 ▼ **Bitmap small**

Here you can enter or select the name of a bitmap graphic that should be used for the display of the command in toolbars with small buttons.

Blank (default) - optional

 ▼ **Bitmap large**

Here you can enter or select the name of a bitmap graphic that should be used for the display of the command in toolbars with large buttons.

Blank (default) - optional

When selecting a bitmap, all bitmap graphics in the folder, **Graphics\Buttons**, are listed. A small bitmap should be of the size 20x20 pixel and a large one 32x32 pixel. Otherwise, the bitmaps are enlarged or reduced accordingly in display. If only one bitmap is entered, it is used for both small and large displays. If no bitmap is entered, the command cannot be inserted into a toolbar. Entering the file extension **.BMP** is optional in both fields. If no path is indicated, the graphics are searched for in the folder **Graphics\Buttons**.

i For the display of buttons in graphics, WinGuard uses the Windows Bitmap (.BMP) format. Various bitmaps are already loaded. You can create additional bitmaps using drawing programs such as the Windows® **Paint** program.

▼ **General Tab: Data section - Function**

Command

Here is where you select the desired function of the button. Subsequent fields for the definition of the function depend on the selected function itself. For additional information, please see the description of the actions.

Blank (default) - optional

... ..

... ..
Blank (default) - optional

▼ **Dialog: Define Command - Animation Tab**

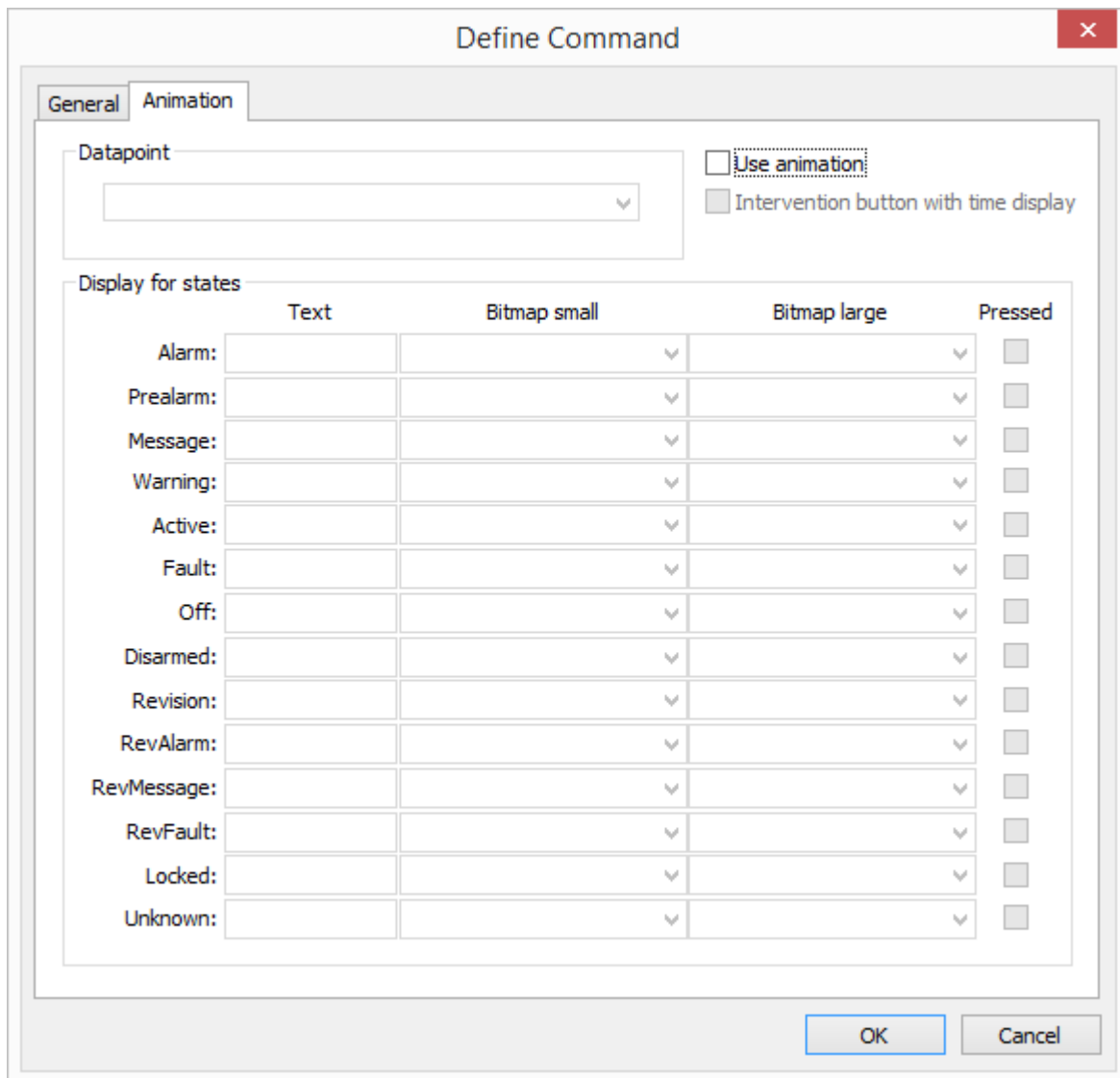


Figure 228: Define Command - Animation

▼ Animation Tab: Data section - Datapoint

Editing this tab is only necessary if this command is to be linked directly with a datapoint. Checking the box, Use animation, activates the animation. Using this function, datapoint states can also be displayed accordingly in toolbars. For example, some interfaces display the time of discovery from fire sensors.

▼ Datapoint

Here you can define the name of the datapoint that should be used for linking or state display.

Blank (default) - no function.

... - select the respective datapoint if applicable.



Use animation

With this option, the subsequently defined animation of the command can be activated depending on state.

Active - animation is activated.

Inactive (default) - animation is not active.



Intervention button with time display

Here you activate the function for display of discovery/intervention time for fire sensors.

Active - the function for intervention time is active.

Inactive (default) - the function for intervention time is **not** active.

▼ Animation Tab: Data section - Display for states

This area contains a table in which the respective display definitions for the various states of the selected datapoints can be made.

Text

These texts are used as state texts for display.

Blank (default) - the preset standard state texts are used.

... - enter the corresponding state text if applicable.

▼ Bitmap small

Here you can enter or select the name of bitmap graphics that should be used for the display of the respective commands in toolbars with small buttons.

Blank (default) - no display.

... - select the respective bitmaps or enter them directly.



This definition has priority over the definition in the General Tab!

**Bitmap large**

Here you can enter or select the name of bitmap graphics that should be used for the display of the respective commands in toolbars with large buttons.

Blank (default) - no display.

... - select the respective bitmaps or enter them directly.



This definition has priority over the definition in the General Tab!

**Pressed**

Here you can determine if the buttons should be displayed as **pressed** in the respective states.

Inactive (default) - the respective buttons are not displayed as pressed.

Active - the respective buttons are displayed as pressed if applicable.

7.25 Gadgets

Gadgets are supplementary functions or display elements and are only available as content type for the definition of areas. Representation or functionality can be influenced via parameters. Currently, only one gadget is available - a clock.

7.25.1 Gadget - Clock

You can define the properties of the **clock** gadget using the dialog, **Clock Properties**.

▼ Dialog: Clock Properties

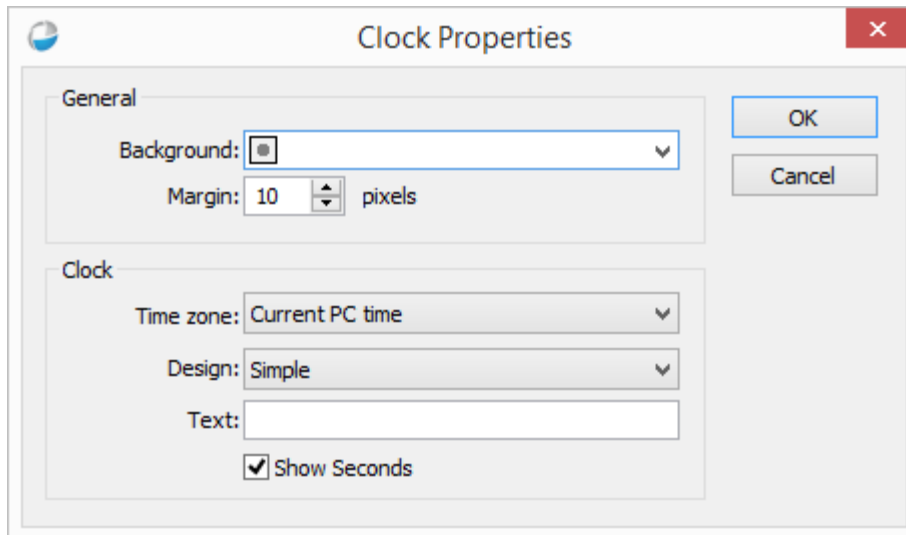


Figure 229: Clock Properties

▼ Functions: Dialog

Button **OK**

This function closes the dialog after configuration data was transferred to the dialog of the layout properties.

Button **Cancel**

This function closes the dialog without further questions or confirmation. All changes are discarded.

▼ Data section: General

▼ **Background**

Here you can define the background color for the clock.

Blank (default) - no specific background color is selected

#... - select the desired color or enter it directly.

(RGB value: 3 hexadecimal values, each between 00 and ff - e.g. #B2B2B2)

Margin ... pixels

Here you can define the minimum distance between the clock and the edge of the area (pixel). The value can be entered directly or incrementally increased or decreased using the arrow keys.

10 (default) - modify the margin if applicable.

▼ Data section: Clock**Time zone**

Here you can define the time zone for the clock.

Current computer time (default) - the current time of the computer is used.

(UTC...) - select the desired time zone if applicable.

Design

With this option, you can select from different clock designs.

Simple (default) - simple clock design.

Metallic - clock design with metallic look.

Text

Here you can define a text that is displayed in the center below the clock.

Blank (default) - no text is faded in.

... - enter the desired text if applicable.

Show Seconds

With this option you can determine if the seconds are displayed.

Active (default) - seconds are displayed.

Inactive - seconds are **not** displayed.

7.26 Set up Service (ServicePanel)

You have the choice to use WinGuard with user interface (UI) as usual or, alternatively, to set up WinGuard as a service. An essential advantage of the service is that, for the operation of WinGuard, it does not require any Windows user to be registered at the corresponding workstation. This is often requested for the Server, Hot-Standby Server, etc. However it has to be noted that in this case no user interface will be available for the operation of WinGuard.

For administration of the service an independent application called **ServicePanel** is available with which WinGuard can be installed, set up, managed and operated to a limited extent. The ServicePanel also offers the possibility to remotely monitor WinGuard clients that are not running as service and to execute certain functions.



In many cases it makes sense to operate e.g. the WinGuard Server as a Service.

7.26.1 Installation

In order to operate WinGuard as a service, it is first required to install and configure WinGuard as service. An additional program called **ServicePanel** has to be installed resp. available. Furthermore WinGuard has to be installed as service together with the ServicePanel.

7.26.1.1 Install ServicePanel







The ServicePanel is part of the WinGuard installation. The program **ServicePanel.exe** is stored in the same directory as the **WinGuard.exe**. During the installation a corresponding shortcut is added to the start menu.


If the installation is not executed via the WinGuard installation resp. a corresponding update, it is also possible to subsequently enter resp. copy the program in the WinGuard program directory. The program can easily be started by a doubleclick or a corresponding shortcut (admin rights required).


To be able to access a WinGuard with the ServicePanel, the service access for the corresponding client has to be activated in its local settings (**Local Installation | Network | Service access**). It is also possible to define the IP port for the service access (standard port: 1235). To connect to the ServicePanel all users need a password and the right **System.Remote-access**.

▼ **ToDo: Install ServicePanel**

The following actions have to be performed to install the ServicePanel:

-  Keep WinGuard installation resp. update ready.
-  Execute WinGuard installation resp. update.
(The ServicePanel must be located in the WinGuard program directory and has to be started with administrator rights!)
-  Start WinGuard (UI).
-  Enable/define service access in WinGuard.
(**Local installation | Network | Service access**)
-  Check / modify user definitions.
(All users need a password and the right: **System.Remote-access**)
-  Exit WinGuard if necessary.

 *The location of the program **ServicePanel.exe** is important since some functions of the ServicePanel (such as e.g. **Install service**) relate to the **WinGuard.exe** located in the same directory.*

 **Please ensure to execute the ServicePanel as administrator and that the service access has been activated for the respective workstation, otherwise it might be that not all functions are available!**

7.26.1.2 Install WinGuard as service

The installation and deinstallation of WinGuard as service is made via the ServicePanel with the help of the function **Install service** resp. **Uninstall service**. During the installation the service "WinGuard" is registered in Windows and configured in such a way that it is automatically started upon starting the operating system. If the start of the service fails, a re-start will automatically be performed.








With the help of the Windows service panel the parameters of the "WinGuard" service can be

displayed resp. adapted after the installation. The panel **Windows Services...** can also be selected as function in the ServicePanel.


Further information with regard to the functions of the ServicePanel can be found in the section [Program window](#)⁶⁷⁶.

▼ **ToDo: Install WinGuard service**

The following actions have to be performed to install the WinGuard service:

-  Keep WinGuard installation resp. update ready.
(if required)
-  Execute WinGuard installation resp. update.
(if required)
-  Enable/define service access for the ServicePanel in WinGuard.
-  Set up the firewall (port etc.) for the ServicePanel access.
-  Start the ServicePanel (admin mode!).
-  Set up WinGuard as service (Function: **More | Install service**).
-  If necessary, start the service WinGuard (function: **Start Service**)
Note: The service is automatically started upon starting the computer.

No further steps are required for the installation of the "WinGuard" service.

 *With the functions of the ServicePanel the "WinGuard" service can be started resp. terminated manually or WinGuard can be started with user interface.*

7.26.2 Overview ServicePanel

Basically the ServicePanel unites two principally independent functionalities:

- Service Management
- Remote Monitoring

In this way the corresponding functions for operating WinGuard as a service are provided.

7.26.2.1 General Information

If no other settings are made in the ServicePanel, all functions relate to the local WinGuard which is located in the same directory as the ServicePanel.exe. The remote monitoring connection is also established to the local WinGuard instance without any further indications.

For the normal case of a single WinGuard installed on the computer, a WinGuard can easily be installed and started as service, without any special operating system knowledge.

In order to make local settings, a WinGuard with complete user interface is required. The service has to be stopped and WinGuard must be started as normal application with user interface. If required the ServicePanel allows a fast and comfortable switching between the two operation modes.

▼ Dialogue: WinGuard settings for the ServicePanel

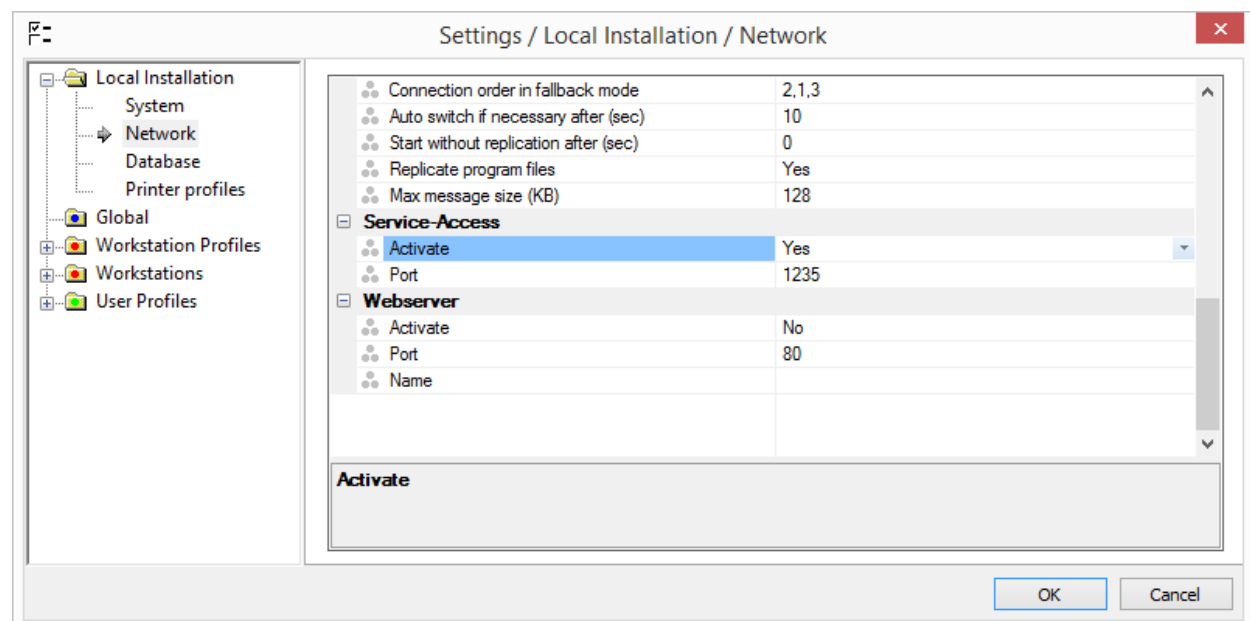


Figure 230: Dialogue WinGuard settings for the ServicePanel

7.26.2.2 Service Management

The local WinGuard can be installed and started as service with the **Service Management**. A WinGuard running as service does not have its own user interface. Only the required core components (e.g. interface handler, database, etc.) will be active. Furthermore no user will actively be registered at a WinGuard running as service.

The following functionalities are supported by the Service Management:

- Install Service
- Uninstall Service

- Start Service
- Quit Service
- Start UI
- Windows Services

Further information can be found in the section [Operation](#)⁶⁷⁶.

7.26.2.3 Remote Monitoring

To be able to monitor and control the states of such a service in a clearly visible way, the **Remote Monitoring** functionality has been implemented. With the help of an IP connection this has been made in such a way to, in addition to the access to the local service, principally enable a monitoring of every other WinGuard installation (even running remotely).

The following functionalities are supported by the Remote Monitoring:

- Connection
- Interface list
- Client list
- Notification list
- Hot-Standby

Further information to be found in the section [Operation](#)⁶⁷⁶.

7.26.3 ServicePanel Operation

After starting the program the most important functions for Service Management are directly available as buttons in the toolbar. The status of the local service can be seen from the button status (active/selected). The button **More** offers access to further functions not used very often.

If there is an existing connection, the upper section of the window displays an **Interface list** with **Interface states** as well as a **Client list** with **Client states** next to each other. It is partly possible to execute additional functions for the entries via the context menu.

In case of an existing connection, **Notifications** - similar to the display in message boxes - will be listed in the bottom area of the window and these notifications can be confirmed resp. responded to directly via the respective buttons.

A short help with regard to the selected program command is displayed in the status bar. In addition there are two fields in which the currently registered user as well as the currently used connection target address is displayed. The status of these fields (active/not active) indicates whether a user is currently registered resp. whether a connection has been established successfully.

The Service Management functions normally related to the **WinGuard.exe** installed as service, only the function Install service always relates to the local **WinGuard.exe** which is located in the same directory as the executed **ServicePanel.exe**. The execution of the functions is partly taken over directly by the concerned **WinGuard.exe** itself by opening it with the corresponding parameters.

7.26.3.1 Start ServicePanel

Upon start of the program ServicePanel.exe the ServicePanel is opened as control panel. The size of the ServicePanel window is adjustable, whereas the content sections are adapted accordingly. If a connection with the option "**Connect to these settings upon start**" has been established before it is immediately tried to re-establish this connection again.

The ServicePanel always has to be started with administrator rights ("executed as administrator") since otherwise not all functions might be available. It is not enough to be registered with an admin account.



Please note that the ServicePanel has to be run as administrator so that all functions are available!

7.26.3.2 Program Window

The user interface of the ServicePanel consists of the toolbar (top), the display area and the status bar (bottom). Available resp. active functions are displayed according to their current status.

▼ **Window: ServicePanel**

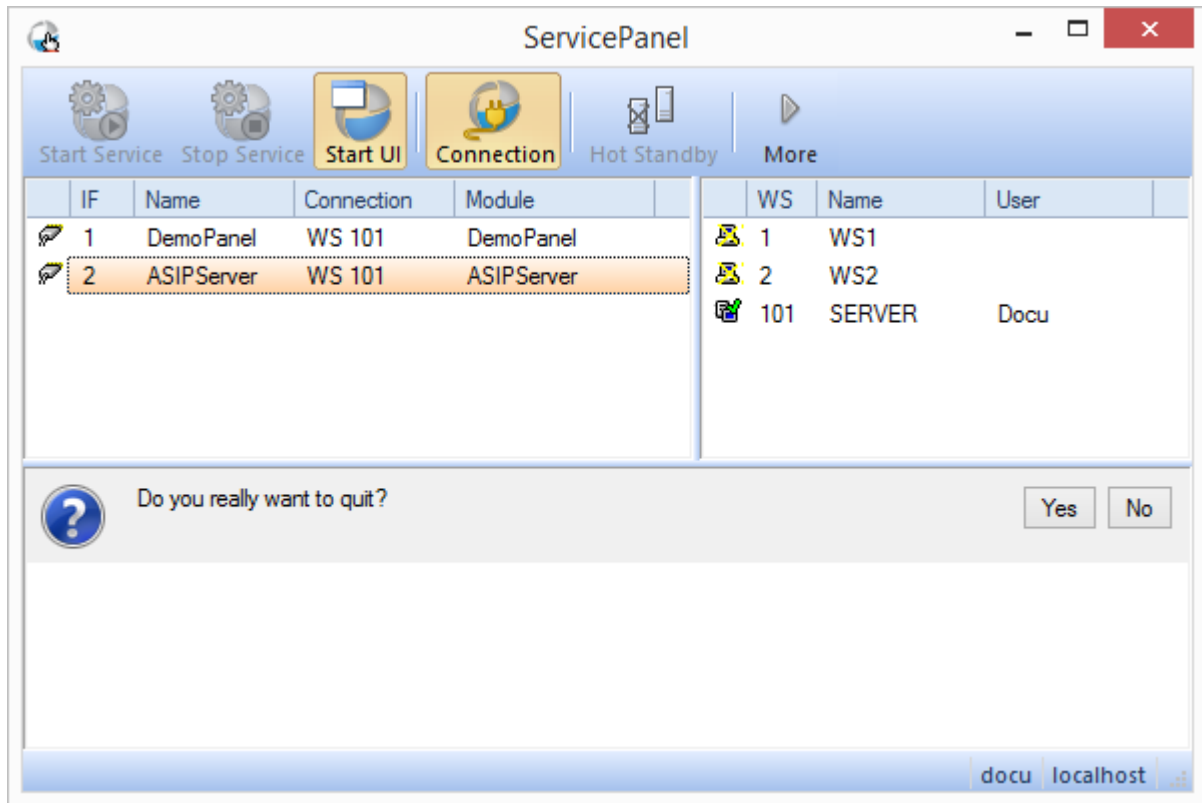


Figure 231: ServicePanel

▼ **Functions: ServicePanel**

The following functions are available as buttons in the upper section of the program windows:

Button Start Service

Via this button it is possible to start an installed WinGuard service.

⚠ Before starting the service for the first time the service access should be activated via a normal start with user interface.

i *The function is only available if WinGuard has been installed as service before and if the service has not yet been started!*

Button Stop Service


The active service "WinGuard" can be terminated with this function.

i *The function is only available if WinGuard is active as service!*

Button **Start UI**

With this function WinGuard can be started as a normal application.

The function starts WinGuard that has been installed as service not in the service mode but with a complete user interface. If WinGuard is already running as user interface, it can be brought to front via this function. If no service "WinGuard" has been installed, this function will start the local **WinGuard.exe**


 *WinGuard can only run either as service or with user interface. To start WinGuard with user interface it might be required to a stop a possibly running service first.*

Button **Connection**

This button directs to the [Dialogue Connection](#)⁶⁸⁰ where it is possible to enter an **IP address**, **user name** and **password** and to establish a connection with these settings. In addition it is possible to **interrupt** the existing connection.

Button **Hot-Standby**

The status of the Hot-Standby operation is displayed via the Hot-Standby button and the Hot-Standby mode can be switched. This function is acting analogue to the respective function of the target system.

 *To execute the Hot-Standby switch the applied user has to possess the right **Set System.Hot-Standby** in one of his profiles.*

Button **More**


A submenu is opened, containing further ServicePanel functions.

▼ **Further functions: ServicePanel (More)**

The following functions can be accessed via the function **More**:

Button **Install Service**

This function registers the local program WinGuard.exe as Service with the name "WinGuard".


 *A start as service is only possible after prior installation.*

Button **Uninstall service**

This function uninstalls a previously installed service "WinGuard".

Button **Windows Services...**

Calls up the Windows Service Manager where all installed services are listed, including the service "WinGuard". The services can be further configured and monitored here. However the usage of the additional functions offered by Windows is normally not required.

 *From the display of the different functional entries (active, selected) it can be seen which status a service currently has, e.g. whether it is installed, started, etc.*

Button **Info about...**


The function opens the info dialogue of the ServicePanel where general information concerning the program can be found.

Button **Language**

With this function a menu for language selection is opened. Currently the selection between German (de) and English (en) is possible.

Button **Close window**

If the ServicePanel window is closed the application is not terminated, only minimized to an icon in the the task bar. The ServicePanel controller can be re-opened by clicking on the tray icon.

 *When the control panel is closed or not activated newly received messages will be displayed for a short time as speech balloon at the tray icon.*

Button **Exit**

With the help of this function the ServicePanel is completely terminated.


 *This function can also be executed via the context menu of the tray icon.*


▼ **Display: Interface list**

All interfaces successfully loaded at the target system are listed in the interface list (similar to the WinGuard interface dialogue). If the icon of an interface is crossed in yellow this interface is currently faulty.

The list contains the following elements:

- **Icon (SST Status)**
Displays an interface symbol. If the symbol is crossed in yellow this interface is currently faulty.
- **SST**
The number resp. ID of the interface is displayed here.
- **Name**
This column contains the interface name defined in WinGuard.
- **Connection**
The client number (BPL number) to which the interface is currently assigned is displayed here.
- **Module**
The module name of the interface is displayed in this column.

 *It is possible to re-start a single interface module or all interface modules via the context menu.*

 *To execute an interface re-start the registered user must have the right **Edit.Interface** in one of his profiles.*

▼ **Display: Client list**

All clients defined in the target system are registered in the client list. Client type and connection status are visible from the icon (similar to the WinGuard status bar).

The list contains the following elements:

- **Icon (BPL Status)**
The icons indicate the respective client type and the connection states.
- **BPL**
The client number of the respective client is displayed in this column.
- **Name**
The client name is indicated here.
- **User**
This column indicates which user is currently registered at the client.

▼ Display: Notification list

All notifications that are active at the target system are registered in the notification list. Usually these are the message boxes that are displayed at the target system. For each entry, there are the same buttons available as in the respective message box at the target system. If a notification is confirmed via one of the buttons, it will be removed from the list and the message box at the target system will be confirmed accordingly.

Notifications that are only faded in for some time at the target system (e.g. notes during interface start) will remain in the notification list until they are confirmed.



*The splash screen upon system start including its process notifications will also be displayed as notification in the list. In this case "**Start without adjustment**" will be executed via the button **OK**.*



If the ServicePanel window is closed and only the icon is active in the task bar, new notifications will be faded in for some time as speech balloons in the task bar. The question mark symbol is not available so that the info symbol will be used for respective query notifications.

▼ Display: Status bar

In the status bar a short help regarding the selected program command is displayed. In addition there are two fields in which the currently registered user as well as the current connection target address is displayed.

The corresponding fields indicate if there is an existing connections resp. if the login for the indicated user has been successful (the text of the fields will turn to black instead of grey).

7.26.3.3 Connection Dialogue

With the help of the function **Connection** of the ServicePanel the Connection Dialogue is opened. The required connection parameters (IP address: port, user name and password) to establish a connection with the corresponding system are defined here.

If there is no active connection, the function **Connect** offers the possibility to establish a connection with the respective system. An existing connection can be terminated by the button **Interrupt**.

▼ Dialogue: Connection

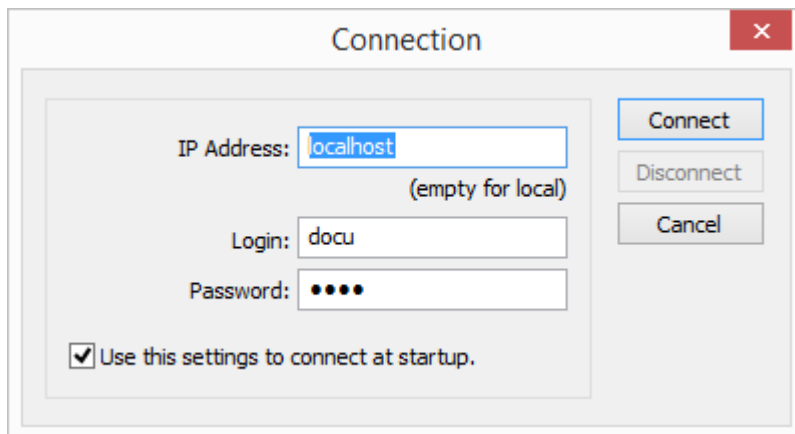


Figure 232: Connection Dialogue

▼ Functions: Connection Dialogue

The following functions are directly available as buttons in the upper right section of the dialogue window:

Button

Connect

A connection to the indicated system with the registered parameters can be established via this button.



*Please note that the WinGuard users need a Password and the right **System.Remote-access**.*

Button

Interrupt

The active connection is interrupted.

Button

Cancel

The dialogue is canceled without any further actions.

▼ Definitions: Connection Dialogue

The following elements are available for defining the connection parameters:

Input field

IP Address

The IP address of the target system is defined here. If the field is left empty, **localhost** will be used as standard IP address and **1235** as IP port.

As an option it is also possible to directly enter an IP port separated by ":", such as e.g. **127.0.0.1:1235**.

empty (default) - define the IP address and if so the port number.



Before starting the service for the first time, the service access has to be activated via a normal start with user interface.



The function is only available if WinGuard has been installed as service before and if the service has not yet been started!

Login

The user ID or the login name has to be entered here. This definition is used when connecting for login.

empty (default) - define the user ID or login name.

Password

The user password has to be entered here.

empty (default) - define the required password.



A password is always required!

It is not possible to establish a connection for a user without password.



Connect with these settings upon start

If this option has been chosen upon connecting, the connection establishment will be executed with the registered settings upon the next start of the ServicePanel.

aktiv (default) - automatic connection is activated.

inaktiv - automatic connection is **not** activated.

It can be seen from the corresponding fields in the status bar of the ServicePanel whether a connection can be established (the target address is black, not grey) and if the login for the indicated user is possible (the user name is black, not grey).




The indicated user data (user name and password) have to be linked to a user defined at the target system who has received the authorization for service access, otherwise the connection will be refused by the target system.



In case the target system has just been started and the user management has not yet been initialized, a connection establishment is always possible. Thus the notifications of the splash screen can be tracked at an early stage during the start process. As soon as the user management has been initialized at the target system, the connection will be re-authenticated and might be - without a valid user registration - terminated again.

7.26.3.4 Tray Icon

After starting the ServicePanel there is an icon  in the system tray with which different functions can be called up.

By clicking on the tray icon, the ServicePanel controller can be re-opened directly. In case the Panel is already open it will be brought to front on the desktop.

The functions to **Open** and **Exit** the ServicePanel are available via the context menu of the tray.



If the control panel is closed or not activated, newly received notifications are faded in for a short time as speech balloon at the tray icon. The control panel can also be opened resp. activated by clicking on the speech balloon so that the corresponding notification can be selected.



If you would like to have the tray icon in the tray section always displayed, this can be set with the help of the Windows function "Adapt notification symbols".

7.26.4 Hints

7.26.4.1 Windows Event display

The service **WinGuard** uses the Windows event display to store different notes and bug information in the application protocol. E.g. if the service could not be started it might be helpful to check this protocol for bugfixing.

The selection of the windows console for the event display is made via the respective Windows function **Administration | Event display**. Under **Windows protocols** the protocol section for applications can be found (**Application**).

Windows console: Event display

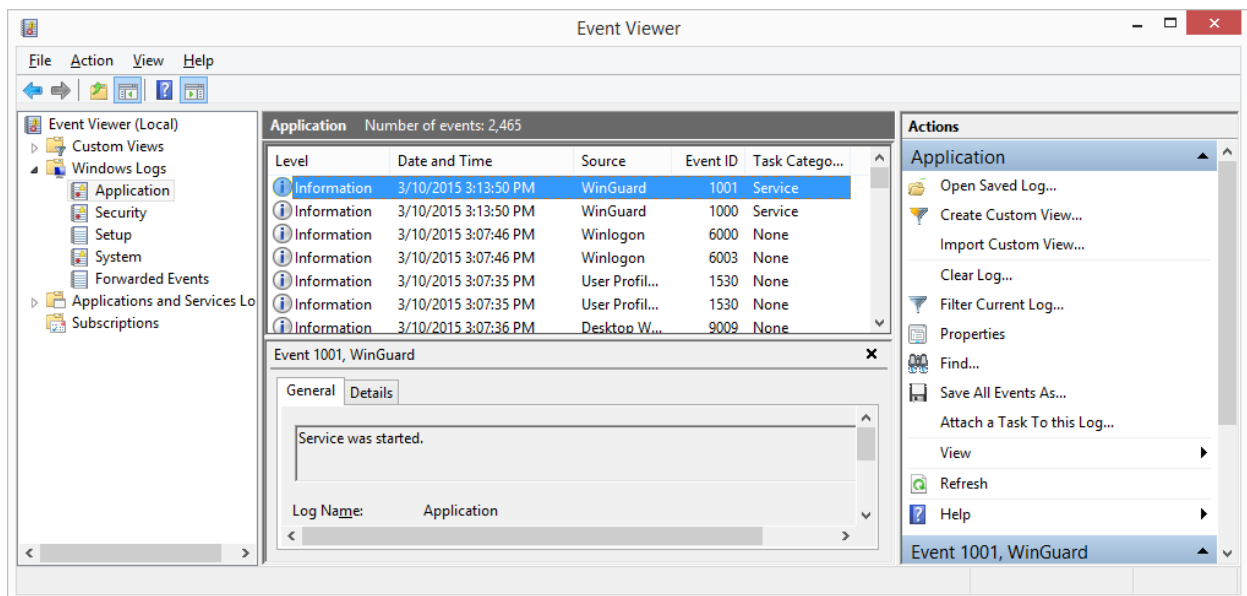


Figure 233: Windows console Event display

7.26.4.2 Windows Services

The service **WinGuard** is also managed by Windows services. It is possible to check and, if necessary, change the current settings of the service here.

The selection of the Windows console for the services is executed via the respective Windows function **Administration | Services**. Alternatively the console can also be started directly via the function **More | Windows Services...** of the ServicePanel.

Windows console: Services

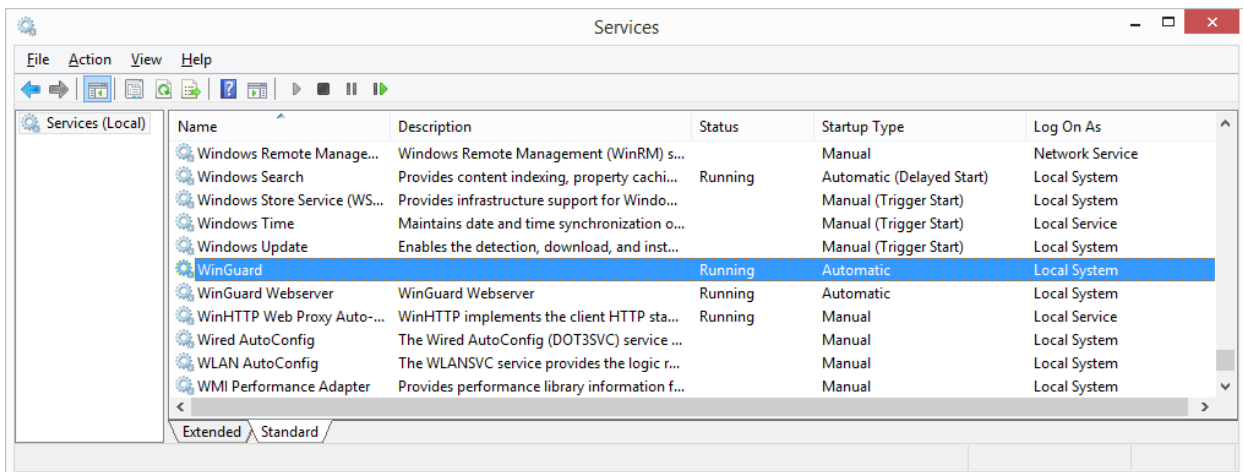


Figure 234: Windows console Services

7.26.4.3 System Acces (Firewall)

If the service access is activated for the first time and the corresponding IP port **1235** is yet activated in the local firewall, there might be a problem when starting the service **WinGuard** for the first time. A remote monitoring access will not be possible in this case.

It is best to start WinGuard one time in the normal mode with user interface (**UI**) and activated service access. Upon opening of the IP port there will be a corresponding note from Windows, offering the possibility to directly activate the IP port for WinGuard.



The Service access is protected via the special right "System.Service access". The user to be applied for connection establishment of the service access must have this right in one of his profiles, otherwise a login is not possible!

7.27 Login with Active Directory (LDAP)

An existing Active Directory (Windows server required) can be optionally used for user management. Various methods of using the Active Directory are supported and can be set up via **Authentication Method** in the settings (please see: [System](#)⁴²⁴). In WinGuard, it is possible in all cases to define users also without domain entries and to use these without accessing the Active Directory.

#	Authentication	Description
1	Local	User, password, and profile assignment are exclusively managed in WinGuard as before.
2	Active Directory (Authentication)	User and profile assignments continue to be managed in WinGuard. However, user authentication can be achieved via the Active Directory. This is done for all users for which a domain was entered. If such a user is deactivated in the Active Directory, that user no longer has access to WinGuard.
3	Active Directory (Authentication + Profile Assignment)	In addition to authentication, the profile assignment is also defined in the Active Directory by allocating respective user groups linked to WinGuard profiles to a user. Only users that have a least one WinGuard profile assigned to them in this manner can log in to WinGuard. It is not required to also define these users in WinGuard. If a user is not defined in WinGuard, his/her ID (for log entries, etc.) is taken from the field, Initials, in the Active Directory. If nothing is defined there, the ID is automatically generated from the login name. If a user is defined in WinGuard and additional profiles were assigned to that user, these are also accessible to him/her.
4	Active Directory (Authentication + excl. Profile Assignment)	Similar to method 2. However, the user only has access to the profiles assigned in the Active Directory. Yet it is still possible to define these users additionally in WinGuard and, for example, to define the ID that is to be used and in the event of multiple profile assignments, to determine the default profile. However, this profile must be assigned to the user in the Active Directory in order for him/her to truly have access to it. Undefined users will be automatically created in WinGuard.

Default User Domains

If a user has a locally defined domain in WinGuard, this defined domain is always used for a login without domain entry. However, with methods 2 and 3, users not locally defined in WinGuard can also log in to WinGuard. In this case, these users would have to enter the domain in addition to the login when signing on. In order to simplify this process, the option was created to predefine a default user domain. This standard domain is then always used in user login without domain entry for an undefined user.

LDAP Server/Domain

The explicit entry of the LDAP server is optional. If no entry is made, the server is implicitly determined via the respective user domain or the domain entries at login. The latter is in the format: **username@domain**. If you would like to enter the LDAP server explicitly in the settings, this can alternatively be achieved via an IP address or the server name/domain. Additionally, it is possible to specify the port that should be used by adding the port number separated by ":".

Example: **192.168.0.10:384** or also **mydomain:612** etc.

LDAP Attribute

With authentication methods 2 and 3, users can also be exclusively managed in the Active Directory. However, WinGuard requires a user ID for every user. This ID can be filed in any attribute of the Active Directory user record. If no user ID was explicitly entered, it is dynamically generated from the first two letters of the first name and the first two letters of the last name.

For such users, any profile continues to be selected since no profiles were assigned locally and therefore no profile was designated as the default profile. But in order to enter a default profile anyway, this information can be filed in any attribute of the Active Directory user record. If this attribute field refers to a valid LDAP profile name and the user is part of the corresponding LDAP group, the respective WinGuard profile is selected at user login. In authentication method 2, profiles only locally assigned to a user can be designated via LDAP as a default profile, provided these profiles have a LDAP name.

For the matching of the LDAP name to the group, a simple or extended mode can be selected in the [settings](#)^[424]. In simple mode, only the groups from the same domain to which a users belongs to are taken into account and no hierarchal structure is possible. However, in extendend mode, nested group hierarchies are searched for the corresponding LDAP name and cross domain references of groups are considered. In the latter, to be considered as a valid group, its **objectSid** value must correspond to the **sidHistory** value of at least one group that the user belongs to.

Single Sign On

As Single Sign On, we refer to the scenario in which a user logs into Windows and then, when starting WinGuard, does not have to go through another user login and can sign on to WinGuard using his/her Windows account. This function can be applied independently of using the Active Directory service. With or without using the Active Directory, the functionality is carried out in different ways.

To activate the function, select the newly available entry, **<Windows>**, under **Automatic login at program start**. When WinGuard is started, the current Windows user is determined. If a corresponding user with the same login is defined in WinGuard, this user is automatically logged in, provided that the local password on record is the same as the Windows password. In methods 1, 2, and 3 using the Active Directory, non-local users undergo authentication of the Windows login information relative to LDAP. **<Windows>** can also be entered for fallback users.

When using the Single Sign On functionality, it is possible to login in explicitly as another user anytime.

If **<Windows>** is active in the settings, the current Windows user can log in anytime without ID or password.

If a user other than **<Windows>** is selected, this user is either directly logged in at system start (local user), or following a preceding successful authentication relative to the LDAP server. As password, the user password on file in WinGuard for authentication is used, meaning that if a user that can be authenticated relative to LDAP should be available for automatic system start or as fallback user, the password for this user must be on record in WinGuard. It can also remain blank, because then the password is used directly at login entry.

7.28 Performance Analysis

To analyze the performance of WinGuard, different values can be logged into a file. The settings for activation etc. are defined in the settings under Global / System in the section **Performance Tracing**. As a standard, the log file (**Trace.csv**) will be created in the directory and with the name that has been indicated in the settings of the system. In case no directory is defined there, it will be issued directly in the project directory. If a directory or name for issue is defined in the INI file, this one will be used.

Additional test parameters can be defined in a script file (**Test.ini**). As a standard, directories and name of the system settings (Settings / Global / [System](#)⁴²⁴) will be used. If no directory is defined there, the file will be loaded directly from the WinGuard project directory.



If there is a semicolon (;) at the beginning of a line, this line will be ignored or interpreted as a comment!

▼ Section: [Macro] - Test.ini

In this section, the definition of macros or variables for further use of this file is made. Format is a simple key value pair, separated by the first space character.

Example:

```
; Definition of Macros  
[Macros]  
CLIENT_WS /ws=1 /ws=2 /ws=3
```

With this definition, the text **CLIENT_WS** is replaced in the rest of the file (also in further lines of this section) by the values **/ws=1 /ws=2 /ws=3**.

Shutdown CLIENT_WS will be transformed into: **Shutdown /ws=1 /ws=2 /ws=3**

▼ Section: [Settings] - Test.ini

In this section, the definition of additional settings for execution is made. The format is a simple key value pair, separated by the first space character.

Allowed keywords:

- **RescanInterval**
Number of repetitions for reading the file.

Example:

```
; Definition of Settings  
[Settings]  
RescanIntervall 5
```

▼ Section: [Commands] and further sections - Test.ini

In this section, the definition of the commands for execution is made. Each line starts with a command followed by parameters in the format **/Param** or **/Param=Value**.

If a value contains space characters, this value has to be set completely in quotation marks ("), e.g. **/text="Hello, World"**.



In the following, the placeholders for the values are always set in angle brackets in the form <...>. The values themselves have to be defined without these brackets!

General parameters:

- **(Client limitation)**

This parameter limits the corresponding command to the indicated clients. Several of these parameters may exist whereas the command will then be limited to all indicated clients.

/ws=<X> - enter the number of the client.

i *If this parameter is not indicated, the command will be executed for all clients!*

- **(Execution time)**

This parameter defines a time in the indicated format at which the command shall be executed.

/time=<YYMMDDhhmmss> or

/time=<YYYYMMDDhhmmss> or

/time=<YYYY>-<MM>-<DD>T<hh>:<mm>:<ss> - enter the execution time.

i *Without this parameter, the command will always be executed immediately (i.e. this might be every second of RescanInterval if the command is in the section [Commands])!*

- **(Delay time)**

This parameter defines a time in milliseconds, indicating how long the command shall be delayed.

/delay=<x> - enter the delay time.

i *With a time indication (/time), the delay will relate to the entered time, otherwise the delay will relate to the current time (as of now)!*

Commands:

- **Execute**

The command executes a section of an INI file. As parameters, the following indications can be defined:

/file=<Directory and file name> - enter file name and directory.

/section=<Name of section> - enter the section.

i *Without indication of **/path**, the section will be executed in the current file, otherwise the entered file will be loaded!*

i *Without indication of **/section**, the section [Command] will be executed, otherwise the entered section will be executed (Section)!*

- **ExecuteFile**

This command loads a file (format as this file) and executes their section [Command]. The following indication is required as parameter:

/file=<Directory and file name> - enter the file name and directory.

- **ExecuteSection**

This command executes the indicated section (Section) of this INI file. The following indication is required as parameter:

/section=<Name of section> - enter the section.

- **ControlDatapoint**

This command controls a datapoint. As parameters, the datapoint ID or interface parameters and in addition, the sensor number and command ID are required:

/id=<id> - enter the datapoint ID (alternatively to the interface parameters).

/sst=<sst>, /datatype=<datatype>, /node=<node>, /address=<address>, /address2=<address2> - alternatively, enter the interface parameters of the datapoint (interface number, data type, node, addresses, address2) instead of the ID.

/sensor=<sensornum> - enter the sensor number

/commandid=<id> - enter the interface-specific command ID

/param1=<x> - if required, enter the parameter 1 related to the command.

/param2=<x> - if required, enter the parameter 2 related to the command.

- **Shutdown**

The command leads to shutdown of WinGuard.

- **SwitchFallback**

The command performs a Hot-Standby switch.



This command is only executed if the Standby Server is active at this time!

▼ Example: Test.ini

```

;*****
; [Macros] - Definition of macros
; Task: Definition of macros or variables for further use in this file
; Format: simple key value pair, separated by the first space character.
; Example: CLIENT_WS /ws=1 /ws=2 /ws=3
; with this definition, the text "CLIENT_WS" will be replaced in the rest of the file (also in fu
; section) by the assigned values "/ws=1 /ws=2 /ws=3".
;-----
[Macros]
CLIENT_WS /ws=1 /ws=2 /ws=3
;*****
; [Settings] - Definition of settings
;-----
[Settings]
RescanInterval 5
;*****
; [Commands] - Definition of commands
;-----
[Commands]
SetTraceFile /path=LOG_FILE_PATH /time=STARTTIME
;SetTraceFile /path=Trace2.csv
;SetTraceComment /text="I like turtles!"
;SetTraceComment /delay=3000 /text="3 seconds later..."
;SetTraceFile /delay=5000 /path=Trace3.csv
;SetTraceComment /delay=5000 /text="I like turtles in the new file too :)"
...
;=====
; User-defined sections / Sections
;=====
;*****
; [ShutdownClients] - User Section: Shutdown / terminate system
;-----
[ShutdownClients]
Shutdown CLIENT_WS"
;*****
; ...
;
    
```

Figure 235: Test.ini

▼ Example: Trace.csv

Time	ip.clients	ip.clients.active	ip.clients.ready	...
08.04.16 14:50:03 0	0	0	0	...
08.04.16 14:50:04 0	0	0	0	...
08.04.16 14:50:05 0	0	0	0	...
08.04.16 14:50:06 0	0	0	0	...
...				

Figure 236: Trace.csv

8 Data Supply

A system such as WinGuard achieves most of its functionality only when it is supplied with data – we refer to this process as projection. While WinGuard communicates with coupled installations and receives their events on its own, you have to determine how the system should react to them. You determine what information it should display, what action it should carry out automatically, etc., all the things that fundamentally define its functions when it is in use. Data supply and maintenance are generally not insignificant parts of the total investment cost of a system.

For this reason WinGuard has paid particular attention to making data supply and its subsequent maintenance as simple and effective as possible. In addition to a program interface that is intuitive in its operation, the organization of the data is of key importance. WinGuard offers a high degree of flexibility in this arena and can provide an effective solution for even the most varied applications.

In order to use the system to its highest potential, it is important that you are familiar with the options that are available. Mistakes made early on may be difficult to correct later. We therefore recommend that you read this section carefully prior to initiating your data supply. Furthermore, we advise you to experiment with a few sensors or a sensor group before implementing a larger-scale data load.

The data supply can be divided into five main categories:

- **Interfaces**

First, the interfaces should be added and set up so that the respective datapoints can be added to the system. You can find more information about interfaces in the section entitled [Interfaces](#) ⁷⁰¹.

- **Locations**

The locations should also be defined early on during projection. Many elements, especially the datapoints, use location information. You can find more details on how to handle location information in the section, [Locations](#) ⁶⁹³.

- **Datapoints**

The handling of datapoints and their definitions is essentially the core of WinGuard. The objects administered by the system such as sensors, fire and intrusion detectors, cameras, etc. define a large part of the commands contained in the system, and are thus crucial elements of the system's functionality. You can learn more about this topic in the section entitled [Datapoints](#) ⁷¹⁵.

- **Graphics**

Graphics can be assigned to objects and, during event reception, provide important information about the event location. Featuring animated symbols and interactive buttons, graphics are universal tools for information and control. You can find more information on graphics in the section entitled [Graphic](#) ⁷⁵⁶.

- **Texts**

WinGuard uses texts in many ways. As pure text for example, you can give information as to what measures are to be taken if a certain event has occurred. Texts can also serve as forms to enter information. With inserted conditions and actions, these texts can guide and automate program actions. You can read more about texts in the section, [Text](#) ⁸⁸⁷.

During data supply, you will often encounter the concept of **Commands** to execute functions in WinGuard. For example, commands can be defined in buttons featured in graphics and texts. User-defined commands can also be carried out in this manner. Commands are always defined in the same way. In the section, [Functions and Variables](#) ⁹³⁹, we provide you with an introductory overview on this subject.

Data Supply:

The remaining sections with respect to data supply describe elements such as the [calendar](#)^[583], [schedules](#)^[585], or [lists](#)^[570], as well as the definition of [sensor types](#)^[597], [animation schemes](#)^[601], and other elements for the user-defined interface.

8.1 Locations

In projection, you can assign a location to every datapoint defined in WinGuard and, if desired, also to individual sensors. On the one hand, the location provides information, for instance, during event display. On the other hand, location definition allows for selection by location from various program areas and therefore enables targeted access to datapoints and events in specific local sites. The visibility of locations can be defined by rights. So these locations are hidden in the explorer and the assigned datapoints in the explorer and depending events are hidden too.

All locations are centrally managed in WinGuard in a hierarchically structured location register. Any number of levels can be added to the hierarchy, and you can use them in any number of ways. The location information in the subordinated levels is optional.

Example: The top level can be a broad location definition, for example, the area of your company premises. The next level can then contain the buildings or building complexes that are located on the company premises. Subsequently, you can add the floors of a building, then the rooms on the individual floors, etc.

Every location has a global, unique ID so that changes in the hierarchy can be made without losing the links to datapoints. However, changing the name of a location element might involve that commands which check name elements will no longer be functional.

You can access the location register using the Explorer bar. A detailed description can be found in the section [Edit Locations](#)⁶⁹⁶. As an option, you can assign a graphic and a text to every location entry. Furthermore, via [Activities/Individual Rights](#)⁵⁵⁷ you can limit the rights to control datapoints for specific locations.

For every location entry you can open a context menu by clicking on it with the right mouse key. Depending on the selected location view mode, double clicking on a location entry results in the display of the associated graphic and/or text.



*The visibility of locations can be defined via rights!
This applies to assigned datapoints and depending events too!*



Locations that contain a comma, semicolon or tab may be incorrectly evaluated during CSV import or with location variables (usage as separator). Commas, semicolons and tabs should therefore be avoided in the definition of location names!



Changes of individual location names might involve that commands which check name elements will no longer be functional!

8.1.1 Explorer

The locations explorer shows the location register with its hierarchy of levels. During normal operation, the icon for the respective location type is displayed in front of the location name. If the form ([Edit Locations](#)⁶⁹⁶) is active, an additional icon that provides information regarding the assignment of graphics and/or texts is shown.

Only those locations are displayed for which the user has the corresponding right (See.Object). Superordinated locations to a visible location will always be displayed together with it, even if there is no right to see them. Deletion of a location is only possible if all its sub elements are visible, i.e. they are not filtered out and the user that is logged in has the right to see all sub elements.

Additionally to moving locations in the location form (editor), the location hierarchy can be directly modified per drag&drop in the locations explorer. The location form must be open to do this. If a location is dragged to another, the dragged location becomes the first child of the destination location.

If you hold down the Shift key while releasing the mouse key, the dragged location is inserted in the same hierarchy level - following the destination location. If a location is dragged to the location **All**, this location is always on the highest hierarchy level.

One click with the left mouse key brings up the display of graphic or text (if defined). Here, the drag&drop function can be used to directly assign a location to a datapoint (only possible while the datapoint editing form is open), or to drag a location entry into the graphic editor. In this way, a graphic that is directly linked to a location is directly copied into the graphic that is open in the editor.

For every location entry, regardless on which level of the hierarchy, you can open a context menu by clicking on it with the right mouse key. The context menu provides the functions described below, provided these are permitted by the respective rights.

▼ Example: Explorer - Locations

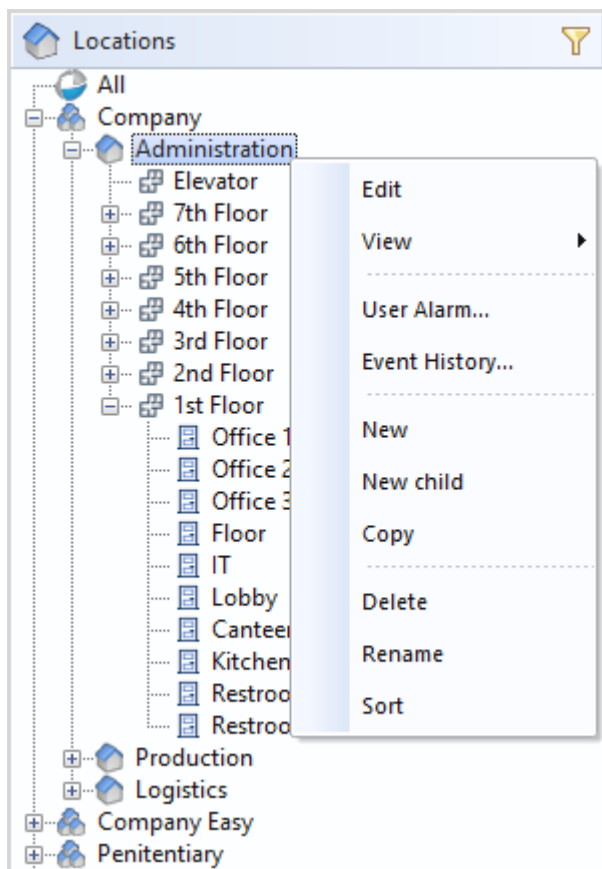


Figure 237: Explorer - Locations

▼ Functions: Explorer - Locations (Title Bar)



(Close explorer window)






This function closes the explorer window, provided that the function has been activated for the user.







(Filter)

This function opens the Dialog for the filter definition in the location explorer (see: [Location Filter](#)¹⁸¹).

▼ Symbols: Explorer - Locations


-  **Site**
-  **Buildings**
-  **Floor**
-  **Room**
-  **Sensor**

The following symbols are are only visible during editing:

-  **Inherited - no own/separate definition**
-  **A graphic is defined**
-  **A text is defined**
-  **Graphic and text are defined**


▼ Functions: Explorer - Locations (Editing)

Here is a description of the editing functions that are available via the context menu of the locations explorer. Some of these functions are only available if the user has the right, **Edit Locations**. Information regarding general explorer functions can be found in the section [Operation](#)^[127] under [explorer](#)^[178].

- **Edit**
This function opens the window **DB:Locations** for editing locations.
- **View** ▶
This function opens a dialog for the selection and display of the graphic/text associated with the location. If no explicit documents (graphic or text) have been defined for the location, the respective definition of a superordinated location is used.
- **User Alarm**
This function opens the dialog [User Alarm](#)^[236].
 *This function is only available if the system expansion module, **User Alarm**, is licensed!*
- **New**
This function adds a new location element at the bottom of the selected level without further confirmation. The name of the new element is **New Location** (with attached, consecutive number, if applicable) and can subsequently be renamed.

- **Event history...**

This function opens the event archive using the filter option defined in the [Event Handling Settings](#)^[475]. A corresponding selection list is displayed.


 *This function is only available if the user has the corresponding rights!*

- **New child (sublocation)**

This function adds a new location element at the bottom of the selected level without further confirmation. The name of the new element is **New Location** (with attached, consecutive number, if applicable) and can subsequently be renamed.

- **Copy**

This function directly (without further confirmation) adds a new element with the same name and an attached consecutive number under the selected entry on the same level. The name can be subsequently changed.

 *Only the location itself, without sublocations, is copied!*

- **Delete**

This function deletes the selected location(s) after respective confirmation.

 **All sublocations are also deleted if they are visible for the user!**

- **Rename**

Using this function you can change the name of the selected location directly in explorer. This function can also be executed via two delayed mouse clicks on the location.


- **Sort**

This function puts the locations that are on the same hierarchy level as the location highlighted/marked in explorer into alphanumerical order. Prior to confirming this action, you can decide if you wish to have the sublevels sorted as well.

8.1.2 Edit Locations

The location editor for adding and editing locations can be retrieved via the menu command **Database | Locations...**. Alternatively, the editor can also be opened by selecting a location in the [explorer](#)^[693] and then selecting an editing function such as **edit**, **new**, etc. in the context menu. Via the assignment of tags, it is possible to additionally categorize locations, which can e.g. be used for visibility, actions, filtering, etc.

The editor includes a toolbar with buttons and an entry field to define the location type, name and link with a graphic and text. In the display section, the linked graphic is shown on the left and the linked text on the right. In the Settings under Contents ([Contents](#)^[450]), in the section **Contents** and the subsection **Target Areas**, the display type can be defined.

 **Rights which manage the visibility of locations will also apply to assigned datapoints and depending events too!**

▼ Window: Locations - Form View

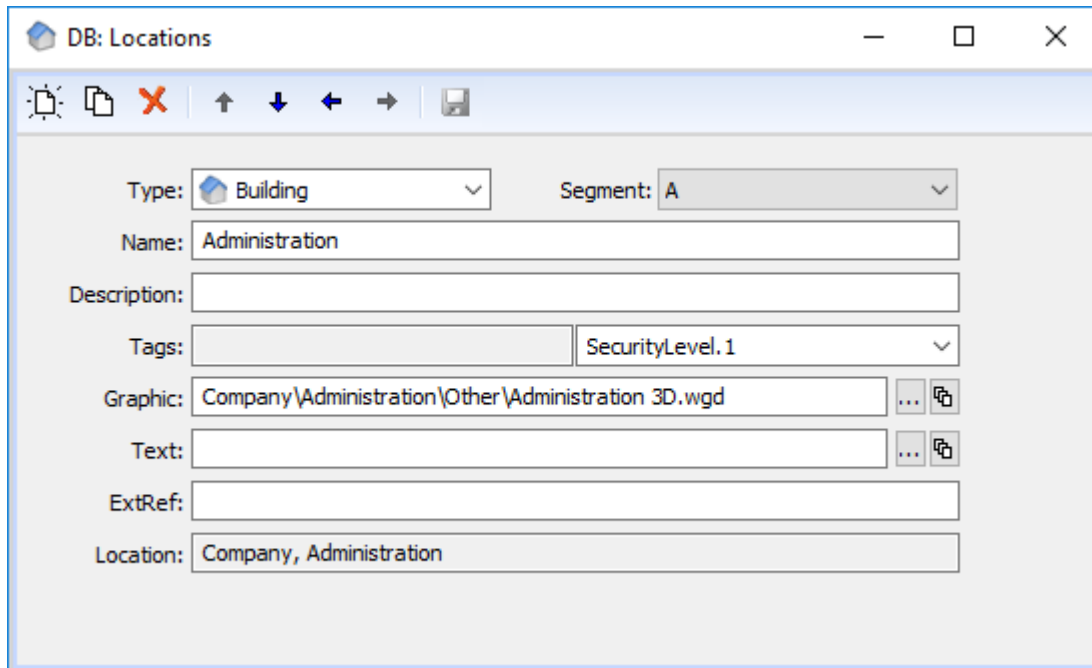


Figure 238: Location Editor

▼ Functions: Toolbar Form View



New

With this function a new record is created.



Copy

This function generates a copy of the selected record.



Delete

With this function the selected record is deleted.



Change hierarchy



Moves the location highlighted in explorer in the same hierarchy level up or down, or changes the hierarchy level to one higher (to the left) or lower (to the right).



Save changes

With this function the current record is saved.

▼ Data section: Locations

Type:

Here the location (hierarchy element) can be assigned to a type (required). You can select from: *Site*, *Building*, *Floor*, *Room*, and *Sensor*.

Blank (default) - select the respective type.

Segment:

Here you can assign a segment definition to a location. In this case the data of the location are only available on the corresponding workstations.

Blank (default) - select a segment, if applicable.



If you assign a segment to a location, this segment will automatically apply to all subordinated locations, all own segment definitions of these locations will be removed!



If a segment is defined in a superordinated location this selection is not active and the inherited segment will be displayed!



*Segments of locations are **not** inherited from assigned datapoints!*

Name:

Here the name of the respective location is defined (required).

Blank (default) - enter the name for the location (hierarchy element).

Description:

Here a description of the location can be defined.

Blank (default) - enter a description, if applicable.

Tags:

Using the tags, it is e.g. possible to define the visibility of locations via rights. However, tags can also be used for filtering in the explorer.

The output field on the left side shows the inherited tags from the locations above. With the combo box on the right side it is possible to select the tags (also several tags) for the location here. The single names of the tags will be displayed separated by commas.

Blank (default) - if required, select the tags for the location.



Tags are inherited to subordinated locations and to assigned datapoints!



To select several tags please press the Ctrl-key during selection. The return key terminates the selection!

Graphic:

Here you can assign a graphic to a location. You can select the name of the graphic with the function that follows or enter it directly. Additionally, you also define the parameters for display (path, filename, and display parameters).

Blank (default) - select a graphic if applicable or enter the name directly and define the parameters for display.

**- (Graphic selection)**

With this function the dialog, **Select Graphic**, is opened.

**- (Parameter)**

This function opens the dialog, **Parameters for Graphic**, in which you can define the parameters for display (please see: [Parameters for Graphic Display](#)⁷⁷⁶).

**Text:**

Here you can assign a text to a location. The name of the text can be selected with the function that follows or entered directly. Additionally, you also define the parameters for display (path, filename, and display parameters).

Blank (default) - select a text if applicable or enter the name directly and define the parameters for display.

**- (Text selection)**

With this function the dialog, **Select Text** is opened.

**- (Parameters)**

This function opens the dialog, **Define Parameters for Text**.

**ExtRef:**

Here you can define an external reference for the location. This reference may be required by some interfaces in coupling with external systems.

Blank (default) - enter the respective external reference, if applicable.

**Location:**

Here the full location including all elements, separated by commas, is displayed.

8.1.3 Links with Locations

If you change the hierarchy level of locations later, the already defined references from other objects can no longer be assigned. In this case, the respective references become invalid. A dialog will appear that informs you of this development and you can then decide if you really wish to move the entry, or if you want to cancel the action.

In WinGuard, locations can be linked with many other elements. Elements that are linked via the internal location ID do not have to be adapted after changes in name or position (hierarchy). However, if an element is linked via the name, then these elements must be modified accordingly after changes to a location name were made.

Links with Location ID:

- Datapoints with assigned locations
- Graphic objects with location link
- Rights/Activities including locations
- Workstations with assigned locations
- Reports/Log queries (event archive) with location filter
- Context definition for graphic test (graphic/text)

Links with location text:

- Datapoint commands (for example, conditions)
- Text commands (for example, conditions)
- Display texts (for example, conditions)
- Event routing (for example, conditions)

- CAD graphics with location link (name as text)



Changes in location names may result in losing functionality in the respective areas!

8.2 Interfaces

Systems of various manufacturers, types, and sizes can be connected to WinGuard through interfaces. These interfaces may be specifically developed in accordance with individual protocol descriptions by the manufacturer, or standard interfaces such as OPC may be used.

Many interfaces today use TCP/IP as a basis for communication, others, usually older interfaces, use serial connections such as RS232 or RS485. Technically, they are differentiated by their capacity of only being able to send data (events), or also being able to receive data and support control functions such as power off, open application, etc. Some systems also provide the possibility of querying or defining complex data such as configuration data.

WinGuard generally supports both of these different types of interfaces and focuses on optimizing the capacities provided by the respective interface. However, depending on device type and manufacturer, these interfaces can vary greatly. To allow the system to communicate with various units, program modules are used that can process specific information on the interfaces and consistently make system functions available internally. We also refer to these program modules as interface modules.

The system cannot automatically recognize which units or installations are connected to the individual workstations. You must therefore install and set up the applicable interface modules. Every interface set up in the system is assigned a distinct numerical ID.

In addition to the interfaces for coupling of external devices, WinGuard has an integrated interface module **Internal**. Further information with regard to the datapoints of this module can be found in the section [Special datapoints](#)⁷⁴⁷.

8.2.1 Table View

Via the menu item **System | Interfaces**, the window, **Interfaces** is opened. It is initially displayed in table view and it is here where you can manage the interface modules. The table lists all interfaces defined in the system with ID, Name, Connection, Module Name, and Version. You can also access various functions through the icons in the window. For further information on this topic please see the section [Form View](#)⁷⁰³.

Window: Interfaces - Table View

Name	Description	Connection	Module	Version	Last change	by	Segment
DemoPanel	DemoPanel	WS1 / - / -	DemoPanel	8.4.1	16.04.18 15:52	Andy	
Virtual	Virtual	WS1 / - / -	Virtual		16.04.18 15:52	Andy	

Figure 239: Interfaces - Table View

Functions: Toolbar Table View



Form View

This function switches the window into form view.



Previous / Next Record

With this function you can select the previous / next record.



Changes are accepted without further confirmation!



New

With this function a new record for an interface is created. The window immediately switches to form view and a new number (ID) is automatically entered for the interface.



Copy

This function generates a copy of the selected record. The window switches directly into form view and a new number (ID) is entered for the interface.



Delete

With this function the selected record can be deleted following respective confirmation.



Setup

With this function you can retrieve the dialog for configuration of the interface selected in the list. The appearance and functions of the dialog depend on the interface module that is used. You can find additional information on this topic in the respective documentation/help section of the interface module.



Monitor

With some interfaces (usually serial interfaces), this function enables you to open a window in which data traffic of the interface can be logged, printed, and saved in a text file in support of startup or troubleshooting.



Monitoring is only possible on the workstation to which the interface is actually connected!



Control Panel

Some interfaces provide an separate control panel for access to specific functions. If the interface provides such a control panel, you can retrieve it via this function.



Projection

Some interfaces provide the option of having objects / datapoints automatically added in WinGuard or checking an existing data supply for consistency and, if necessary, modifying it. This is achieved via a projection dialog that is individually accessed and made available by the respective interface module.



Only if an interface module provides the option of automatic projection can the respective dialog be retrieved using this function.



Restart Module

With this function all interfaces that use the same interface module as the selected interface are shut down, reloaded, and restarted at all workstations.



If multiple interfaces have been assigned the same module, all interfaces that use this module are restarted!



Total Restart

With this function all interfaces at all workstation are shut down, reloaded, and restarted.



Help

With this function the on-line help of the selected interface module can be opened (provided it is available).



Following changes to the interface, its configuration, or changes to the associated datapoints (adding, deleting, changes in address, etc.), the applicable interface modules must be restarted in order for these changes to be activated!

8.2.2 Form View

The form view enables you to add new interfaces to the system or to modify existing interfaces. All basic settings such as the number (ID), the module, or the workstation to which the interface is to be coupled (main connection) are defined here. Additional settings are then made in the configuration dialog.

For video interfaces, you can also select the workstations that shall have direct access to the the video system. Special definitions like those for the toolbar, particular event handling, or for the tooltip template can also be made here.



Please be sure to read the help section of the respective interface you are using prior to setup / startup!

! If you change the interface number or the module, the functionality of the assigned datapoints will be lost!

! Following changes to the interface, its configuration, or changes to the associated datapoints (adding, deleting, changes in address, etc.), the applicable interface modules have to be restarted in order to activate these changes!

Window: Interfaces - Form View

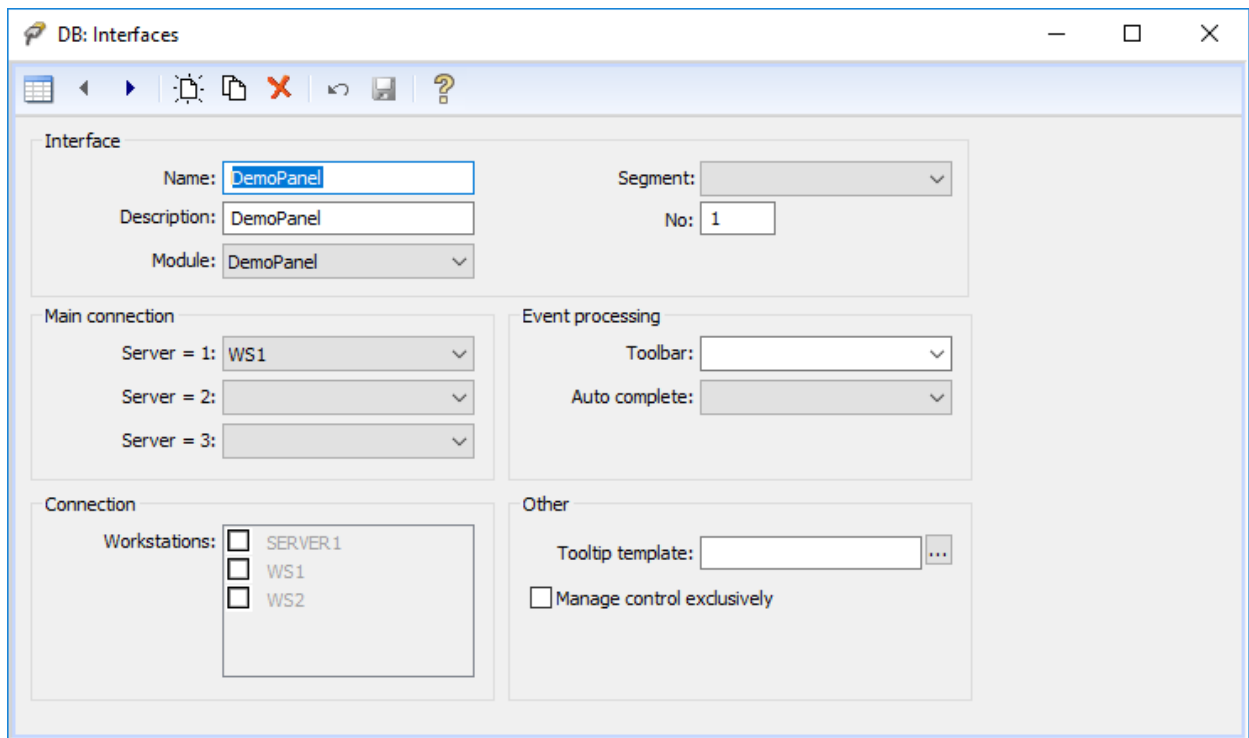


Figure 240: Interfaces - Form View

Functions: Toolbar - Form View



Table View

This function switches the window into table view.



Previous / Next Record

With this function you can select the previous / next record.



Changes are accepted without further confirmation!



New

With this function a new record for an interface is created. The form view is presented and a new number (ID) is automatically entered for the interface.



Copy

This function generates a copy of the selected record. The form view is presented and a new number (ID) is automatically entered for the interface.

**Delete**

With this function the selected record can be deleted following respective confirmation.

**Undo**

With this function the last change(s) can be reversed.

**Save**

With this function the current / selected record is saved.

**Help**

With this function you can open the online help section of the selected interface module (provided it is available).

▼ Data section: Interface

Name:

Here you can define the unique name of the interface.

Blank (default) - enter a distinct/unique name.



If a number is defined as name, the description will be used as name (compatibility with older versions)!

Description:

Here you can define a text to describe the interface.

Blank (default) - enter the desired description if applicable.

**Module:**

Here you select the module that the interface shall use. You can select from all modules that are currently in the program subfolder, **mod**, and that are compatible with your version of the program.

Blank (default) - select an appropriate module.



Please ensure that the correct module is selected here!

**Segment:**

Here you can assign a segment definition to the interface. In this case the data of the Interface are only available on the appropriated workstations.

Blank (default) - select a segment if applicable.

No:

Here you can define the unique number (ID) of the interface. This number is used in various system tasks such as queries, event routing, etc.

Blank (default) - enter a distinct/unique number (1...999).



Later changing of interface numbers should be avoided as these numbers might already be used at other locations (e.g. for rights, queries, archive, etc.) - further adaptations might be required, archive data might be interpreted wrongly!

▼ Data section: Main Connection

Only one of the servers can be the active one. The other servers are running in standby mode.

▼ Server = 1:

Here you select the workstation at which the interface is active when **server 1** is activated (standard operation). Communication with the respective system is then executed via this workstation.

Blank (default) - the interface is not active if server 1 is the active one (standard operation).

... - select the workstation for standard operation.



Please ensure that the correct workstation is selected!

▼ Server = 2:

Here you define the workstation at which the interface is active when **server 2** is activated. Communication with the respective system is then executed via this workstation.

Blank (default) - the interface is not active if server 2 is the active one.

... - select the workstation for Hot-Standby operation, if applicable.



A selection is only required for systems with one or two standby servers!

▼ Server = 3:

Here you define the workstation at which the interface is active when **server 3** is activated. Communication with the respective system is then executed via this workstation.

Blank (default) - the interface is not active if server 3 is the active one.

... - select the workstation for Hot-Standby operation, if applicable.



A selection is only required for systems with one or two standby servers!

▼ Data section: Connection

Workstations:

This setting is only available for digital video interfaces. All workstations defined in the system are listed. Every workstation that shall have direct access to the respective video system has to be activated here. This means that the respective add-on modules for the video interface must also be installed on these workstations.

Inactive (default) - activate the respective workstations, if applicable.

▼ Data section: Event processing

▼ Toolbar:

Here you can assign a separate toolbar for the event list for events of this interface. This toolbar is then displayed in the event list when an event is selected from this interface. You can select from all toolbars defined in the system.

Blank (default) - the toolbar predefined in the system is applied.

... - select the desired toolbar, if applicable, or enter it directly.

**Auto complete:**

Here you can define how events should be completed at this interface. You can select from the following settings:

<Default> - the system setting applies.

Always (even if no display) - at event end, the event is immediately completed (even without prior confirmation).

If accepted - at event end, the event is immediately completed if the event was accepted by the user beforehand.

If deferred - at event end, the event is immediately completed if it was deferred beforehand.

Never - events are not completed automatically.

▼ Data section: Other**Tooltip Template:**

Here you can enter a WinGuard text file that defines the layout for tooltip display. If no file is entered, the system preset will be applied.

Blank (default) - the system preset applies.

... - select the desired text file, if applicable, or enter it directly.

**- (Text selection)**

This function opens the dialog, **Select Text**.

**Manage control exclusively**

If this setting is active, commands will be handled in such a way that control/responsibility from the executing workstation must first be accepted (if it is assigned to another workstation) before the command can be executed.

Active - exclusive control applies.

Inactive (default) - exclusive control does not apply.

8.2.3 Setup

Every interface has its own dialog for setting up communication parameters. Here you can define settings such as serial communication parameters like the COM port that is to be used, the transmission speed (baud rate), time parameters, and many other items. All foundational communication parameters are defined using these dialogs.

In these dialogs, you will also be able to define priorities. These definitions are used as presets for all datapoints of the respective interface. You can enter a priority between **-1** and **999** in each of the entry fields for the priority of the various event types. You can still modify these presets when defining the individual datapoints (please see: [Priorities Tab](#)⁷³¹). But some interfaces also provide the option of defining priorities for certain incidents in the INI file. If definitions have been made in the INI file, the respective settings of the interface or datapoint are then ignored!

Priorities of **-1** and **0** have special meaning. A priority of **-1** indicates that an event of the respective type is not even generated for this datapoint. A priority of **0** indicates that the respective event is never activated/displayed automatically.

The dialogs for setup of the interfaces often vary greatly from one another, so that it is necessary to refer to the respective online help of the applicable interface. We therefore strongly recommend that you carefully read the appropriate online help section prior to setup of an interface. In these sections,

you will find information regarding the requirements, installation, additionally required modules, startup, and operation of the applicable interface.

i Please, before setting up an interface, carefully read the respective online help section!

i If priorities are defined via an INI file, then the respective priority definitions of the interface and respective datapoints are ignored!

▼ Dialog: Setup Interface (Example: Demo Panel)

Figure 241: Setup Interface (Demo Panel)

8.2.4 Operation

Upon start of the system, interfaces are started automatically, whereas upon start, each workstation only starts the interface for which it has been registered as main connection. This means that e.g. upon

start of the server, only the interfaces that are configured for the server will be restarted. Interfaces of other workstations (e.g. of an interface server) are not restarted but will remain active. Thus, if all workstations with interfaces of a system are restarted, all interfaces are automatically restarted too.

If a module restart is performed (see: [Table view](#)⁷⁰¹), only these modules (with the same module directory) are restarted on the corresponding workstations. Upon a total restart, all modules are restarted on the workstations. In case of non-active workstations or if they do not have a connection to the server (offline), there will be no restart of the corresponding modules.

If, during operation of an interface, its configuration is changed, this interface will only become active by restarting it. This means that, after making changes, the user has to restart the interface! The same also applies to certain changes that are made at the datapoints of an interface.



After making any changes at interfaces, their configuration and after changing of datapoints (adding, deleting, changing of addresses etc.), the corresponding interface modules have to be restarted. Only by doing so, the changes will be activated!

ToDo: Changing of datapoints or their linkage parameters



Create, delete datapoints or change linkages (if required, auto projection)



Restart interface.



Test.

ToDo: Change of interface configuration



Change configuration.



Restart interface.



Test.

ToDo: Assign interface to another workstation



Remove workstation assignment from interface.



Restart interface.



Assign new workstation to interface.




Restart interface.



Test.

8.2.5 Monitor

For interfaces that provide this function, the respective function/icon () allows you to open the window, **Monitor Interface <n>**, (where <n> stands for the number of the interface) in the window, [Interfaces](#)⁷⁰¹, for the interface currently selected there. Data traffic can be traced here to support startup or troubleshooting. Printing and saving the data is also possible.

You can find a detailed description on this topic in the section [Interface Monitor](#)^[338].

8.2.6 Control Panels

Some interfaces also provide their own control panels for display or operation. These generally consist of dialogs that support working with the connected system, or a control panel similar to the one of the system itself.

Some interfaces supports the additionally control panel ([Set Value](#)^[234]) to set analog datapoint values, the data category **Value** is required.



You can find information about interface control panels in the online help of the respective interfaces!

8.2.7 Datapoints

The datapoints related to an interface can mostly be set up in WinGuard using the projection function (also named auto projection, see: [Projection](#)^[710]). In addition, most cases require to manually define further datapoints for the interface (see also: [Interface](#)^[751]) which, however, depends on the particular interface. Further information can be found in the respective interface help documentation.

Examples for additional interface datapoints:

- Datapoint for display of system information such as e.g. communication interruptions, faults, etc.
(SST: interface, type: internal, node: blank, address: blank)
- Datapoint for definition of single panels/controllers of the interface in case this is supported (e.g. for ModbusIP, often also for video systems, etc.)
(SST: interface, type: device, node: unique number, address: blank)
- Datapoint for restart of an interface.
(SST: internal, type: interface, node: blank, address: SST#)

Show events for not projected datapoints

If such an option is available an activated for the interface, events are generated in WinGuard even if the corresponding datapoint is not defined at all. A datapoint name for such an event is generated using a format e.g. [**<InterfaceNo>:<DataType>-<Address>**] dependent by the interface, where the variables in <...> are replaced by the corresponding values. Even graphic and text can be attached to such kind of events. Graphic and text filenames are given in the format **SST<InterfaceNo>DEF**. If the interface module has e.g. the interface number 1, the graphic **SST01DEF.WGD** and the text **SST01DEF.WGT** will be displayed, provided that they exist in the particular basic folder.



For some interfaces, the setup of device datapoints is required for execution of automatic projection!



Please read the corresponding online help carefully before installation resp. setup and commissioning of an interface!

8.2.8 Automatic data supply

For different device modules, it is possible to automatically have datapoints added in WinGuard, or to check an existing supply for consistency. This is done via a dialog that is individually provided by the

device module, the **Automatic Projection**. If a device module offers the option of an automatic projection, the respective dialog can be retrieved.

The dialogs for automatic projection often vary greatly from one another, and it is therefore necessary to refer to the respective online help files of the individual interfaces.



Prior to executing an automatic projection of an interface, please read the applicable online help carefully!

▼ Example: Automatic Data Supply (Demo Panel)

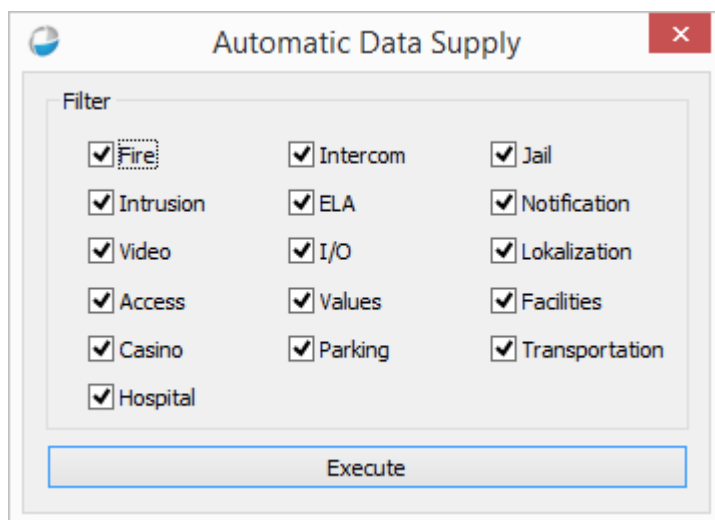


Figure 242: Automatic Data Supply (Demo Panel)

8.2.9 INI Files

INI files allow users to modify the function of an interface to meet the needs of their project environment. For example, available data types, commands and event properties can be defined in the INI files. The supplied standard files contain common presets that can then be modified to meet project specifications.

Interfaces with an INI file load this file primarily from an interface sub folder (interface name) located in the data folder of your project data. If this folder is not available or the file does not exist, it will be loaded from the subfolder **Mod** of the program folder. The Mod folder contains the standard Advancis INI files. These INI files can change with program updates.







Only if the standard definitions are insufficient, the respective INI files have to be copied into the interface data file folder and modified there. It is recommended that you first make a backup of all current INI files in the Mod folder so that any changes made can later be restored. Moreover, any changes to the INI files should be marked and commented accordingly. This can be achieved by copying the applicable line, deactivating it (usually via ";") and adding a comment (who, when, why, etc.). In that way, the modified line can always be compared to the original one.






Creating interface sub folders and inserting INI files has to be realized with the WinGuard explorer file manager!

When making changes, you should proceed in the following way:

ToDo: Modifications to INI Files

-  Open the file explorer (**System | Datenbank | Dateien...**) (see: [Files](#)³⁴¹)
-  Create the interface sub folder in the data folder of your project.
-  Make a copy of the INI file from the **Mod** folder and save it outside your project folder to edit it with an external standard text editor.
-  Copy the original INI file to your interface data folder as a backup.
-  Edit the INI file (outside from WinGuard).
 - Make a copy of the original lines and deactivate it (; ⇨ comment).
 - Modify the lines for your requirements.
 - ...
-  Copy the modified file to the interface sub folder in the data folder of your project.

 *Use the WinGuard file explorer!*
-  Restart interface.
-  Test.

▼ Example: VIRTUAL.INI

```
;Initialization file for Virtual.DLL

;Datatype definitions
;Format: <Datatype-Id>,<Name>,<Command-Id>,<Command-Id>,...
;<Datatype-Id> below 10 have special internal meaning and must not be changed! Other numbers may
;<Name> is the displayed name in WinGuard and may be changed at will.
;<Command-Id> Command as defined in the section [COMMANDS] in this file, with ending E this comma
[DATATYPES]
10,[virtual.datatype.flag],100,101,102
20,[virtual.datatype.securityarea],103,104
1,[virtual.datatype.testgroup],1,2,42,3,4,5,6,7,8,9,10,11,12,13,14,15,16,25,26,17,18,19,20,21,22,
1,#,1,2,42,3,4,5,6,7,8,9,10,11,12,13,14,15,16,25,26,17,18,19,20,21,22,23,24,40,41,60
9,[virtual.datatype.internal]

;Command definitions
;Format: <Command-Id>,<Name>,<GlobalCommand>,<StateSet>,<StateClear>,<StateText>,<DisableOnState>
;<Command-Id> 50 to 99 have special internal meaning and must not be changed! Other numbers from
;<Name> is the displayed name in WinGuard and may be changed at will
;<GlobalCommand>: ON, OFF, REVON, REVOFF, RESET, RESETALL, ARM, DISARM, ACTIVATE, DEACTIVATE
;<StateSet>,<StateClear>,<DisableOnState>,<DisableOnNotState>,<EventBeg>,<EventEnd>: Statebits to
;[ALARM],[PREAL],[WARNING],[ACTIVE],[MSG],[FAULT],[OFF],[REV],[REVALARM],[REVFAULT],[REVMMSG],[ARM
;<StateSet> and <EventBeg> must only contain one bit. In other cases the bits may also be combine
;If <SetState> and <ClearState> contains the same bit, this state is toggled.
;If <EventBeg> and <EventEnd> contains the same bit, this event is immediately ended.
;All parameters are optional.
[COMMANDS]
1,[virtual.cmd.setactive],ACTIVATE,[ACTIVE],,,[ACTIVE],,[ACTIVE],
2,[virtual.cmd.clearactive],DEACTIVATE,,[ACTIVE],,,[ACTIVE],,[ACTIVE]
3,[virtual.cmd.setoff],OFF,[OFF],,,[OFF],,[OFF],
4,[virtual.cmd.clearoff],ON,,[OFF],,,[OFF],,[OFF]
5,[virtual.cmd.setalarm],,[ALARM],,,[ALARM],,[ALARM],
6,[virtual.cmd.clearalarm],,[ALARM],,,[ALARM],,[ALARM],
7,[virtual.cmd.setfault],,[FAULT],,,[FAULT],,[FAULT],
8,[virtual.cmd.clearfault],,,[FAULT],,,[FAULT],,[FAULT]
9,[virtual.cmd.setmessage],,[MSG],,,[MSG],,[MSG],
10,[virtual.cmd.clearmessage],,,[MSG],,,[MSG],,[MSG]
11,[virtual.cmd.setwarning],,[WARNING],,,[WARNING],,[WARNING],
12,[virtual.cmd.clearwarning],,,[WARNING],,,[WARNING],,[WARNING]
13,[virtual.cmd.setprealarm],,[PREALARM],,,[PREALARM],,[PREALARM],
14,[virtual.cmd.clearprealarm],,,[PREALARM],,,[PREALARM],,[PREALARM]
15,[virtual.cmd.setarmed],,[ARMED],,,[ARMED],,[ARMED],
16,[virtual.cmd.cleararmed],,,[ARMED],,,[ARMED],,[ARMED]
17,[virtual.cmd.setrevision],REVN,[REV],,,[REV],,[REV],
18,[virtual.cmd.clearrevision],REVOFF,,[REV],,,[REV],,[REV]
19,[virtual.cmd.setrevalarm],,[REVALARM],,,[REVALARM],,[REVALARM],
20,[virtual.cmd.clearrevalarm],,,[REVALARM],,,[REVALARM],,[REVALARM]
21,[virtual.cmd.setrevmsg],,[REVMMSG],,,[REVMMSG],,[REVMMSG],
```

```

22, [virtual.cmd.clearrevmsg],,, [REVMSG],,, [REVMSG],, [REVMSG]
23, [virtual.cmd.setrevfault],, [REVFAULT],,, [REVFAULT],, [REVFAULT],
24, [virtual.cmd.clearrevfault],,, [REVFAULT],,, [REVFAULT],, [REVFAULT]
25, [virtual.cmd.setdisarmed],DISARM, [DISARMED],,, [DISARMED],, [DISARMED],
26, [virtual.cmd.clearedisarmed],ARM, [DISARMED],,, [DISARMED],, [DISARMED]
40, [virtual.cmd.reset],RESET,, [ALL],,,,, [ALL]
41, [virtual.cmd.unknown],, [UNKNOWN], [ALL],, [ALL], [ALL],, [ALL]
42, [virtual.cmd.toggleactive],, [ACTIVE], [ACTIVE]
50, [virtual.cmd.lockon],LOCK, [LOCK],,, [LOCK],
51, [virtual.cmd.lockoff],UNLOCK,, [LOCK],,, [LOCK]
60, [virtual.cmd.removependingcommands],,,,, [ALL], [ALL]
61, [virtual.cmd.removependingcommandswithsensors],,,,, [ALL], [ALL]
100, [virtual.cmd.active],ACTIVATE, [ACTIVE],,, [ACTIVE]
101, [virtual.cmd.inactive],DEACTIVATE,, [ACTIVE],,, [ACTIVE]
102, [virtual.cmd.toggle],, [ACTIVE], [ACTIVE],,
103, [virtual.cmd.armed],ARM, [ARMED], [DISARMED],, [ARMED]
104, [virtual.cmd.disarmed],DISARM, [DISARMED], [ARMED],, [DISARMED]

```



Following changes to INI files in systems that are running, these files must be updated system wide (Function: [Add Files](#)³⁴¹ and/or Restart Server)!
Changes do not take effect until the interface has been restarted!



Changes to INI files should only be executed by qualified personnel!



An INI file that is not configured correctly can make an interface unusable!!!

8.2.10 LNG File

Using LNG files, users are able to adapt the language of the interfaces to the conditions of their project environment. LNG files contain the language elements for events, dialogs, etc. Through the language selection at the workstation to which the interface is coupled, the respective language file is also defined. Changes to the language of the workstation do not take effect on the language of the interface until the interface is restarted. If no applicable language file is available for the selected language, English is used by default.

Interfaces with a LNG file load this file primarily from the file folder of projection. If no applicable LNG file is available there, then it is loaded from the subfolder **Mod** of the program folder. The standard Advancis LNG files are located in the Mod folder. These LNG files may change with updates.

When these standard definitions are insufficient, the respective LNG files must be copied into the file folder and modified there, if applicable. It is recommended that you make a backup of the current LNG files in the Mod folder prior to this action so that any changes made can be retraced.

With the help of the program, **Localizer**, new language files can be created or existing ones modified. They can then be applied to the project.

Changes to LNG files should be made in the following manner:

ToDo: Changing LNG files



Copy the LNG file from the **Mod** folder into the **Files** folder.



Start Localizer and select the file.



Expand or change entries accordingly.



In multi-client systems, the LNG file must be distributed accordingly (for example, [Add Files](#)³⁴¹).



Restart interface.



Test.

**An incorrectly-defined LNG file can render an interface useless!!!**

8.2.11 Multi Usage

Many projects require that individual interface modules have to be used multiple times. In general, this is possible (with only a few exceptions) without any problems. However, it should be considered that usually all these interfaces use the same interface modules and also the same INI file. The function **Module Restart** by WinGuard restarts all instances of the respective interface module simultaneously. In cases where this function is undesired or if different INI files are required, you can add copies of the applicable interface folders with varying names.

For this purpose it is highly recommended that you write a batch file that executes all copy commands. In expanded systems, this file can then add several variations of several different modules. This batch file should be kept up to date. Moreover, it should be extended whenever you wish to add newly copied module instances to the program directory. This batch file can also be tested for proper function on a (temporary) copy of the program folder and this file can also be used with every update.

If you like to use different INI files with the interfaces, create a separat folder with the same name (like in mod folder) in the Data folder of your project folder and save the modified INI file there.

▼ Example: Duplicate module

If you need some instances of the interface (IF_Name) that can be started independently, you can add copies of this interface folder to the program sub folder **mod**. The copies can be named, for example, **IF-Name_01** to **IF-Name_nn**.

Example: Batch file

```
REM Batch file for copying interface modules ...
REM Project: ...
REM Created by: ...
REM Date:...
REM ...
REM Start 1. Copy - Module: SMS
PAUSE
CD mod
COPY SMS SMS_01
...
COPY SMS SMS_nn
PAUSE
REM
REM *** Copying ended ***
PAUSE
```



*For interfaces that use **Remote EXE Modules** you have to modify the communications port in the interface settings accordingly!*

8.2.12 Help

Using this function the online help for the selected interface module can be retrieved. Prior to setup and startup of an interface, it is recommended that you carefully read the applicable online help. There you will find information regarding requirements, installation, additionally required modules, startup, settings, and operation of the respective interface.



Please carefully read the respective online help prior to installation and/or setup and startup of an interface!

8.3 Datapoints

All information from linked devices or systems is received by WinGuard via interface modules. Information from sensors, detectors, cameras, doors, etc. are projected and administered via so-called datapoints.

In addition to general properties such as name, description, etc., every datapoint must be assigned to a datapoint category (for example, fire, intrusion, camera, door, control, value, etc.). The datapoint category and assigned interface determine certain pre-defined and company-specific properties and functions for the datapoint. These properties serve to link the datapoint to the various sensors and also serve to define the information for display and actions in the system.

When defining a datapoint, you also determine which graphic and text documents will be displayed upon receipt of an event; which actions will be carried out in response to an event; and what priority the event has for handling. Every datapoint can have up to five event graphics and one text describing defined measures assigned to it. Datapoints and sensors can be assigned to locations. If so, you can easily find datapoints later using the location. Additionally the location can be directly displayed in graphics and texts. You can find additional information in the respective sections [Locations](#)^[693], [Graphic](#)^[756] and [Text](#)^[887].



*The visibility of datapoints can be defined by rights!
This applies to depending events too!*



The visibility of datapoints depends on the visibility of the assigned location!

To simplify the projection process, many interfaces provide an automatic projection function for datapoints. This function enables you to directly insert data from the respective installation configurations for the automatic generation of datapoints in WinGuard.

Datapoints are the central and most important elements of the system. It is therefore very important that you proceed carefully in establishing and processing datapoints. If not configured correctly, the information of the installations may not be interpreted or displayed properly.

To administer and maintain datapoints, WinGuard provides four basic elements that allow you to execute specific tasks such as add, process, copy, delete, control, etc.

- **Explorer**
 - Display of current states
 - Execution of control commands
 - Add, copy, rename, and delete
 - Organize (filter, defer, etc.)
- **Table view**
 - Datapoint list (with name, address, interface, location, etc.)
 - Add, copy, and delete
 - Autoadd unknown datapoints
- **Form view**
 - Add, copy, modify, and delete
 - Interface link
 - Assignment of graphics and text
 - Definition of actions
 - Datapoint-specific definitions
- **Main control panel**

- Display/print of current states
- Execution of control commands
- filter

8.3.1 Explorer

In the datapoint explorer, datapoints are displayed in a hierarchic structure in which datapoints are assigned to respective datapoint categories in the highest hierarchy level. Datapoint categories are only displayed if datapoints of that particular category have been defined and are assigned to it. If not, then these elements are faded out.

Only those locations are displayed for which the user has the corresponding right (See.Object). Superordinated locations to a visible location will always be displayed together with it, even if there is no right to see them.

By moving the mouse across a datapoint in explorer, a small information window (tooltip) opens near the position of the mouse. This tooltip shows the name, sensor type, location, and description of the datapoint or sensor. If you are using your own tooltip definitions, these are displayed accordingly.

Datapoints can be arranged in explorer in almost any desired hierarchy. This is done via drag&drop by clicking on a datapoint (with the left mouse key), holding down the mouse key, moving it to another entry, and releasing it there. Whether or not it is possible to move an entry to a certain spot is indicated by the form of the mouse pointer (for example, the prohibited symbol - red circle with slash).

Every datapoint can be directly subordinated to the datapoint category it belongs – this applies to all datapoints in the second level of the hierarchy – or it can be subordinated to another datapoint, which can be of a different datapoint category -- this applies to datapoints in the third or lower hierarchy levels. This makes it possible, for example, to subordinate a datapoint of the category intrusion to a datapoint of the category lock. However, this datapoint is then no longer displayed under intrusion itself.

If sensors are assigned to a datapoint, these are always displayed below the datapoint to which they are assigned. Datapoints can be edited using the [form view](#)⁷²¹. After saving, any changes made to the datapoint category or name take immediate effect in the explorer window.

Via the control symbol located in the far right of the title bar, a context menu can be opened for the currently selected datapoint or sensor that contains all possible commands for that datapoint or sensors and enables their execution. Of course, this only applies to controllable elements and users who have the appropriate rights.

The context menu that is opened by clicking on an entry with the right mouse key has an expanded functionality: with object or sensor entries, you can also directly open a test view for alarm, fault, or event. Moreover, the datapoint name can be changed directly in the explorer window.

Using the explorer, you can also assign locations to datapoints directly. You can do this by selecting one or more datapoints in explorer and then dragging it or them to the respective location in the Location explorer while holding down the left mouse key. That location is then directly assigned to all selected datapoints. The same can be done with sensors.



A pre-selection of the visible datapoints is possible using tags via rights!



The assignment of datapoints to locations is accepted without further confirmation - provided the appropriate rights are in place!

▼ Example: Explorer - Datapoints

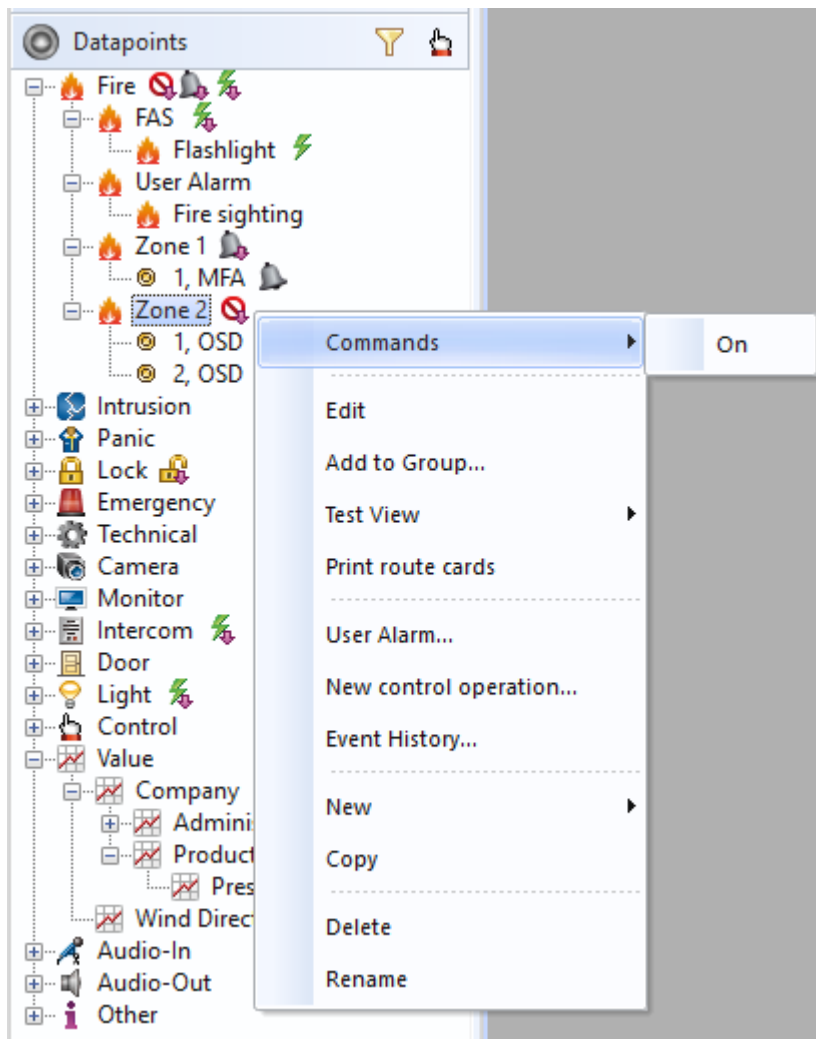


Figure 243: Explorer -Datapoints

▼ Functions: Explorer - Datapoints (titlebar)



(Close explorer)

Provided this function is activated for the user, the datapoint explorer can be closed with this button.



(Filter)

With this button you can open the dialog for the filter setting selections that determine which datapoints are displayed in explorer (see: [Datapoint Filter](#)¹⁸⁵).



(Control)

With this function a context menu is displayed with all available commands for the selected datapoint(s).

▼ Functions: Explorer - Datapoints (Context Menu)

Below is a description of the context menu functions. Functions that are available depend on the system license, user rights, and the selected datapoints.

- **Commands** ▶

A context menu with available commands for the selected datapoint(s) or sensor(s) is displayed.



This function is only available if the user has the appropriate rights and has selected a controllable datapoint!

- **View**

This function opens the window **DB:Datapoints** in form view, but no changes can be made here.



This function is only available if the user does not have the appropriate right for editing datapoints!

- **Edit**

This function opens the window **DB:Datapoints** in form view, meaning that datapoints and/or sensors can be edited.



This function is only available if the user has the corresponding rights!

- **Add to Group...**

With this function you can open a dialog for the selection of a datapoint group to which the selected datapoint(s) may be added.



This function is only available if the user has the corresponding rights!

- **Test View** ▶

This function shows a list of states (alarm, fault, etc.) for which a respective test view of the datapoint in the selected state can be activated.

- **Route card print**

This functions opens the dialog for the route card print. Here you can enter respective definitions for the execution of the route card print for the selected datapoint.



*This function is only available for datapoints of the category **Fire!***

- **User Alarm...**

This function opens the dialog **User Alarm** for the selected datapoint.



The availability of the function depends on the license!

- **New control operation...**

This function opens the window **Control operations** and adds the selected datapoints to the list of control operations.




*This function is only available if the user has the required rights and if the system has been licensed including the system extension module **Scheduler!***

- **Active control operations**

Upon positioning of the mouse over the function, the active control operations are displayed on the right side. Upon execution, the window containing the list of active control operations will be opened.


- **Event history...**

This function opens the event archive using the filter option defined in the [Event Handling Settings](#)⁴⁷⁵. A corresponding selection list is displayed.

 *This function is only available if the user has the corresponding rights!*


- **New** ▶

With this function you can add a new datapoint or sensor for the selected datapoint. A corresponding selection list is displayed.

 *This function is only available if the user has the corresponding rights!*


- **Copy**


With this function you can copy an existing datapoint. Name and address of the new datapoint are automatically adjusted (incremented).

 *This function is only available if the user has the required rights and if the system has been licensed including the system extension module **Scheduler!***

- **Delete**


This function deletes the selected datapoint(s) following respective confirmation.

 **All subordinated datapoints/detectors will be deleted too, provided that all its subelements are visible (not filtered out) and that the user may see all subelements - otherwise deletion is not possible!**

 *This function is only available if the user has the corresponding rights!*

- **Rename**

With this function the name of the selected datapoint can be changed directly in the explorer. This function can also be executed via two delayed mouse clicks on the datapoint.

 *This function is only available if the user has the corresponding rights!*

8.3.2 Table View

After activating the command **Database|Datapoints** the window **Datapoints** is opened which shows the datapoints listed in a table.

The window contains a complete list of all datapoints, however, without their sensors. The table columns contain specific information about the datapoints such as datapoint category (symbol), name, interface, data type, location, etc.

By clicking on an element in the header bar, the table is sorted by the content of the respective column. By double-clicking on a datapoint (table row) you can switch directly into the form view of that datapoint.

You cannot make any changes to the datapoint settings in the table. In order to edit datapoints, [please switch to the form view](#) ⁷²¹.

Window: Datapoints - Table View

Name	IF	Datatype	Node	Address 1	Address 2	Location	Tags	Description	Last change	by	Segment
Device not acti...	0		0	0				in demo mode	19.09.16 16:38	Andy	
FAS	1	Fire: Panel	0	0		Company, Administration			19.09.16 16:38	Andy	
Fire sighting	0	User Alarm	0	3				manual fire sighting	19.09.16 16:38	Andy	
Flashlight	1	Fire: Control	0	1		Company, Administration, 1st Fl...			20.04.17 15:15	Andy	
User Alarm	0		0	0					19.09.16 16:38	Andy	
Zone 1	1	Fire: Zone	0	1		Company, Administration, 1st Fl...		Administration main entrance	18.04.18 12:15	Andy	
Zone 2	1	Fire: Zone	0	2		Company, Logistics, 1st Floor, E...		Warning: CO2 extinguishing sy...	16.04.18 15:28	Andy	B
Device not acti...	0		0	0				in demo mode	19.09.16 16:38	Andy	
Door 1	1	Intrusion: Sensor	0	1		Company, Administration, 1st Fl...			15.09.17 12:53	Andy	
Door 2	1	Intrusion: Sensor	0	5		Company, Administration, 1st Fl...			19.09.16 16:38	Andy	
Door 3	1	Intrusion: Sensor	0	6		Company, Administration, 1st Fl...			19.09.16 16:38	Andy	
Door 4	1	Intrusion: Sensor	0	8		Company, Administration, 1st Fl...			19.09.16 16:38	Andy	
Door 5	1	Intrusion: Sensor	0	9		Company, Administration, 1st Fl...			19.09.16 16:38	Andy	
Door 6	1	Intrusion: Sensor	0	10		Company, Administration, 1st Fl...			19.09.16 16:38	Andy	
F 4	1	Intrusion: Sensor	0	12		Company, Administration, 1st Fl...			19.09.16 16:38	Andy	
F 5	1	Intrusion: Sensor	0	13		Company, Administration, 1st Fl...			19.09.16 16:38	Andy	
IDS	1	Intrusion: Panel	0	0		Company			22.09.17 10:12	Andy	
Motion	1	Intrusion: Sensor	0	3		Company, Administration, 1st Fl...			26.09.16 20:12	Andy	
W 1	1	Intrusion: Sensor	0	2		Company, Administration, 1st Fl...			15.09.17 12:55	Andy	
W 2	1	Intrusion: Sensor	0	7		Company, Administration, 1st Fl...			10.03.17 16:22	Andy	
W 3	1	Intrusion: Sensor	0	11		Company, Administration, 1st Fl...			10.03.17 16:22	Andy	
Assault	1	Intrusion: Sensor	0	4		Company, Administration, 1st Fl...			25.09.17 16:59	Andy	
Company	0		0	0					19.09.16 16:38	Andy	
Device not acti...	0		0	0				in demo mode	19.09.16 16:38	Andy	
Handset	1	MSG: Handset	0	1		Penitentiary, Block B, 3rd Floor, ...		Peter Schmidt	25.09.17 16:59	Andy	

Figure 244: Datapoints - Table View

Functions: Toolbar Table View

The toolbar of the window contains the following elements:



Form View

This function switches the window to form view.



Previous / Next Record

With these functions the previous or next record is selected.

i Changes are accepted without further confirmation!



New

With this function a new record is created.



Copy

This function generates a copy of the selected record.



Delete

With this function the selected record is deleted.



Auto-add unknown datapoints

With this function the automatic addition of datapoints can be activated or deactivated, provided this is supported by the respective interfaces ([Autoadd Datapoints](#) ⁷⁴⁶).

**Document View**

Using this function, the document view of the datapoint with the set incident information is displayed.

**Define incident for document view**

This function opens a dialog in which incident information (context) for the document view (test view) can be defined.

**Filter by datapoint category**

Via this selection a filter for the display of a certain datapoint category can be defined.

Blank (default) - no filter is active.

... - select the desired datapoint category if applicable.

8.3.3 Form View

Following the command "**Display** or **Edit**" from the context menu of the datapoint explorer or via the function "**Form View**" in the table view, the window **Datapoints** in form view of the datapoints is displayed.

The window and the associated tabs contain all elements of the datapoint and/or sensor definition. In the individual editing sections, you can enter or select the respective information for definition.

▼ Window: Datapoints - Form View

The screenshot shows the 'DB: Datapoints' window in 'Form View'. The window title is 'DB: Datapoints'. The toolbar contains icons for Table View, Previous/Next record, New, Copy, Delete, Save, Print, and Help. The main form is divided into sections: 'Datapoint' with fields for Category (Fire), Segment, Name (Zone 1), Description (Administration main entrance), and Tags (None); 'Sensor' with Number (1), Sensor type (MFA), and buttons for New, Change No., and Delete; 'Link' with Interface (DemoPanel), Datatype (Fire: Zone), Node, Address (1), and Address 2; and a 'Documents' section with tabs for Coordinates, Priorities, Commands, and Assignments. The Documents section contains sub-sections for Location (Company, Administration, 1st Flo), Text (Templates\Text_FAS.wgt), Graphics (Demo\GIS\Tampa City.wgd, Event Frames\Fire 1.wgd /S /FDP), and Textmacros.

Figure 245: Form View - Datapoints

▼ Functions: Toolbar Form View

The toolbar of the Form View contains the following elements



Table View

This function switches the window to table view.



Previous / Next record

With this function you can select the previous or next record.



Changes are accepted without further confirmation!



New

With this function you can create a new record.



Copy

This function generates a copy of the selected record.



Delete

With this function you delete the selected record.

**Undo**

Reverts the current change (goes back to what was saved last).

**Save Changes**

Via this function, you can activate the autoadd function for datapoints, provided that this function is supported by the interface (please see: [Autoadd Datapoints](#)⁷⁴⁶).

**Document View**

With this function the document view of the datapoint is displayed including all defined incident information.

**Define incident for document view**

This functions opens the dialog that allows you to determine the incident information (context) for the document view (test view).



*When selecting a different datapoint via the explorer or by activating the functions **Forward** or **Back**, the last changes made to the current datapoint are accepted without further confirmation!*

8.3.3.1 Data Section Datapoint

In the upper section of the form view, the general definitions of the datapoint are entered. After selecting the **category**, a **name** (max 50 characters) has to be defined for the datapoint. The combination of type and name must be unique, meaning that you cannot define two datapoints with the same category as well as with the same name. It is recommended that you provide a clear name for the datapoint. Via the assignment of tags, it is possible to additionally categorize locations, which can e.g. be used for visibility, actions, filtering, etc. Under description, you can enter additional information (free text) about the datapoint. These definitions can also apply to all sensors of the datapoint.



These definitions also apply to all detectors of the datapoint!



Rights which manage the visibility of locations will also apply to assigned datapoints and depending events too!

Window excerpt: Data section - Datapoints

The screenshot shows a 'Datapoint' configuration window with the following fields:

- Category:** Fire (dropdown menu)
- Segment:** (empty dropdown menu)
- Name:** Zone 1 (text input field)
- Description:** Administration main entrance (text input field)
- Tags:** None (dropdown menu)

Figure 246: Data section - Datapoints

▼ Data section: Datapoint

Category:

Via this selection field, you define the category of the datapoint.

You can select from:

Datapoint Group, Fire, Intrusion, Assault, Lock, Emergency, Sabotage, Technical, Camera, Monitor, Intercom, Door, Light, Control, Value, Audio-In, Audio-Out, and **Other.**

Fire (default) - select the appropriate category.



If you change a datapoint category, previous category-specific information in respective tabs might be deleted!

Segment:

Here you can assign a segment definition to a datapoint. In this case the datapoint is only available on the corresponding workstations.

Blank (default) - select a segment if applicable.



If you assign a segment to a datapoint, this segment will automatically apply to all subordinated datapoints (explorer hierarchy) and all own segment definitions of these datapoints will be removed!



If a segment is defined in a superordinated datapoint this selection will not be active and the inherited segment will be displayed!



*Segments of locations are **not** inherited from assigned datapoints!*

Name:

Here a name for the datapoint (object) or sensor group is defined. The datapoint is subsequently identified in the system by this name. A name can only be used once within a datapoint category (the combination of category and name must be unique).

You can use the same name for a datapoint of another category. However, such a "double application" of names is not recommended!

Blank (default) - enter a name.

Tags:

Using the tags, it is e.g. possible to define the visibility of locations via rights. However, tags can also be used for filtering in the explorer.

The output field on the left side shows the inherited tags from the datapoints above. With the combo box on the right side it is possible to select the tags (also several tags) for the datapoint. The single names of the tags will be displayed separated by commas.

Blank (default) - if required, select the tags for the datapoints.



Tags from locations are inherited to assigned datapoints!

Tags from datapoints are inherited to subordinated datapoints (explorer hierarchy)!



To select several tags please press the Ctrl-key during selection. The return key terminates the selection!

Description:

Here you can enter an additional text about the datapoint. In this way you can provide more information in addition to the name of the object that will be available in various places.

Blank (default) -enter a text, if applicable.

8.3.3.2 Data Section Sensor

In the next section of the form view, individual **sensors** or the respective sensor type can be defined for the datapoint. Every sensor is assigned a distinct/unique sensor number. If no sensor number is entered (blank field) the entire datapoint is selected. Here the sensor type for the datapoint itself is also defined.

▼ Window excerpt: Data section: Sensor

Figure 247: Data section - Sensor

▼ Data section: Sensor

Number:

With this selection, each individual sensor of a sensor group can be defined using an assigned, distinct number. The entire object can be selected if the field is left blank.

Blank (default) - select the number of the sensor if applicable.

Sensor type:

Here you can select a [sensor type](#)⁵⁹⁷ for the currently selected sensor or the entire object. All sensor types defined for the datapoint category are available for selection. The corresponding sensor type symbol is displayed to the right of the selection field.

Blank (default) - select the sensor type or enter it directly.

(Symbol)

Here the symbol that corresponds to the selected sensor type is displayed. If this sensor type is not defined, the field remains empty.

Button

New

If you click on this button, a new sensor with a distinct number is added. The number of the new sensor is the lowest number that has not already been assigned, and is higher than the number in the respective selection field. The sensor type is taken from the respective selection field.

Button

Change No.

By clicking this button the number of the current sensor is changed to the number indicated in the entry field provided that uniqueness is maintained.

(Number)

If a number is entered in this field, it is used for the new sensor created by clicking on the button **New**. This number is also applied if you click on the **Change No.** button.

Blank (default) - enter the sensor number if applicable.

Delete

The currently selected sensor is deleted with this function.

8.3.3.3 Data Section Link

In the link section, information about the linking of the datapoint with the interface and the connected subsystem is defined. Here is where you provide WinGuard with the link to the respective installations for the receipt and sending of data. After selecting an **interface** and a data type, you can define the respective parameters in the entry fields: **Node**, **Address** and **Address2**. If the desired interface does not appear in the selection list, you must first add it to the system.

Such a link must be distinctly/uniquely assigned to a datapoint. If you attempt to assign a link to a datapoint that has already been assigned to another datapoint, the system will notify you that such a link is not possible when you try to save your entry.

▼ Window excerpt: Data section - Link

Figure 248: Data section - Link

▼ Data section: Link

Interface:

Here you define the interface via which the object should be linked to the respective system. You can select from all defined interfaces available in WinGuard. Should an interface not be available in the selection list, you must first add it to the system (please see: [System Interfaces](#) ⁷⁰¹).

Blank (default) - select the interface (required).

Data type:

Here you must define the data type. The selection list shows all available data types supported by the selected interface. You can find specific information in the help section of the interface module you are using.

Blank (default) - select the data type (required).

Node:

Here you can enter additional information regarding the link. This information depends on the interface module you are using.

Blank (default) - enter the node number if applicable.



The node field is either blank or contains a number > 0!

Address:

Here you can also enter additional information regarding the link. This information depends on the interface module you are using.

Blank (default) - enter an address if applicable.



*The address field is either blank or contains a number > 0!
For some interfaces, several entry fields may be present.*

Address 2:

Here you can enter additional information regarding the link. This information depends on the interface module you are using.

Blank (default) - enter Address 2 if applicable.



The Address 2 field either remains blank or contains any character string!

**(Help)**

Using this function, you can access the help section of the respective interface.

8.3.4 Datapoint Tabs - General

In this section, you can find the description of tabs that are available for all datapoints. Basic definitions such as the assignment of location, graphics, text, priorities, commands, etc. are covered.

8.3.4.1 Documents Tab

The definitions you make in the **Documents** Tab specify which information should be displayed when an event is received. In particular, you can define the graphics and texts that were previously added in the formats used by WinGuard and are to be used for event display. If no graphics or texts are defined (default), a blank pane is displayed.

If a new sensor is added, all the definitions in the **Documents** Tab are pre-filled with the respective entries of the sensor group. You can still make changes in every field that relates to the sensor group itself or the individual sensor.



If the content of one of the fields relating to the sensor group is changed, the contents of all sensors that previously contained the same content as the group are also changed respectively. Sensors in a group that had a different content than those of the group prior to the change continue to maintain the original content!

In the datapoint form on the Documents Tab, fields are only indicated in color to show the which settings the sensor has adopted from the sensor group. The color scheme has the following meanings:

- **White** Own definition for this entry.
- **Red** This definition was changed for at least one of the sensors.

- **Green** This definition was adopted from the group.

This way, it is possible to see at a glance which information may have been overridden for datapoint sensors.

▼ **Window excerpt: Documents Tab**

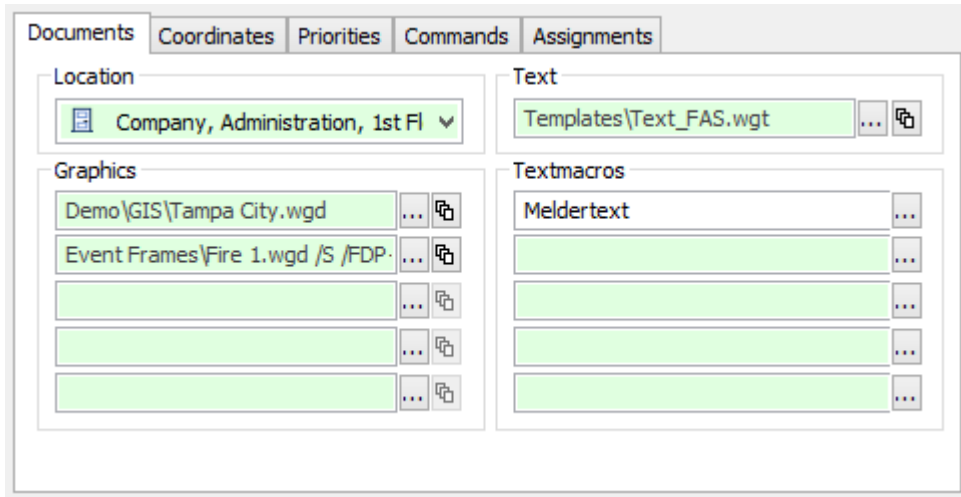


Figure 249: Documents Tab

▼ **Data section: Location**

In the **location** section, a location from the location register can be assigned to a datapoint or sensor.

▼ - **(Location)**

Here a location can be assigned to a datapoint. You cannot enter the location directly. However, you can also assign the location using the location explorer and drag&drop.

You can select from: *all defined locations*.

Blank (default) - select the location if applicable (optional).

▼ **Data section: Text**

In the **text** section, a text file, for instance in (**.WGT**) can be assigned to a datapoint or sensor. This text is then displayed when an event occurs. Entering a text is optional. An event does not have to be linked with a text.

Entering the file extension (**.WGT**) is optional. If you do not enter a complete path, the **Texts** folder is searched. **HTML** or **TXT** files can also be used here.

☐ - **(Text)**

Here you can assign a text module to the datapoint.

You can select from: *all defined texts*

Blank (default) - no text is displayed for events.

... - select a text if applicable or enter the name directly.

☐ - **(Text selection)**

This function opens the dialog **Select Text**.

**- (Parameter)**

This function opens the dialog **Define Text Parameters**.

▼ Data section: Graphics

In the entry fields of the Graphics section, up to five **graphics** can be indicated that should be displayed when an event from a datapoint or sensor is received. The first graphic is displayed directly on a standard basis. Entering graphics is optional. An event does not necessarily have to be linked with a graphic.

You can define the file name of a graphics file, generally in the format **(.WGD)** in the entry fields. Other formats, such as **(.DWG)** can also be assigned here. Entering the file extension **(.WGD)** is optional. If you do not enter a path, the subfolder graphics will be searched for the file. Following the graphics file, you also have the option of entering parameters to explicitly define the visibility of the layers and other display parameters of the respective graphic for the screen or printing.

**- (Graphic 1 .. 5)**

Here you can assign up to five graphics to a datapoint or individual sensor.

You can select from: **all defined graphics**.

Blank (default) - no graphics are displayed for events.

... - select the graphic if applicable or enter its name directly.

**- (Graphic selection)**

This function opens the dialog **Select Graphic**.

**- (Parameter)**

This function opens the dialog **Graphic Parameters** in which you can define parameters for the display of the graphic (please see: [Parameters for graphic display](#)⁷⁷⁶).

▼ Data section: Text macros

You can define up to five text macros in the section **Text macros** that can be used in event display. Text macros either refer to the text itself that is entered into the entry field or to a text file in the format **(.WGT)** or **(.TXT)**. In text files that are used for event display, you can insert variables of the type **Text macro 1 ... Text macro 5**. These variables are then replaced with the respective text macro in event display.

**- (Text macro 1.. 5)**

Here you can assign up to five text macros to a datapoint or individual sensor.

You can select from: **all defined texts**.

Blank (default) - the text macro is undefined.

... - select a text if applicable or enter a text directly.

**- (Text selection)**

This function opens the dialog **Select text**.

8.3.4.2 Coordinates Tab

Every datapoint and every sensor can be optionally indicated with geo-coordinates (latitude, longitude, altitude). Currently, the altitude entry is not functional. The geo-coordinates can be entered manually

on the Coordinates index card in the datapoint form. Coordinates are entered in decimal degrees (please see latitude).

It is also possible to establish the geo-coordinates of a datapoint automatically by dragging & dropping the datapoint into the GIS layer of a graphic with geo-coordinates or moving it around in one. In this case the datapoint is not actually placed into the graphic, only its coordinates are adapted which means that it will then be displayed in the respective position in the GIS layer of the graphic.

The datapoint symbols are displayed in every GIS graphic in which the GIS layer and geo-coordinates have been activated. In the GIS Viewer mode the GIS layer is activated on a standard basis. Datapoints that have geo-coordinates move automatically with the map.

▼ Window excerpt: Coordinates Tab

The screenshot shows a window with five tabs: Documents, Coordinates (selected), Priorities, Commands, and Assignments. Below the tabs, there are three input fields:

- Latitude: 49.996645
- Longitude: 8.65399182
- Altitude: (empty)

Figure 250: Coordinates Tab

▼ Data section: Coordinates

Under this tab the geographic coordinates of the datapoint are defined. Entries here are optional and at the present time, altitude is not used.

Latitude:

Here you can define the latitude of the datapoint/sensor position.

Blank (default) - undefined.

... -enter the latitude of the datapoint / sensor if applicable.

Longitude:

Here the longitude of the datapoint / sensor can be defined.

Blank (default) - undefined.

... - enter the longitude of the datapoint / sensor if applicable.

Altitude:

Here the altitude of the datapoint / sensor can be defined.

Blank (default) - undefined.

... - enter the altitude of the datapoint / sensor if applicable.

8.3.4.3 Priorities Tab

Via the **Priorities** tab a priority can be determined for each of the possible event types for the datapoint (not dependent on sensor).

With the priority setting you determine which event will be displayed first if several event messages are received at the same time. The higher the indicated value, the higher the priority of the event. If an event with a higher priority than the one currently displayed is received, the higher-priority event is immediately shown.

You can enter a priority between **-1** and **999** in each of the entry fields for the various event types. This gives you the option of overwriting the preset priorities that were determined when the interface was set up. If the entry field remains **blank (default)** the presets apply.

Priorities **-1** and **0** have special meanings. Priority **-1** means that an event of the respective type is not even generated for this datapoint. A priority of **0** indicates that the respective event is never automatically displayed.



In some INI files the priority for individual events can be defined. In these cases, this definition always overwrites the one of the respective interface or of the datapoints!

▼ Window excerpt: Priorities Tab

Alarm:	<input type="text" value="300"/>	Fault:	<input type="text" value="20"/>
Prealarm:	<input type="text" value="200"/>	Off:	<input type="text"/>
Active:	<input type="text"/>	Revision:	<input type="text"/>
Message:	<input type="text"/>		
Warning:	<input type="text"/>		

Figure 251: Priorities Tab

▼ Data section: Priorities

Alarm ... Revision:

Here you determine the definition of the priority for the respective event.

Possible priorities: **-1, 0, 1 ... 999**.

Blank (default) - the presets of the interface apply.

... - enter the priority for the respective event type if applicable.

8.3.4.4 Commands Tab

Via the **Commands** tab you can define commands that are to be executed in association with event processing or in cases of a change in state. The execution of the commands during events may occur at different times and, depending on the incident, also on different workstations. This allows you, for example, to have camera images displayed on a certain monitor during an event, and have the monitor

turn off when the event display is closed.

Execution times of datapoint commands:

- **Accept**
Upon acceptance of an event the command is executed on the workstation on which the event was accepted.
- **Complete**
The command is executed on all workstations. This occurs regardless of whether the event was completed automatically or manually.
- **End Display**
The command is executed at the workstation on which the event display is ended. This occurs regardless of whether the display is ended automatically or manually.
- **Event end**
Upon reception of the end message from the installation, the command is executed on all workstations.
- **Event reception**
Upon reception of an event, the command is executed on the workstation connected to the respective interface. The command is not executed on any other workstation!
- **First display**
The command is executed a maximum of only once on the workstations on which the event is displayed for the first time. This occurs regardless of whether the event was displayed automatically or manually.
- **Start Display**
The command is executed every time on the workstations on which the event is displayed. This occurs regardless of whether the event was displayed automatically or manually.
- **State change**
The command is executed upon a change in state of the datapoint only on the workstation to which the interface is connected. The command is not executed on any other workstation!

To enter your command there is an entry field similar to the text editor, but with a limited number of functions. You can enter conditional elements and commands, or texts in the format (**.WGT**). You can create these texts using the text editor. These texts, in turn, can also contain conditional elements and commands. Proceeding in this manner is recommended if you wish to enter more complex command sequences.

Additional information about editing and defining commands can be found in the sections [Text](#)⁸⁸⁷ and [Functions and Variables](#)⁹³⁹.



All commands that depend on the occurrence of an event must always be in the formulation IF (execution time . . .)!



All commands that depend on the occurrence of a change in state must always be in the formulation IF (change in state . . .)!

▼ Window excerpt: Commands Tab

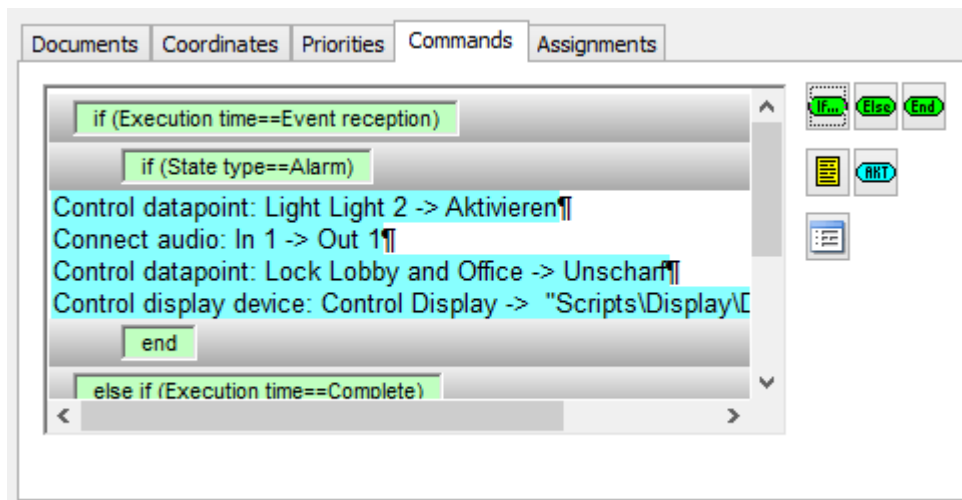


Figure 252: Commands Tab

▼ Data section: Commands



Command field

Here you can define datapoint specific commands for the datapoint. Additional information on controlling and/or the commands can be found in the sections [Texts](#)⁸⁸⁷ and [Commands and Variables](#)⁹³⁹.

Blank (default) - no datapoint-specific commands are executed.

... - insert the desired command if applicable.



Insert condition element

This function inserts an **IF**- or **ELSE IF** condition into the action and opens the dialog **Text Properties** with the [Condition Element Tab](#)⁹¹⁵ for editing of the properties.

... - select the condition and define the parameters.



Insert Else

This function inserts an **ELSE** element into the action in order to create a corresponding alternative possibility to an **IF condition**.



Insert End

This function inserts an **END** element into the action in order to complete the corresponding **IF condition**.



Text module

This function opens the dialog **Select text** and allows insertion of a text in the format **(.WGT)**.

... - select the desired text module.



Command...

The function creates an **action** at the cursor position in the text and opens the dialog **Text properties** with the [Command Tab](#)⁹¹³, allowing the definition of the action with the corresponding parameters.

... - select the action and indicate the required parameters.



Text Properties

The function opens the dialog **Text Properties**. The function of this dialog are described in detail in the section [Tabs and Text properties](#)⁹⁰⁵.

8.3.4.5 Assignments Tab

This tab allows you to assign datapoints to other datapoints. For example, this may be used in interactions between admission and video systems, or to simplify investigations, etc. The application of assignments depends on each interface and can therefore vary greatly. Information on this topic can be found in the respective help sections of the appropriate interface. However, for most interfaces, this tab is not currently functional.

Window excerpt: Assignments Tab

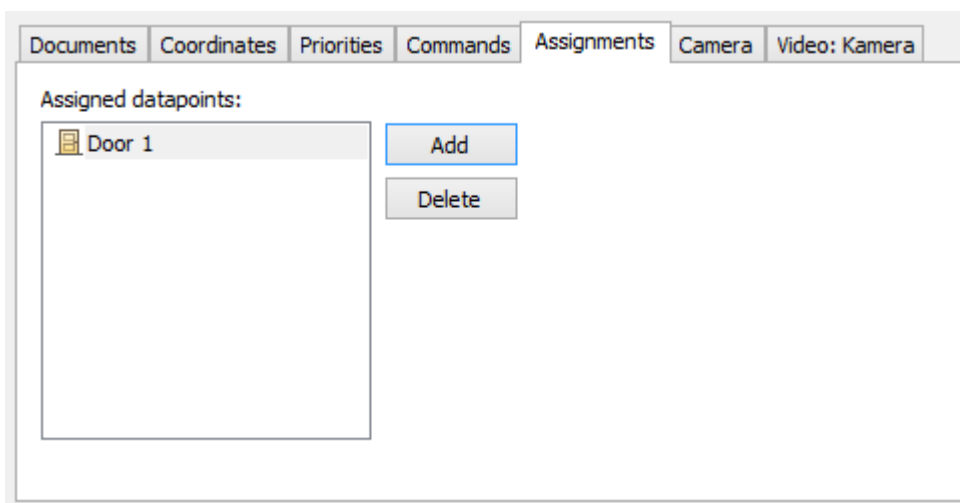


Figure 253: Assignments Tab

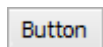
Data section: Assignments



Assigned Datapoints:

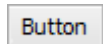
This list displays assigned datapoints (category and name).

Blank (default) - no assigned datapoints are defined.



Add

When clicking the button **Add**, the dialog **Selection** opens. This dialog enables you to select datapoints that you can assign to this datapoint.



Delete

By clicking this button, the selected datapoint is removed from the list without further confirmation.

8.3.5 Datapoint Tabs - Other

Depending on the datapoint category and the selected interface, additional tabs may also be available. On these tabs additional information for the respective datapoints are defined.

You may find additional tabs for intercoms, cameras, locks, I/O systems, etc., just to mention a few of the application options.

8.3.5.1 I/O Tab

Using the **I/O** Tab, you can define respective states and events for datapoints whose interfaces transmit binary data. For the binary values **0** and **1**, you can find respective entry fields on the tab to define state and event handling. In the case of a change in state, only the state of the datapoint, only one event (also with implicit end), or state and event can be set or generated.



The layout shown here and entry fields, as well as their functions, may differ from this example depending on the interface!

Window excerpt: I/O Tab

State	Event - Type	Event - Text	Priority	Function
0: Ignore	▼			(Meldung: Typ Text Priorität)
	▼	All	▼	(Zustand: Setzen Löschen Text)
1: Ignore	▼			(Meldung: Typ Text Priorität)
Active	▼		▼	(Zustand: Setzen Löschen Text)

Figure 254: I/O Tab

Data section: I/O Tab

The actions for the processing of changes in states from $0 \Rightarrow 1$ or $1 \Rightarrow 0$ can be defined in WinGuard here. The parameters for the respective changes in states are the same and are described below.

0 / 1 (Change from $1 \Rightarrow 0$ or from $0 \Rightarrow 1$):

Event - Type

Here you select the type of event, in other words, an event of this type is generated. If this entry is blank no event is generated.

Ignore (default) - no event is generated.

Idle - pending, uncompleted events are ended.

Alarm, fault, ... - an event of the respective type is generated.

... - select the desired event type if applicable.

Event - Text

Here you can define the state text for the event.

Blank (default) - the **default state text** for the event is used.

... - enter the state text for the event if applicable.

Event - Priority

Here you can determine the priority for the event (please also see: [Priorities Tab](#)⁷³¹).

Possible priorities: **-1, 0, 1 ... 999**

Blank (default) - the presets of the interface or INI file apply.

... - enter the priority for the event if applicable.


State - Set

Here you can select the state for the datapoint, or in other words, this state is set at the datapoint. If this entry is blank, the state remains unchanged.

Blank (default) - no state is set.

Alarm, Fault, ... - the respective state is set.

... - select the desired state if applicable.

 *If the state is already set, it remains unchanged!*

State - Delete

Here you can select the state that should be deleted (reversed).

All (default) - all states (except for the currently set state) are deleted.

Blank - the states remain unchanged.

... - select the state to be deleted if applicable.

 *The state selected under **Set State** remains unchanged!*

State - Text

Here you can define the state text for the datapoint.

Blank (default) - no state text is used by the datapoint.

... - enter the desired state text if applicable.

8.3.5.2 Camera Tab

If the current datapoint is one of the category camera, the **Camera** tab is also displayed. This tab allows you to indicate what kind of camera it is (digital or analog), or if the camera is controllable. You can define the presets for controllable cameras via this tab as well.

▼ Window excerpt: Camera Tab

Figure 255: Camera Tab

▼ Data section: Camera

Digital Camera

This option determines if this camera is a digital camera. If this option is inactive, the camera cannot be selected for display in the VideoManager or the VideoDisplay.

Inactive (default) - an analog camera is defined.

Active - a digital camera is defined.

i Only digital cameras can be directly displayed on WinGuard monitors!

Allows PTZ control

This setting determines if the camera is a controllable one. If this option is inactive, the respective control elements such as zoom, preset selection, etc. are also inactive.

Inactive (default) - the camera is not controllable.

Active - the camera is controllable.

Reports PTZ status

This option defines whether the PTZ camera is supplied with corresponding information via the interface. A set of connected values for pan, tilt and zoom is considered as PTZ status.

inactive (default) - the camera cannot be controlled.

active - it is a camera that can be controlled.

i In addition, the PTZ status is visualized in the status text of the datapoint in the format **P:<ppp> T:<tt> Z:<z.z>**. The indication for pan is always in a three-digit format, the one for tilt is always two-digit and the one for the zoom has a decimal!

North angle: ... °

Here, the north angle of a camera is defined.

The value indicated in the north angle defines the north alignment of cameras and graphics. The indication is made using values from 0°-359° degrees and describes the deviation from the exact north alignment in clockwise direction. For a graphic, a north angle of 0° means that north is exactly at the top, 90° exactly right, 180° exactly at the bottom, etc.

Blank (default) - for this camera, no view is displayed.

... - if required, enter the north angle (0-259).



*The north angle of a graphic is defined in the characteristics of the **GIS** index card. If no north angle has been defined for a graphic, no views will be displayed in this graphic!*

View angle: ... °

The view angle (without zoom) for visualization in the graphics is defined here. Only the horizontal image angle is important here. It describes the angle between two lines drawn from the center of the camera through the margins of the image and can be dynamically calculated depending on the corresponding zoom level and displayed then.

Blank (default) - a view angle of 50° is used.

... - if required, enter the view angle (1-259).

Focal length: ... mm

The focal length (without zoom) for the camera is defined here.

The focal length is an optical value of the camera objective and is indicated by the manufacturer. For PTZ cameras, the focal length is not fixed but changes linearly with the optical zoom (focal length range from ... to).

Blank (default) - a focal length of 5 mm is used.

... - if required, enter the standard focal length.

Presets

Here the list of available presets is displayed. You can edit the presets using the functions located on the right side.

Presets serve for determining of predefined camera sets (e.g. positions, zoom, etc.) that can be directly activated later by corresponding commands.

Blank (default) - no presets are defined.

... - select a preset for editing if applicable.

New

This button opens the dialog **Define Preset** for editing. The new entry is inserted into the list by its number.

Edit

The button **Edit** also opens the dialog **Define Preset** to edit the previously selected entry.

Delete

This button deletes the selected entry from the list. There is no confirmation!

▼ Dialog: Define Preset

Figure 256: Define Preset

▼ Data section: Define Preset

No.

Here the number of the preset must be defined (1-999).
... - enter the number of the preset (required).

Name

Here the name of the preset must be defined.
... - enter the name of the preset (required).

Button

OK

By executing this function, the preset is inserted into the preset list or modified there and the dialog is closed.

Button

Cancel

By executing this function, the dialog is closed without the changes made to the preset list being accepted.

8.3.5.3 Lock Tab

The **Lock** tab is displayed if the datapoint category **lock** was selected for the datapoint. With the selection of an arming command, it is determined which of the possible commands for this object effects an arming of the zone.

The reason for this is the following: when the zone of an intrusion sensor system is internally armed, all associated sensor groups that are not inactive due to, for example, an open window, are not included in the surveillance. If, as described in the [Explorer](#) ⁷¹⁶, you have linked the intrusion sensors with a lock, WinGuard verifies all sensor groups related to the lock when the arming command is canceled. Depending on the interface, you may see a dialog with a list of all sensor groups that are not inactive.

▼ Window excerpt: Lock Tab

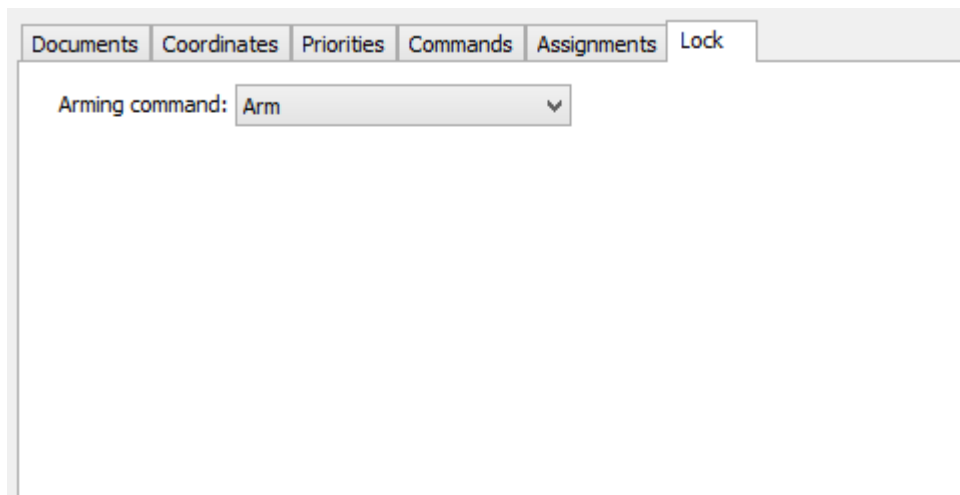


Figure 257: Lock Tab

▼ Data section:

Arming command

Here the command that executes the arming of the respective zone is defined. Which commands are available depends on the selected interface.

Arm (default) - arming command (example)

8.3.5.4 Intercom Tab

For datapoints of the category **intercom**, an additional **Intercom** tab is available that allows you to make specific definitions. For example, with the check box **Handle call as emergency call**, you can determine if every call from this intercom should be handled as an emergency. In WinGuard all emergencies are displayed as an alarm event.

With the check box **control station**, you can indicate all intercoms located at a workstation. In the [settings](#)^[404], under intercom, you can assign up to three **local intercoms** to every workstation.

Using the definitions in the data section, door opener, you can define which commands should be triggered with the activation of the buttons for opening and closing in the [intercom control panel](#)^[224]. A datapoint can be controlled by pressing a respective button (begin) or by releasing it (end). If a command is only entered in the begin field, it is not executed until the button is released. For each of the four conceivable actions the definitions **datapoint category**, **datapoint name**, and **command** are available to you.

▼ Window excerpt: Intercom Tab

		Category	Datapoint	Command
Open	Begin:	<input type="text"/>	<input type="text"/>	<input type="text"/>
	End:	<input type="text"/>	<input type="text"/>	<input type="text"/>
Close	Begin:	<input type="text"/>	<input type="text"/>	<input type="text"/>
	End:	<input type="text"/>	<input type="text"/>	<input type="text"/>

Figure 258: Intercom Tab

▼ Data section: Options



Handle call as emergency call

This option determines if all calls from this intercom should be handled as an emergency.

inactive (default) - an incoming call is **not** handled as an emergency call.

active - an incoming call is handled as an emergency call.




An emergency is always displayed as an alarm event!

Control station

This option determines that the intercom is assigned to a specific workstation.

Inactive (default) - the intercom is **not** a control station intercom.

Active - the intercom is a control station intercom.

 *Additionally, you must define the intercom units in the settings under intercom!*

▼ **Data section: Door opener**

The following selection fields are available for **Open-begin**, **Open-end**, **Close-begin**, and **Close-end**.

Category

Here you define the datapoint category of the datapoint that is to be used as door opener.

Blank (default) - no action.

... - select the respective datapoint category if applicable.

Datapoint

Here you define which datapoint (depending on the selected datapoint category) should be used as the door opener.

Blank (default) - no action.

... - select the respective datapoint if applicable.

Command

If a datapoint was selected, you can select or define the respective command to open the door here.

Blank (default) - no action.

... - select the respective command for the datapoint if applicable.

8.3.5.5 Value and Analog-Value Tab

The **Values** tab is displayed if the datapoint category **Value** was selected. In the entry fields, the minimum and maximum values, in other words, the **value range**, for this datapoint are defined. These (along with an entry for a unit) are applied in scaled WinGuard graphics.

For this reason, the number of digits following the decimal point is also important for the definitions of **from** and **to**. The maximum number of decimal points determines the number of decimal points used in the display of the value in WinGuard.

In the fields for the **value limits** (Max-Hi, Max-Lo, Min-Hi, Min-Lo) and event, the limits for normal operation are defined. The two limit entries **Max-Hi/-Lo** or **Min-Hi/-Lo** are used for event generation.

If the value exceeds the established Max-Hi value, the event defined in the next field for this datapoint (under **event if higher**) (the entries for state and priority are optional and override the respective standard settings) is triggered. When the value falls **below Max-Lo**, a corresponding end event message is generated. The same in reverse applies for **Min-Hi** and **Min-Lo**.

Most of the interfaces which are supporting analog values have an additional, interface dependent tab to define conversion values. So - most of the time - there will be defined a linear conversion (interface dependent - see interface help). In this case all values are converted within the defined limits.

▼ Window excerpt: Value Tab

Figure 259: Value Tab

▼ Window excerpt: Analog-Value Tab (if applicable interface dependent)

Figure 260: Analog-Value Tab

▼ Data section: Value Range

from

This value determines the lower limit of the value range for display or conversion. Lower values are not displayed.

Blank (default) - a lower limit is not active.

... (< to) - enter the lower limit value if applicable.



The maximum number of decimal places entered in the **from** and **to** fields determines the number of decimal places used for the display!

to

This value determines the upper limit of the value range for display or conversion. Higher values are not displayed.

Blank (default) - an upper limit is not active.

... (> **from**) - enter the upper limit if applicable.



The maximum number of decimal places entered in the **from** and **to** fields determines the number of decimal places used for the display!

Unit

Here you define a unit for the value.

You can select from: °C, m, cm, mm, km/h, m/s, bar, V, mV and A.

Blank (default) - the value is displayed without unit.

... - select a unit or enter one directly if applicable.

**Save history**

This option determines if this datapoint can be selected in the display of historical data.

Inactive (default) - no historical data can be displayed for this datapoint.

Active - this datapoint is available in the selection for display of historical data.

▼ Data section: Limits

Max-Hi

Here you can determine the upper limit value for the operational limit. When the value exceeds this limit, the datapoint is switched into the selected state and a corresponding event is generated, provided that the option **Ignore** is not selected under **Event**.

Blank (default) - checking the limit value is inactive.

... - enter the limit value to activate the limit check.

Max-Lo

Here you can enter the lower limit value for the upper operational limit (dead-band). When the value falls below this indicated limit, the datapoint goes back to **idle** status and the event is ended.

Blank (default) - the value for **Max-Hi** is used.

... (< **Max-Hi**) - enter the desired limit value if applicable.



This value is only used if it is lower than Max-Hi!

Event (if higher)

Here you define the state and the event type of the event in cases where the actual value has reached or exceeded the **Max-Hi** value.

Ignore (default) - the state remains unchanged and no event is generated.

... - select the state and/or event type if applicable.

State (if higher)

Here you can define a state text for the event.

Blank (default) - the state is used as state text for the event.

... - enter a state text for the event if applicable.

Priority (if higher)

Here you can determine the priority for the event (please also see: [Priorities Tab](#)⁷³¹).

Possible priorities: **-1, 0, 1 ... 999**

Blank (default) - the presets of the interface or INI file apply.

... - enter the priority for the event if applicable.

Min-Hi

Here you can define the upper limit value for the lower operational limit (dead-band). If the actual value exceeds this limit, the datapoint goes back to **idle** status and the event is ended.

Blank (default) - the value for **Min-Lo** is used.

... (> Min-Lo) - enter the desired limit value if applicable.



This value is only used if it is higher than Min-Lo!

Min-Lo

Here you can define the lowest operational limit value. If the actual value falls below this limit, the datapoint switches to the selected state and a corresponding event is generated, provided that the option **Ignore** was not selected under **Event**.

Blank (default) - the limit check is inactive.

... - enter a limit value to activate the limit check if applicable.

**Event (if lower)**

Here you define the state and the event type of the event if the actual value has reached or fallen below the **Min-Lo** value.

Ignore (default) - the state remains unchanged and no event is generated.

... - select the state and/or the event type if applicable.

State (if lower)

Here you can define a state text for the event.

Blank (default) - the state is used as state text for the event.

... - enter a state text for the event if applicable.

Priority (if lower)

Here you can define the priority for the event (please also see: [Priorities Tab](#)⁷³¹).

Possible priorities: **-1, 0, 1 ... 999**

Blank (default) - the presets for the interface or INI file apply.

... - enter the priority for the event if applicable.

▼ Data section: Range (Analog-Value Tab)

from

This value determines the minimal value (operating limit low) which can be received from the system.

Blank (default) - a lower value is not active.

... (< to) - enter the lower value if applicable.

to

This value determines the maximal value (operating limit high) which can be received from the system.

Blank (default) - a upper value is not active.

... (> from) - enter the upper value if applicable.



If are both values are not defined (blank), the conversion is not active!

Percent Deadband ... (%)

Here you can define a value change filter. Only if the change of the value is greater than the filter the conversion will be done.

Blank (default) - the filter is not active.

... - Changes are only executed if the filter is passed over.



Values are signed

This option determines if the system values are delivered with a sign (+/-).

inactive (default) - the values are **not** signed.

active - the values are signed.

8.3.5.6 User Alarm Tab

The user alarm allows you to initiate an alarm manually for a datapoint. In this manner, you can also integrate special incidents such as a phone alarm message into the regular event handling processes to take advantage of all the resources the system has to offer. Via this tab, any necessary additional definitions can be made.

Window excerpt: User Alarm Tab

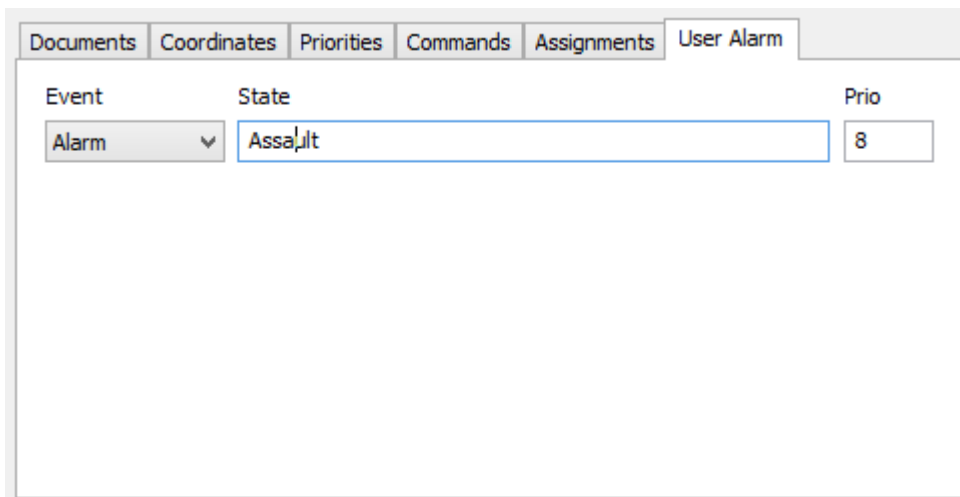


Figure 261: User Alarm Tab

▼ Data section: User Alarm

Event

Here you select the event type for the execution of a user alarm.

You can choose from: [all event types](#).

Alarm (default) - a user alarm event of the type alarm is generated.

... - select the desired event type if applicable.

State

Here a state text for the execution of a user alarm is defined.

Blank (default) - the state is used as state text for the event.

... - enter a state text for the event if applicable.

Prio (Priority)

Here you determine the priority for the event (please also see: [Priorities Tab](#)^[731]).

Possible priorities: **1 ... 999**

Blank (default) - the presets of the Priorities Tab apply.

... - enter the priority for the event if applicable.

8.3.5.7 Other Tabs

WinGuard uses additional tabs for an expanded definition of datapoints. These tabs are generally interface-specific and define, for example, additional information for intercoms, cameras, locks, I/O systems, etc. You can find further information about these index cards in the respective interface documentation.

8.3.6 Automatic Projection

To simplify projection, many interfaces have functions for automatic projection of datapoints. With these functions, data directly from the configuration files of the respective installations can be inserted for the automatic generation of datapoints in WinGuard. Some units also have the capability of reading the respective configuration directly from the installation via the interface to generate the respective datapoints in the system.

You can find additional information on **Automatic Projection** in the respective documentation of the WinGuard interfaces (please also see: [Projection](#)^[710]).

8.3.7 Auto-add Datapoints

The table view of the datapoints has a special feature: the automatic addition of unknown datapoints. The function **Autoadd unknown datapoints** in the [table view](#)^[719] (depending on interface) makes it possible to add datapoints that are not known to the system automatically upon receipt of a corresponding incident. Most interface modules allow the display of events from datapoints not projected in the system. The name of the datapoint is generated following this pattern: **[Interface]: [Node]-[Data type]-[Address]**. In such cases, you can have the respective datapoint newly added automatically using this function.

As name, the designation generated via the above-referenced pattern is used, and as type, the category **Other** is applied. If a datapoint with the generated name is already in existence, a consecutive number is added. Only the definitions in the link section are filled with the respective information. No further entries in the fields of the dataset are made. To simplify projection even more, it is possible to use the information of an already existing datapoint as the basis for a new datapoint that is to be added

automatically. In this case, only the datapoint name and the information from the link section from the datapoint that is to be copied are overwritten. All other data is applied unchanged. Whenever a datapoint is highlighted in the table, it is this datapoint that is used as a basis. Only if no datapoint is highlighted, a datapoint that is to be added automatically is newly generated with the category: **Other**.



*Interfaces that feature **Automatic Projection** should not use this function. Data replication should be executed via their projection function!*

8.3.8 Create Datapoint from Event

If there is no datapoint assigned to an event, you will find the command **Create datapoint** in the context menu of the event (depending from the right Modify datapoint). Using this command a associated datapoint can be created.

If a datapoint with sensor will be created the properties (text, graphic, textmacros, etc.) from the sensor will be used and this information can be not the same like the information from the original datapoint.

This command can also be used to restore deleted datapoints from events. In this case the datapoint is restored with the same database-id. All available information from the event like category, name, location, links, commands, documents, etc. will be restored. If the event is assigned to an sensor the sensor and the datapoint will be created. Additional sensors must be created manually.



Is a datapoint already allocated the command is not available!



Coordinates and the hierarchy in the explorer tree can not be restored!

8.3.9 Special Datapoints

In WinGuard there are several special datapoints not assigned directly to an interface and thus also not assigned to one of the connected system. These datapoints are then assigned to the interface **Internal**. Via these datapoints, the system can e.g. display information of clients, interfaces, etc. or provide additional elements such as order elements in the datapoint explorer, monitors, operator alarms, default datapoints, etc.

Datapoints of the interface Internal:

- (empty)
- Workstation
- Interface
- Camera
- Monitor
- Hot Standby
- User Alarm

Example: Structure-Datapoint Technical/ Workstations

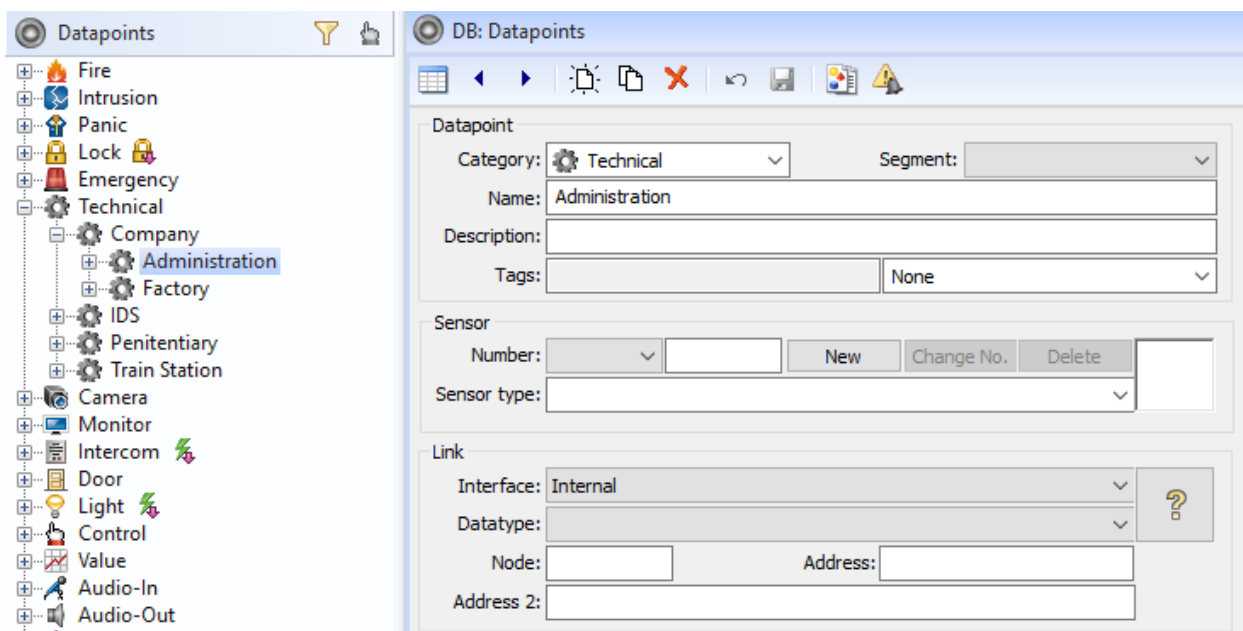


Figure 262: Structure-Datapoint Technical / Workstations

8.3.9.1 Camera

In the system it is also possible to define internal cameras, e.g. to integrate local USB cameras or local video/TV cards. These cameras can, however, only be defined and displayed related to a workstation. The definition of the related video elements is normally made in the settings under workstations / [Video](#) / local camera #. These additional camera datapoints have to be defined as described in the following.

Link:

- **Category:**

Camera - select camera as datapoint category.

i For the datapoint category camera, there is an additional tab Camera. The checkbox digital camera has to be activated there!

- **Name:**

... - define the name of the datapoint.

- **Interface:**

Internal - select the internal element.

- **Datatype:**

Camera - select camera as datatype.

- **Node:**

Blank - this element is left blank.

- **Address:**

... - enter the number of the correspondent local camera (1...3).

- **Address 2:**
Blank - this element is left blank.

8.3.9.2 Default


For each datapoint, it is possible to define exactly one datapoint as default datapoint. These additional default datapoints do not have a name (**Name remains empty**). As linkage, it is recommended to select the interface Internal. The documents for graphics and text defined here will be used for all datapoints of the same category that do not have an own entry for the corresponding definition. The additional default datapoints should be defined as described in the following.

Link:

- **Category:**
... - select a suitable datapoint category.
- **Name:**
Blank - the datapoint name must be empty!
- **Interface:**
Internal - select the internal element.
- **Datatype:**
Blank - select the empty element for the datatype.
- **Node:**
Blank - this element is left blank.
- **Address:**
Blank - this element is left blank.
- **Address 2:**
Blank - this element is left blank.

Example: If e.g. an entry for graphic 1 is existing at such a datapoint without a name, this will be used for all datapoints of this category that do not have an own entry for graphic 1.

8.3.9.3 Grouping

For integration of event grouping, additional datapoints can be set up. These can be used with the help of the functions defined in the [Event Handling](#)  definition. These additional datapoints have to be defined as described in the following.

Link:

- **Category:**
... - select a suitable datapoint category.
- **Name:**
... - define the name of the datapoint.

- **Interface:**
Internal - select the internal element.
- **Datatype:**
Grouping - select Grouping as datatype.
- **Node:**
Blank - this element is left blank.
- **Address:**
... - enter any unique number as address.
- **Address 2:**
Blank - this element is left blank.

8.3.9.4 Hot Standby

In case of using a system with Hot-Standby server, an additional datapoint for display of the operation mode has to be set up. During normal operation (the Server is also the active Server), the datapoint will be set in the status **Silence** by the system. However, during operation mode Hot-Standby (the Hot-Standby server is the active server), the datapoint will be set in the status **Active** and, in addition, a corresponding event message will be triggered.

Using the datapoint commands **Activate / Deactivate**, a corresponding switch between the Server and Hot Standby Server can be realized. The commands are only functional if there are exactly two servers (old dual Hot Standby mode). This additional operation datapoint has to be defined as described in the following.

Link:

- **Category:**
... - select a suitable datapoint category.
- **Name:**
... - define the name of the datapoint.
- **Interface:**
Internal - select the internal element.
- **Datatype:**
Hot-Standby - select Hot Standby as datatype.
- **Node:**
Blank - this element is left blank.
- **Address:**
Blank - this element is left blank.
- **Address 2:**
Blank - this element is left blank.

8.3.9.5 Interface

For almost all interfaces in the system, a corresponding interface datapoint for display of their states and event messages has to be set up. In case of an interface failure, this datapoint will be set into failure status by the interface and a corresponding event message will be triggered. These additional interface datapoints have to be defined as described in the following.

- **Category:**
... - select a suitable datapoint category.
- **Name:**
... - define the name of the datapoint.
- **Interface:**
... - select the suitable interface.
- **Datatype:**
Internal - select internal as datatype.



If the datatype Intern is not available for an interface, no additional datapoint is required for monitoring of the interface!

- **Node:**
Blank - this element is left blank.
- **Address:**
Blank - this element is left blank.
... - enter the number of the correspondent interface.
- **Address 2:**
Blank - this element is left blank.

Interface control datapoint

In addition to the interface datapoints, it is possible to define further datapoints for control (restart) of the interfaces. Via the control commands of these datapoints, the corresponding interfaces can be re-started by the user. These additional datapoints have to be defined as described in the following.

Link:

- **Category:**
... - select a suitable datapoint category.
- **Name:**
... - define the name of the datapoint.
- **Interface:**
Internal - select internal as interface.
- **Datatype:**
Interface - select interface as datatype.

- **Node:**
Blank - this element is left blank.
- **Address:**
... - enter the number of the correspondent interface.
- **Address 2:**
Blank - this element is left blank.

8.3.9.6 Monitor

It is also possible to define monitors in the system. In general, it is differentiated between internal and external monitors. External monitors (mostly analog) can be addressed via interfaces and cannot be displayed in WinGuard, only be controlled.

Internal monitors belong to the system and are required for display of digital video streams. These additional monitor datapoints have to be defined as described in the following.

Link:

- **Category:**
Monitor - select monitor as datapoint category.
- **Name:**
... - define the name of the datapoint.
- **Interface:**
Internal - select the internal element.
- **Datatype:**
Monitor - select monitor as datatype.
- **Node:**
Blank - this element is left blank.
- **Address:**
... - enter a unique number for this monitor (1...499).



For internal monitors, usually the numbers 1...99 are used for the VideoManager (internal) and the numbers 100...499 are used for the VideoDisplay (external)!

- **Address 2:**
Blank - this element is left blank.

8.3.9.7 Server

Using a system with Hot Standby Servers, it is possible to additionally create a datapoint for each of the three possible servers. These datapoints can then be used for display of the operation mode of the corresponding server. The datapoint of the active server will be placed into the status **Active** and the two other servers will be set to **Silence**. In addition, a corresponding event message is triggered.

With the help of the datapoint command **Activate**, a switch or activation of the corresponding server (Hot Standby switch) can be realized. If the number of the server to be activated will be transferred as parameter 1, the address of the datapoint will be ignored and the parameter will be used for activation. The additional datapoints have to be defined as follows.

Link:

- **Category:**
... - select a suitable datapoint category.
- **Name:**
... - define the name of the datapoint.
- **Interface:**
Internal - select the internal element.
- **Datatype:**
Server - select Server as datatype.
- **Node:**
Blank - this element is left blank.
- **Address:**
... - enter a unique number for this server (1...3).
- **Address 2:**
Blank - this element is left blank.

8.3.9.8 Structure

For structuring of datapoints in the explorer, any datapoints can be set up as so called father datapoints. Other points can then be arranged e.g. under these points (see example). For structuring, all other datapoints can of course be used as well. The additional structure datapoints should be defined as described in the following.

Link:

- **Category:**
... - select a suitable datapoint category.
- **Name:**
... - define the name of the datapoint.
- **Interface:**
Internal - select the internal element.

- **Datatype:**
Blank - select the empty element as datatype.
- **Node:**
Blank - this element is left blank.
- **Address:**
Blank - this element is left blank.
- **Address 2:**
Blank - this element is left blank.



These points will not be considered for calculation of datapoints within the scope of your license!

8.3.9.9 User alarm

For integration or triggering of operator alarms, additional datapoints can be set up. These can be used or triggered with the help of the function [Operator alarm](#)²³⁶. These additional datapoints have to be defined as described in the following.

Link:

- **Category:**
... - select a suitable datapoint category.
- **Name:**
... - define the name of the datapoint.
- **Interface:**
Internal - select the internal element.
- **Datatype:**
User Alarm - select user alarm as datatype.



There is an additional tab Operator alarm for these datapoints. Additional indications with regard to event message, status and priority have to be made there!

- **Node:**
Blank - this element is left blank.
- **Address:**
... - enter any unique number as address.
- **Address 2:**
Blank - this element is left blank.

8.3.9.10 Workstation

For each workstation in the system, a corresponding workstation datapoint has to be setup for display of the workstation states and events. If e.g. a defined **workstation is not active** (registered at the server), the server will set its datapoint to **Fault** and trigger a corresponding event message. If the **Dead man's control** is activated and the control time is exceeded an **Alarm** event is generated. An event with

state **Warning** is generated if the **system time is different** between server and client ([System Time Synchronisation](#)¹¹⁴⁰).

Events can be deactivated if the event priority is set to -1 on the tab **Priority** in the datapoint definition. These additional workstation datapoints have to be defined as described in the following.

Link:

- **Category:**
... - select a suitable datapoint category.
- **Name:**
... - define the name of the datapoint.
- **Interface:**
Internal - select the internal element.
- **Datatype:**
Workstation - select workstation as datatype.
- **Node:**
Blank - this element is left blank.
- **Address:**
... - enter the number of the correspondent workstation.
- **Address 2:**
Blank - this element is left blank.

States of workstation datapoints:

- **Silent (normal)**
The connection between Server and Client is active.
- **Fault**
The connection between Server and Client is interrupted (e.g. workstation not started).
- **Warning**
If the system time between server and client are different and the time setting function is not working if activated (e.g. no rights) an event with state Warning for this datapoint is generated.
- **Alarm**
The alarm of the dead man's control of the workstation has been issued.

8.4 Graphics

In WinGuard, graphics are a central element for the display and processing of events and other information. Graphics are not just limited to display, but can also contain interactive elements. For graphics, WinGuard uses a proprietary file format with the extension **.WGD**.

WinGuard graphics can be easily created with the integrated [Graphic Editor](#)⁸⁰⁹. It provides all functions necessary to add new graphics or edit existing ones within the process of projection. In the WinGuard interface, these functions are included under the menu item **Graphic**. **Graphic editor** functions are object-oriented and based on vector graphics. Every geometric shape represents an object that can be edited, and to which certain properties (for example, color, line width, etc.) can be assigned. Objects can also be gathered into groups. This group then acts like one object, and all items within that group are edited together. Each datapoint can have up to five graphics assigned to it that can be displayed in cases of an event.

Graphics can also be defined independently of events and show information such as current datapoint states (for example, as a background graphic). These are referred to as state graphics.

The **Graphic editor** enables you to define several individual levels within a graphic that can be edited separately from one another. These levels are called [Layers](#)⁸²⁵. Functions such as **Pane**, **Frame**, and **Powerclip** allow you to use parts of graphics in other graphics. In this manner, for example, individual sections of a building floor plan can be used in other graphics and be inserted there as additional objects. In addition to geometric shapes, there are also other objects like **import graphics**, **symbols**, **buttons**, **VideoDisplays** etc.

Through the use of [buttons](#)⁷⁹⁵, graphics can be designed interactively. Buttons for the display of additional graphics, control of datapoints, display of texts, etc. may be inserted. This allows you to easily display both overview and detailed representations of a building. Every graphic can have any number of additional graphics assigned to it.

Generally, [symbols](#)⁷⁹⁰ are used to represent datapoint states in graphics. Additionally, any graphic object can be provided with a link and thus establish a direct connection to a datapoint or a location. Furthermore, you can define areas in graphics into which other display elements such as video monitors, texts, document, layouts, etc. can be inserted.

You can use existing graphics as a basis for new graphics by inserting them as a link or copy in the graphic to be created. Proceeding in this manner is common as the graphics needed for event display, such as property maps and floor plans, etc., are often already available in digital format, or can be changed into digital form easily through scanning. WinGuard supports the direct display of various vector and bitmap graphic formats.

Supported vector and graphic formats:

- **WGD** WinGuard Drawing
- **WMF** Windows Metafile
- **EMF** Windows Enhanced Metafile
- **DXF** Drawing Interchange Format (AutoCAD)
- **DWG** AutoCAD File Format
- **DGN** MicroStation file format
- **SLD** Slide file (AutoCAD)

Supported bitmap-graphic formats:

- **BMP** Windows Bitmap
- **JPG** File Interchange Format
- **PNG** Portable Network Graphic
- **GIF** Graphic Interchange Format (without animation)
- **TIFF** Tagged Image File

Other formats can be easily converted into a format supported by WinGuard by using popular conversion or graphic programs.

8.4.1 Explorer

The graphics explorer displays all files and folders contained in the sub folder **Graphics** of the WinGuard project folder. Files displayed here have to be in graphic formats supported by the system.

You can open a context menu for every file or folder by right-clicking with the mouse key. The functions of the context menu are described below. It has to be pointed out that folders cannot be copied. However, they can be moved via drag & drop. If a graphic file is moved via drag&drop from the explorer window into a graphic window, it is shown in display mode there.

Example: Explorer - Graphics

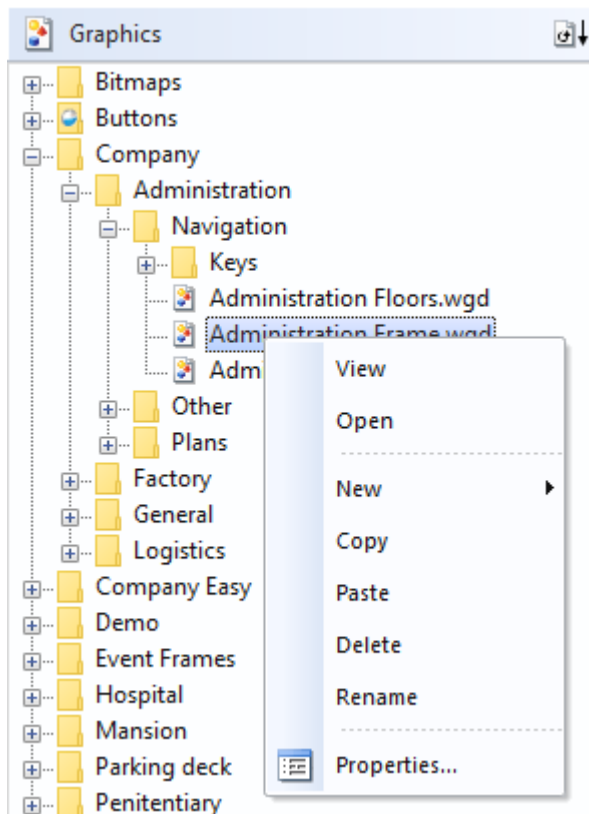


Figure 263: Explorer - Graphics

Functions: Explorer - Graphics (Title bar)



(Close explorer window)

This function closes the explorer window, provided that the function has been activated for the user.

Via the function to the right, you can open a context menu for selection of file types in explorer.



All Files



WinGuardGraphics



Vector Graphics



Bitmap Graphics

▼ **Functions: Explorer - Graphics**

Below is a description of the functions available in the graphics explorer. Some of the functions depend on the object selected or the user rights.



Using the functions Copy and Past with drag&drop you can export and import files or folders!

- **View**

This function corresponds to a double click on a graphic in explorer: the graphic is shown in the display window. By right-clicking in the display window and selecting the function **Open Graphic**, you can open the graphic with the graphic editor.

- **Open**

This function opens a graphic editor window and directly loads the selected graphic.

- **New**

This function opens a selection with which you can add a new graphic with the name **New Graphic.wgd** in the selected folder, or a new folder with the name **New Folder**. If an element with this name already exists, a consecutive number will be added.

- **Copy**

With this function a copy of the selected files or folders is copied to the clipboard.

- **Past**

With this function the files or folder from the clipboard are inserted in the selected folder.

- If the identical files or the folder already exist (selected before with Copy), they will be created with the same name and an added consecutive number (#).
- If the file or folder are not identical a window is shown where you can choose to replace or create a copy of this files or folder. If you create a copy they will be created with the same name and an added consecutive number (#).



Consider valid file types!

- **Delete**

This function deletes the selected files or the selected folder, including all sub folders and their content after a respective confirmation.

- **Rename**

With this function the name of the selected graphic or folder can be changed directly in the explorer. This function can also be executed directly on the right side of the explorer by two delayed clicks on the entry.

**Properties**

This function opens a dialog to setup the properties of a folder or a file. Here you can define the **name** and **description** and a **segment** assignment. Additionally you will find information about type, last changes, etc. (see: [Files](#)^[341]).

Via the button to the very right in the explorer titlebar, you can determine which types of files (all, WinGuard, vector, or bitmap graphics) should be listed in the explorer. You can see the current setting from the symbol that is displayed on the button.

8.4.2 Menu Item - Graphic

Via the menu item **Graphic** you can access the usual commands for adding and saving graphics. You can also access a variety of tools, aids, and options, but these are often used via the graphic editor toolbar or the context menus of the graphic objects. Most of the functions serve to edit graphics and are thus only available when editing. Some of the other functions, however, such as GIS map and symbols, are only applicable when viewing graphics.



Most function are only available for editing graphics!

▼ Menu Item: Graphic

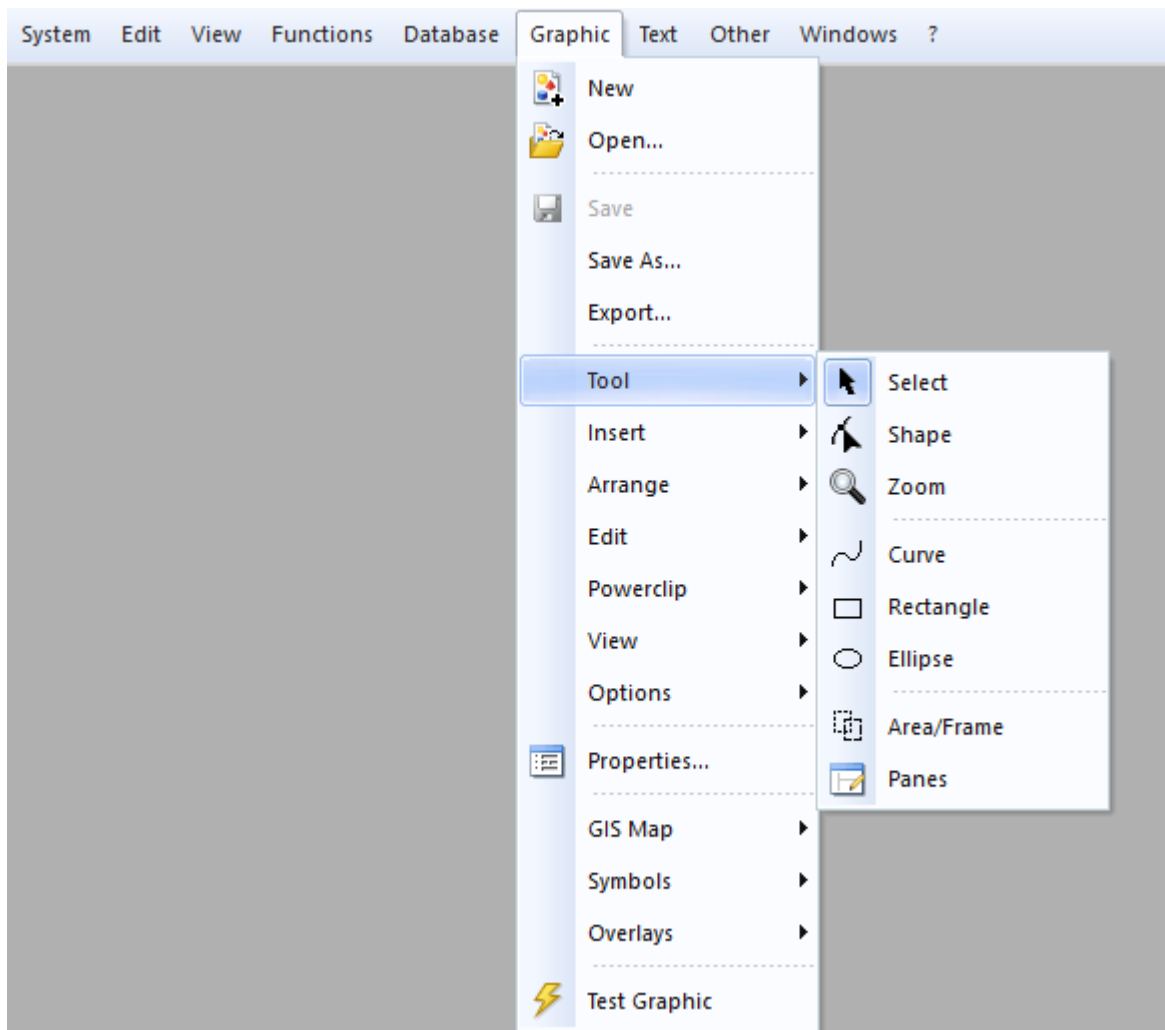


Figure 264: Menu Item - Graphic

▼ Functions: Graphic



New

Opens a new graphic editor window with a blank drawing surface for the creation of a new graphic.



Open...

Opens the dialog, **Graphic**, via which a saved graphic can be opened in the graphic editor for editing.



Save

The currently-displayed graphic is saved without confirmation under its existing name. New graphics are saved under the function **Save As**.

- **Save As...**

The Dialog, **Save Graphic As**, is opened, which allows you to save the current graphic under a new file name and/or in a different folder.

- **Export**

The dialog, **Export Graphic**, is opened, which allows you to save the current graphic in a different graphic format (wgd, wmf, png, jpg, bmp, gif, tiff).



When saving in WGD format, datapoint IDs are replaced with the names of the datapoints. This way, the graphic can later be reused (with a changed datapoint ID)! After editing the graphic, the IDs are saved again!

- **Tool**

A submenu with graphic editor tools is opened.

(please see: [Submenu Tools](#) ⁷⁶²)

- **Insert**

A submenu for the insertion of objects is opened.

(please see: [Submenu Insert](#) ⁷⁶⁴)

- **Arrange**

A submenu for arranging objects is opened.

(please see: [Submenu Arrange](#) ⁷⁶⁵)

- **Edit**

A submenu with functions to edit objects is opened.

(please see: [Submenu Edit](#) ⁷⁶⁷)

- **Powerclip**

A submenu with functions for powerclip editing is opened.

(please see: [Submenu Powerclip](#) ⁷⁶⁹)

- **View**

A submenu for hiding or showing aids (for example, grid, helplines) is opened.

(please see: [Submenu View](#) ⁷⁷⁰)

- **Options**

A submenu with aids is opened.

(please see: [Submenu Options](#) ⁷⁷¹)



- **Properties...**

The **Properties** dialog is opened. A detailed description of this dialog can be found in the sections: [Overview Graphic Tabs](#) ⁸²⁸, [Graphic Document](#) ⁸³¹, [Graphic General](#) ⁸⁴⁶, and [Graphic Objects](#) ⁸⁶⁷.

- **GIS Map**

A submenu with GIS map functions is opened. These functions are only available for the view/display of respective graphics.

(please see: [Submenu GIS Map](#) ⁷⁷¹)

- **Symbols**

Opens a submenu for turning the visibility of datapoints on or off (depending on datapoint categories).

(please see: [Submenu Symbols](#) ⁷⁷²)



Test Graphic

Turns the test mode either on or off. If the test mode is active, you can review which objects in the graphic are animated, and what the animation looks like / how the interactive objects react (buttons or variable fields).

8.4.2.1 Tools Submenu

▼ Submenu: Graphic - Tools

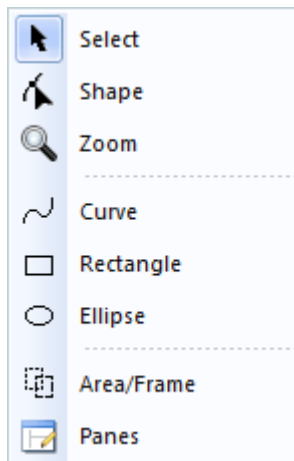


Figure 265: Submenu: Graphic - Tools

▼ Functions: Submenu: Graphic - Tools



Selection

In case this function is active, objects can be selected. The objects can be selected by mouse click and moved or changed in size by holding the left mouse button pressed.

Via right click, a context menu for editing can be opened.



Shape

In case this function is activated, the form of curves, rectangles or ellipses can be changed.

By clicking on the object, the nodal points become visible. Their position can be changed by holding the left mouse button pressed.

By clicking on a nodal point at a curved line, the control points become visible. By dragging them, the curve shape can be changed.



Zoom

In case this function is activated, the zoom can be maximized, minimized or the view can be moved.

Using the left mouse button, the zoom is maximized, the right mouse button minimizes the zoom. Turning the mouse wheel forward or backwards has the same effect. By clicking and dragging with the mouse, the image section is moved. If a rectangle is drawn by holding the right mouse button pressed, the rectangle will be displayed as zoom area upon release of the button.



Curve

In case this function is activated, nodal points can be created by clicking into the graphic. These nodal points are, as a standard, linked with a straight line.

If the left mouse button is held pressed and the mouse pointer is moved, a curve with variable shape will be generated between the previous and the selected nodal point.

By holding the right mouse button pressed, a line can be freely drawn.



Rectangle

In case this function is activated, a rectangle/square can be inserted using the left mouse button.

The left mouse button has to be held pressed at the desired position and the rectangle must be drawn with the mouse (by holding the left button further pressed).

If the shift key is pressed during this processed, a square will be created.



Ellipse

In case this function is activated, an ellipse/circle can be inserted.

The left mouse button has to be held pressed at the desired position and the ellipse must be drawn with the mouse (by holding the left button further pressed).

If the shift key is pressed during this processed, a circle will be created.



Area/Frame

In case this function is activated, a **Area** can be defined using the **left** mouse button and a **Frame** by using the **right** mouse button.

The corresponding mouse button must be held pressed at the desired position and then the corresponding rectangle has to be drawn with the mouse (by holding the left button further pressed). A pane will be displayed by a short dotted and a frame by a long dotted frame line.

In a **Area**, a section for display of another graphic can be defined (comparable with the image of a camera).

In a **Frame**, other graphics can be loaded and displayed by referencing them. For display, a corresponding section of the referenced graphic can be used here as well (comparable with the camera image on a monitor).



Edit Panes

In case this function is activated, a selected pane can be edited. the editing functions correspond to the display panes in the layouts (see: [Layouts](#)^[604] / [Edit](#)^[605]).

8.4.2.2 Insert Submenu

▼ Submenu: Graphic - Insert

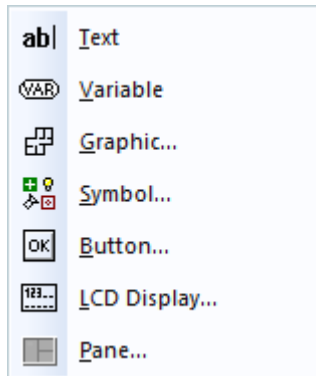


Figure 266: Submenu: Graphic - Insert

▼ Functions: Submenu: Graphic - Insert

ab| Text

By selection of this menu item, the insertion of texts is activated. Upon clicking into the graphic, the object is inserted and the dialog **Graphic settings** is opened in which the text, position, etc. can be defined.

VAR Variable

By selection of this menu item, the insertion of variables is activated. Upon clicking into the graphic, the object is inserted and the dialog **Graphic settings** is opened in which e.g. the type can be selected from a list of available variables.

Graphic

By selection of this menu item, the dialog **Insert graphic file** and the explorer for graphics is opened. Graphics of the proprietary WinGuard format **wgd**, the **vector formats wmf, emf, dwg, dgn, dxf** and **sld** as well as **Bitmap formats bmp, jpg, png, gif** and **tiff** can be used.

Symbol

By selection of this menu item, the explorer window **Symbols** is opened from which symbols can be inserted into the graphic via drag & drop.

OK Button

By selection of this menu item, the insertion of buttons is activated. Upon clicking into the graphic, a button is inserted and the dialog **Graphic settings** is opened.

123... LCD Display

By selection of this menu item, the insertion of LCD displays is activated. Upon clicking into the graphic, an LCD display is inserted and the dialog **Graphic settings** is opened. In this way, texts from external attachments can be displayed as running text within a graphic, provided that the interface is supporting this function.



Pane (insert)

By selection of this menu item, the insertion of panes is activated. Upon clicking into the graphic, a pane is inserted. With the help of the function **Edit panes**, the panes can then be further defined and supplied with contents such as e.g. layouts, video monitors, graphics, etc.

8.4.2.3 Arrange Submenu

▼ Submenu: Graphic - Arrange

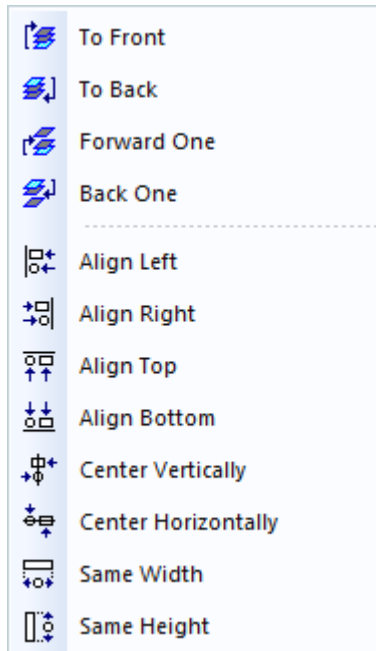


Figure 267: Submenu: Graphic - Arrange

▼ Function: Submenu: Graphic - Arrange



To Front

The selected object(s) will be moved to the very top in the object stack of the layer (to the foreground). Then the objects will be displayed above the other objects of the layer.



To Back

The selected object(s) will be moved to the very bottom in the object stack of the layer (to the background). Then the objects will be displayed behind all other objects of the layer.



Forward One

The selected object(s) will be moved one position forward within the object stack.



Backwards One

The selected object(s) will be moved one position backwards within the object stack.



Align Left

If several objects have been selected in one graphic, the objects will be moved in such a way that their leftmost points will be on a common vertical line. The object that has been most left will remain unchanged in its position.

**Align Right**

If several objects have been selected in one graphic, the objects will be moved in such a way that their rightmost points will be on a common vertical line. The object that has been most right will remain unchanged in its position.

**Align Top**

If several objects have been selected in one graphic, the objects will be moved in such a way that their most top points will be on a common horizontal line. The object that has been most top will remain unchanged in its position.

**Align Bottom**

If several objects have been selected in one graphic, the objects will be moved in such a way that their most bottom points will be on a common horizontal line. The object that has been most bottom will remain unchanged in its position.

**Center Vertically**

If several objects have been selected in one graphic, the objects will be moved in such a way that all centers will be aligned to the common vertical center line.

**Center Horizontally**

If several objects have been selected in one graphic, the objects will be moved in such a way that all centers will be aligned to the common horizontal line.

**Same Width**

If several objects have been selected in one graphic, the broadest object will remain unchanged and the more narrow objects will be stretched to the width of the broadest object.

**Same Height**

If several objects have been selected in one graphic, the highest object will remain unchanged and the objects with a lower height will be stretched to the height of the highest object.



Some of the functions listed here only make sense if several objects have been selected. To highlight several objects, the following three options are available:

Highlight an object via mouse click. Hold the <Shift> key while clicking on objects to highlight/mark additional objects.

Left-click with the mouse an area in the graphic that does not contain any objects. Then drag the mouse while holding down the left mouse key over the objects you wish to highlight/mark. A dotted line will appear behind the mouse pointer. Once all the desired objects are located within that dotted line, release the mouse key. All marked/highlighted objects now have junction points.

*Open the **Graphic Content** explorer. Select multiple objects by clicking on them while holding down the <Ctrl> key.*

8.4.2.4 Edit Submenu

▼ Submenu: Graphic - Edit

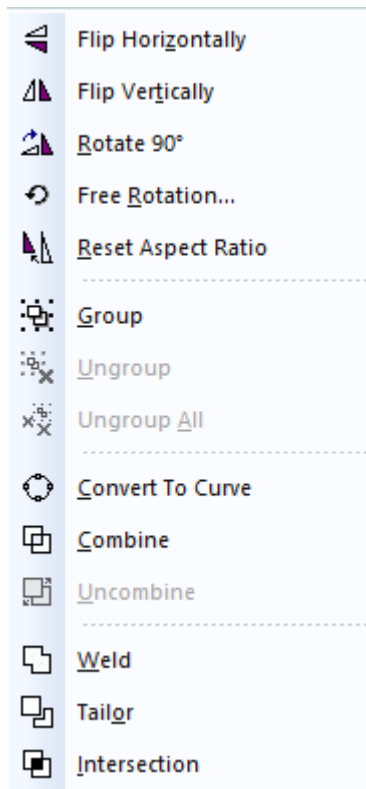


Figure 268: Submenu: Graphic - Edit

▼ Functions: Submenu: Graphic - Edit



Flip Horizontally

The selected object(s) are flipped at the central, horizontal axis.



Flip Vertically

The selected object(s) are flipped at the central, vertical axis.



Rotate by 90°

The selected object(s) are rotated by 90° clockwise around the (common) center.



Free Rotation...

First of all, a small popup is displayed in which the rotation values are indicated in degrees. When pressing the enter key (<Enter>), the selected objects are rotated correspondingly around the (common) center. In case of positive values, the rotation is executed contra clockwise and clockwise in case of negative values.



Reset Aspect Ratio

If width or height have been compressed or stretched, this function resets the original aspect ratio.

**Group**

In case several objects are marked, they can be grouped. It is also possible to group groups with each other or with other objects.

**Ungroup**

This function ungroups the marked group again into its original elements.

**Ungroup All**

Ungroups the marked group incl. contained subgroups.

**Convert to curve**

This function allows you to convert selected objects of the types: ellipse, rectangle, or text into a curve.

**Combine**

Using this function, selected objects of the type curve, rectangle, ellipse or text can be combined to one joint object of the type curve.

**Uncombine**

Combined objects can be uncombined again, however the single components are objects of the type curve. Rectangles, ellipses or texts cannot be restored.

**Weld**

With this function you can fuse the area of two objects that are on top of one another into one object with only one outline that defines the area. The filling and pen properties of the object that is on top are applied to the combined object.

**Tailor**

With selected objects that are on top of one another, this function allows you to keep the top object intact, minus the intersection between the top and lower objects.

**Intersection**

With selected objects that are on top of one another, this function allows you to keep the part of the area of the top object that intersects with the objects below remains intact.



Some of the functions listed here only make sense if several objects have been selected. To highlight several objects, the following three options are available:

Highlight an object via mouse click. Hold the <Shift> key while clicking on objects to highlight/mark additional objects.






Left-click with the mouse an area in the graphic that does not contain any objects. Then drag the mouse while holding down the left mouse key over the objects you wish to highlight/mark. A dotted line will appear behind the mouse pointer. Once all the desired objects are located within that dotted line, release the mouse key. All marked/highlighted objects now have junction points.

*Open the **Graphic Content** explorer. Select multiple objects by clicking on them while holding down the <Ctrl> key.*

8.4.2.5 Powerclip Submenu

The Powerclip function allows you to combine sections of several objects into one object - a Powerclip object. This function requires an additional, closed object, for example in the shape of a rectangle, an ellipse, or any kind of closed outline. This object should be located above the objects to be cut / cropped.

ToDo: Powerclip

-  Draw an object (a closed outline, for instance) that encompasses the area to be displayed - the container.
-  Select the object(s) that are to be cut/pasted or inserted into the container.
-  Activate the function **Place inside container**.
-  Move the mouse (without pressing a mouse key) to the object container - pls. note that the mouse pointer has changed shape. Once the mouse has crossed the edge of the object container, the mouse pointer changes anew.
-  Click the left mouse key. The objects are loaded into the container and only the parts within the container are visible.

▼ Submenu: Graphic - Powerclip

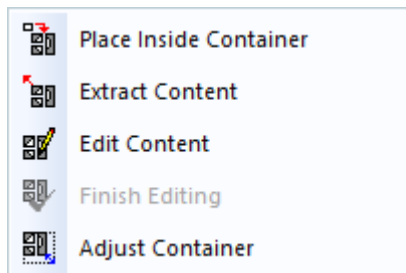


Figure 269: Submenu: Graphic - Powerclip

▼ Functions: Submenu Graphic - Powerclip



Place inside container (- Powerclip)

Upon activation of this function, the mouse pointer is displayed as a broad arrow. By clicking on the frame of a container (rectangle, ellipse or closed curve), the selected objects are grouped to a powerclip object. All parts of the objects out of the container become invisible.



Extract content

In case a powerclip object is selected, this function can be used to reverse the command **Place inside container**. All objects are removed from the container and stored as single objects in the graphic on the object stack.



Edit content

This function allows to edit a powerclip object. The powerclip object is put visually in the background so that the original objects become visible and can be edited.

**Finish editing**

With this function, the content editing of a powerclip is finished.

**Adjust container**

By activation of this function, the form of the container can be edited. The nodal points of the powerclip object (container) become visible and the form and location of the object can be changed.

8.4.2.6 View Submenu

▼ Submenu: Graphic - View

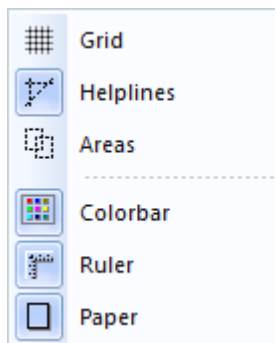


Figure 270: Submenu: Graphic - View

▼ Functions: Submenu Graphic - View

**Grid**

With this function you can show or hide the grid. The grid is a helpful tool for arranging/adjusting objects in a graphic. Via the function (**Adjust to grid**) objects can be directly docked to grid points.

**Helplines**

With this function you can show or hide the helplines. Like the grid, helplines can aid in aligning/adjusting objects in a graphic.

**Areas**

With this function, you can hide or show the defined display areas of a graphic.

**Color bar**

This function shows or hides the color selection on the right side of the graphic editor. Via Color Selection, you can directly assign colors to selected objects.

**Ruler**

With this function you can show or hide the ruler on the top and left edge of the graphic editor.

**Paper**

With this function you can show or hide the paper edge in the background of the graphic.

8.4.2.7 Options Submenu

▼ Submenu: Graphic - Options

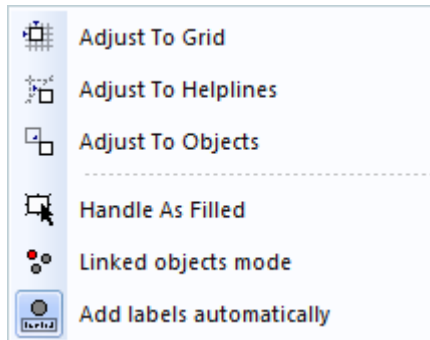


Figure 271: Submenu: Graphic - Options

▼ Functions: Submenu: Graphic - Options



Adjust To Grid

In case this function is active, objects will be adjusted to grid if they are moved or newly created.



Adjust To Helplines

In case this function is active, objects close to a helpline will be adjusted to the helpline if they are moved or newly created.



Adjust To Objects

In case this function is active, objects close to a nodal point, a vertical or horizontal line of an object, will be adjusted correspondingly if they are moved or newly created.



Handle As Filled

In case this function is active, non-filled objects can also be marked with the mouse pointer by clicking into the interior of the object.



Linked Object Mode

In case this function has been activated, newly drawn curves, rectangles and ellipses are automatically provided with a link to the datapoint marked in the explorer. In addition, the visibility settings will be set to **visible depending on content** and the animation settings to **none**.



Only those linked objects whose link refers to the currently marked datapoint are displayed!



Add labels automatically

In case this function is active, a datapoint that is moved into the graphic via drag & drop will be automatically assigned with a label containing the datapoint name.

8.4.2.8 GIS Map Submenu

These functions are only available for display of GIS maps and serve to control the various display formats.

▼ Submenu: Graphic - GIS Map

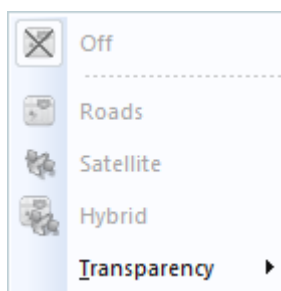


Figure 272: Submenu Graphic - GIS Map

▼ Functions: Submenu Graphic - GIS Map



Off

This function turns the display of the GIS Map (layer) off.



Sub menu: Graphic - GIS Map

This function switches the GIS display into Roads view mode.



Satellite

This function switches the GIS map display into the satellite view mode.



Hybrid

This function switches the GIS map display into the combined view mode (satellite and road).

- **Transparency**

Here you can open another submenu to select the transparency. In this menu, the transparency for the display can be selected in various levels (not percentages).

8.4.2.9 Symbols Submenu

In graphics, these menu functions allow you to render datapoints of respective datapoint categories either visible or invisible. This makes it easy to hide or redisplay respective information in the graphics. Visibility or invisibility pertains only to state graphics. Event graphics are displayed independently of these settings.

▼ Submenu: Graphic - Symbols

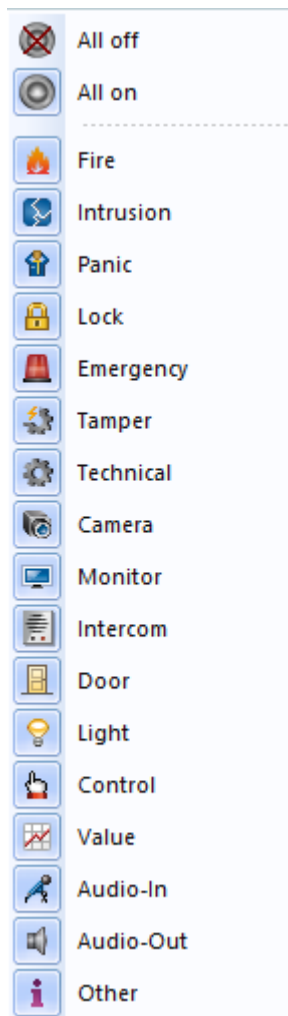


Figure 273: Submenu: Graphic - Symbols

▼ Functions: Submenu Graphic - Symbols



All off

With this menu function all linked objects in all state graphics can be rendered invisible.



All on

With this menu function all linked objects in all state graphics can be rendered visible.



Fire ... Other



With these menu functions the respective linked objects can be hidden or shown depending on datapoint categories in all state graphics.

8.4.2.10 Overlay Submenu

Using these menu functions, the overlays of the view field of camera datapoints can be made visible or hidden in the graphics. Thus it is easily possible to hide or display these overlays in the graphics.

The display of these overlays depends on the following settings:

- System settings (Global/Graphic/Camera view fields)
- Graphic settings (Tab GIS: Dimensioning+North angle)
- Camera-datapoint-settings (Tab camera: north angle, etc.)

▼ Submenu: Graphic - Overlays

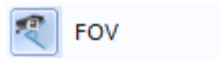


Figure 274: Submenu Graphic - Overlays

▼ Functions: Submenu Graphic - Overlays



FOV

Using this menu function, the display of camera view fields can be switched between visible and hidden in all graphics.

8.4.3 Folder Structure

Upon installation of WinGuard, it can be defined in which file the project data shall be stored (see [Directories and data storage](#)^[58]). The selected path can be found in the system settings under **Local Installation|System|General** and can be changed there, if required. In case no path has been defined in the settings, the project data will be located in the program directory.

The project folder, by default, contains the subfolder, **Graphics**, whose content can be viewed with the help of the **Graphics explorer**. If you have completed the Setup of the [Project Data](#)^[31] and have installed the Demo Project, you can find an example of an orderly folder structure here. On the one hand, graphics are differentiated by type, for example by imported CAD graphics, base graphics, or datapoint graphics. On the other, there is a division by buildings, floors, and facilities.

If you execute the installation without the demo project, you will find (by default) the two sub folders **Symbols** and **Buttons** in the **Graphics** folder. The functionality of [***](#)^[790]Symbol and [Buttons](#)^[795] is coupled into these folders with the integration of the graphics on which they are based. This is why you have to establish an assignment in the [Settings](#)^[424] under **System|Sub folders** if you wish to rename these folders.

8.4.3.1 Symbol Library

In WinGuard graphics, symbols are used to define frequently-used graphic elements such as sensors, fire detectors, etc. These [Symbols](#)^[790] can then be used in the actual display graphics. Additionally, symbols are used for the animated display of datapoint states within graphics. For this purpose datapoints can be assigned/linked to symbols.

If you have executed the [Setup of Project Data](#)^[31] and selected a projection with symbols, you already have a selection of symbols available to you. The Demo and Project data contain relevant examples with predefined animation, either by color change or image change.

Interactive symbols that correspond to the wishes of the user or meet regulations are available for most sensor types and can be loaded and assigned from the respective libraries. The libraries that come with WinGuard contain popular symbols. This allows for the creation of systems that conform to VdS and BHE requirements (German security agencies) as well as the Austrian Standard. Moreover, the integrated graphic editor enables you to develop user-defined symbols and to add symbols through import from other graphic systems or projects.

The graphics of the symbol library are saved in the folder, **Graphics\Symbols**. When inserting a symbol into a graphic, you can select the desired symbol from the graphics (WGD format) saved here.



Symbols must always be saved in the folder Graphics\Symbols or a subfolder!

8.4.3.2 Button Library

Graphics can be designed interactively via visible and invisible [buttons](#)^[795]. Buttons allow users to execute specific commands directly in the graphic via mouse click. WinGuard provides a large number of [commands](#)^[946] that can be linked with a button. These serve in navigation, control of other datapoints, and many other functions. If you do not wish to use a standard format for a button (rectangular or round) or other templates from the demo project, you can also create your own user-defined buttons for application in graphics.

The button library is located in the folder, **Graphics\Buttons**.

When inserting a button into a graphic, you can select from the graphics saved in WGD format here. Please see the [Button Tab](#)^[869] and the selection field **Graphic** in the Properties Dialog.

When inserting a button into a **Text**, you can select from the graphics saved in BMP format here. Please see the Dialog for [Text Buttons](#)^[906] and the selection field **Bitmap**.



Button graphics should always be saved in the folder Graphics\Buttons!

8.4.3.3 Project Graphics

Within the context of projects, it is recommended that particular attention be paid, from the very beginning, to the structure of the folders, and not just for reasons concerning system maintenance. The respective folders and folder structure can be easily established with the help of the graphic explorer. It has often proven practical to organize these by buildings and then according to type / use.

▼ Example: Graphic file structure

Graphic

 Bitmaps

 Buttons

 ...

 Project (Folder)

 Property 01 (Folder)

 Building 01 (Folder)

 CAD (Folder)

 CAD Plan ... (

 BP-P01-B01-F01 (Base plan of property 1, building 1, floor 1)

 ...

 BP-P01-B01-Fxx (Base plan of property 1, building 1, floor xx)

 DP-P01-B01-F01 (Datapoint plan of property 1, building 1, floor 1)

 ...

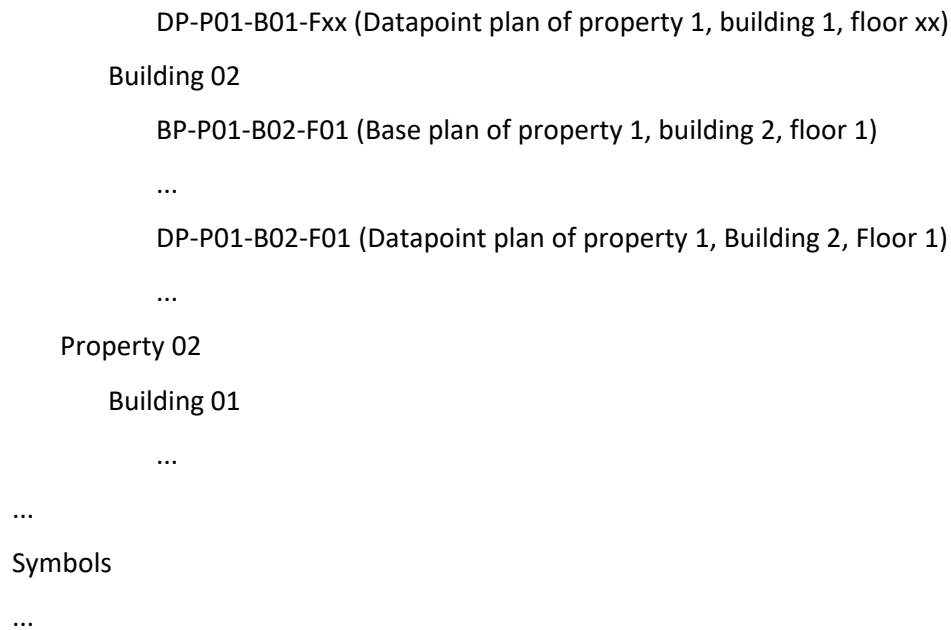


Figure 275: Graphic File Structure

8.4.4 System Settings

Via the menu command **System|Settings...** you can open the dialog, **Settings**. There, in the **Global** folder, you will find a number of presets in the subfolder, **Graphic**. These settings can be globally modified to meet your needs, but many of these can also be individually defined for workstations or profiles. The graphic-related system settings can be divided into the following sections: **Display**, **Editor**, **Animation**, **CAD Support**, **DWG/DXF Support**, and **DGN Support**.

You can find additional information regarding settings in the section, [Settings](#)⁴⁰⁴.

8.4.5 Display and Print Parameters

There are many areas in WinGuard where you can reference graphics. These include dialogs for editing locations or datapoints, and graphic-related commands such as [Switch Graphic](#)¹⁰³⁹, [Print Graphic](#)¹⁰⁰¹, etc. Commands, in turn, can be defined in several areas, for example under Buttons or other graphic objects, in event routing, within texts, or under the [Command Tab](#)⁸⁴⁶ for editing datapoints.

Whenever you can reference a graphic, you have the option of entering the name and parameters directly. Alternatively, the graphic can be selected via the dialog, **Select Graphic**, and the parameters can be defined via the dialog, **Parameters for Graphic...** . For the definition of the parameters, two similar dialogs are available: one for WinGuard graphics and a second for the integration of CAD graphics.

▼ Example: Reference to a Graphic


Company\Administration\Plans\BP_Administration 1F.\ ... 

Figure 276: Reference to a Graphic

▼ Function: Graphic Reference



(Graphic name)

This field contains the file path, the graphic name and the display parameters. The data can be entered with the help of corresponding dialogs (that can be opened with the following buttons) or alternatively also directly.

Blank (default) - no function.

... - select the graphic and parameter or enter the data directly.



Path and file name have to be entered in relation to the graphic subdirectory!



(File selection)

The button opens the dialog **Select graphic** from which the file path and graphic can be selected.

... - select the graphic.



(Graphic parameter)

The button opens the dialog **Parameter for graphic ...** in which the corresponding settings can be made.

... - if necessary, define the parameters.

In addition to the standard buttons for **close window**, **OK**, and **cancel**, the dialog window, **Parameters for Graphic '...'** includes, depending on the selected graphic type, the options to retrieve a specific display area of the graphic and to position it, to define the visibility or printability of layers, to assign graphics to individual frames, and to turn on the display for the state mode.

▼ Example: Dialog - Parameter for WinGuard Graphic

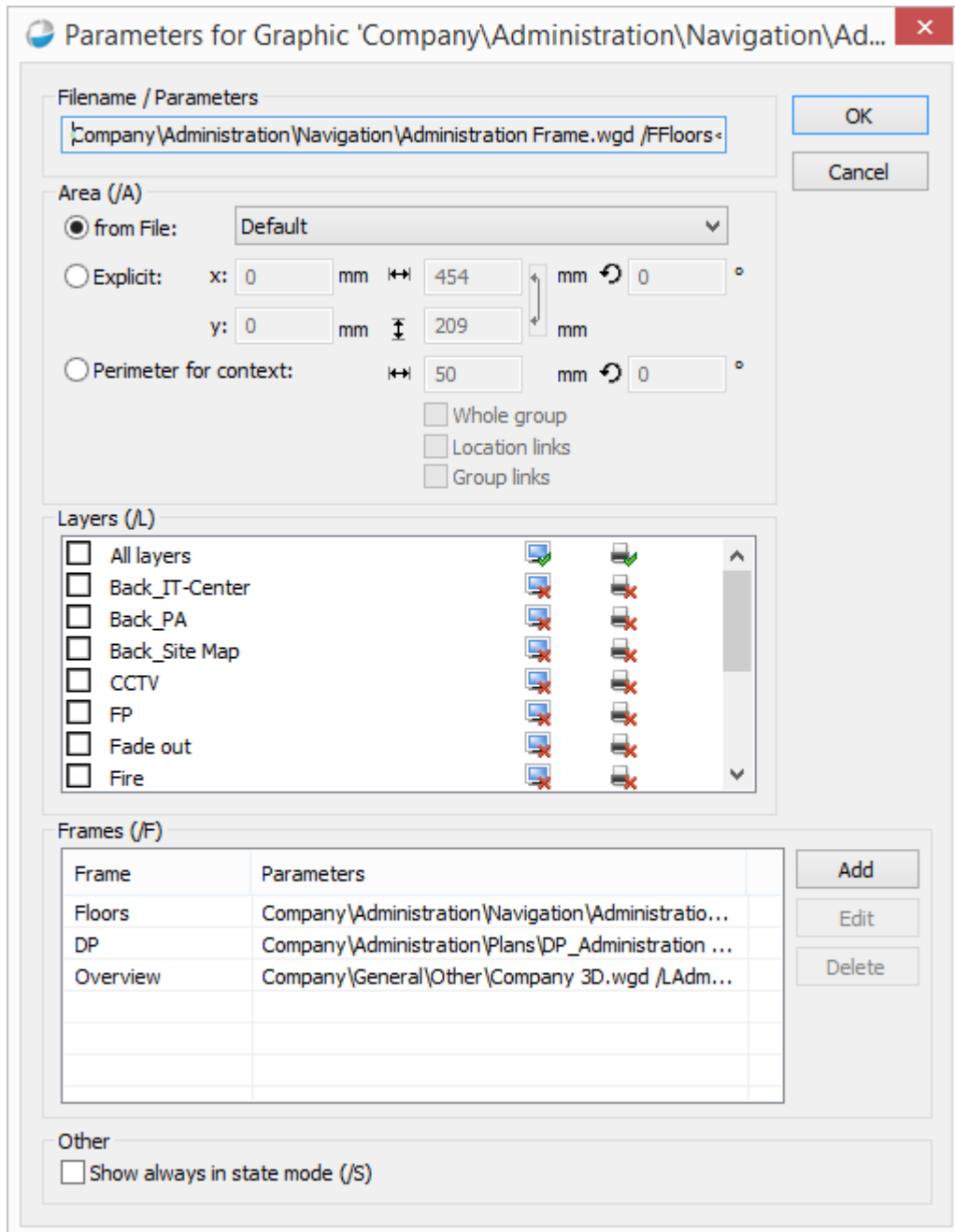


Figure 277: Parameters for Graphic

▼ **Example: Dialog - Parameters for CAD Graphic**

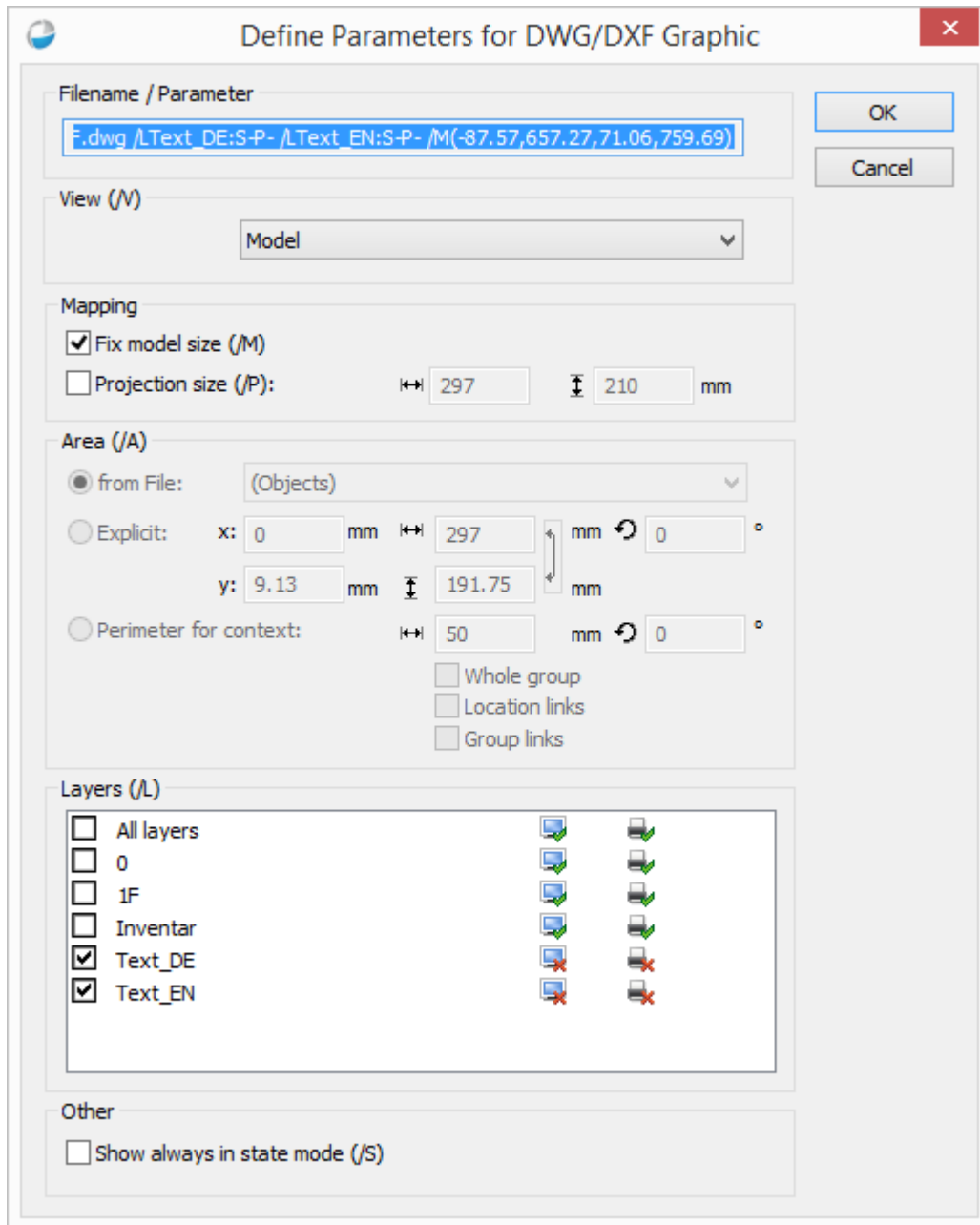


Figure 278: Parameter for CAD Graphic

▼ **Functions: General**

Button **OK**

Changes are accepted and the dialog is closed.

Button **Cancel**

Changes are discarded and the dialog is closed without confirmation.

▼ **Data section: View (/V)**

This data section is only available for CAD graphics.

(Selection Model / Layout)

Here you can select the model or one of the layouts defined in the graphic for the view of the CAD graphic in WinGuard. When displaying the model in frames, the fading in/out of objects may cause shifting, since the display area is determined by visible objects. When displaying layouts, on the other hand, only the print area of the DWG paper area is shown.

Model (default) - select the desired view if applicable.

▼ **Data section: Mapping**

This data section is only available for CAD graphics.

 Fix model size (/M)

With this option, you can determine the displayed size of the model view in order to avoid shifting when fading objects in or out.

 Projection size (/P)

When this option is active, an explicit size of the area to be displayed can be defined.

 mm

The value indicated here defines the width of the area that is to be displayed.

297 (default) - enter the desired width if applicable.

 mm

The value indicated here defines the height of the area that is to be displayed.

210 (default) - enter the desired height if applicable.

▼ **Data section: Area (/A)**

Here you can determine the type of display area definition. You can choose from predefined areas of the graphic, an explicit area definition, and an automatic area definition.

The following options are available:

From file (default) - the display area from the file is activated.

Explicit - the explicit definition of the display area is active.

Perimeter for context - the automatic display area definition is active.

 From file

If this option is active, a display area can be selected directly from the file. If no area was defined, only the **default** area is available.

Active (default) - the option "area from file" is active.

 - (Name of display area)

Here you can select one of the defined display areas from the graphic. Areas from CAD graphics that are defined accordingly are also available for selection.

Default (default) - select the display area if applicable.

Explicit:

If this option is active, the display area is defined based on position, size, and rotation. If the area is located within the source graphic, the respective section is displayed as enlarged if applicable. The values here always relate to the coordinate system of the source graphic.

Active - the option "area via explicit definition" is active.

- x: mm


The value indicated here is applied as the left edge for the display.

0 (default) - enter the desired position if applicable.

 **mm**

The value indicated here determines the width of the area that is to be displayed.

297 (default) - enter the desired width if applicable.

 **° (Angle)**


The value indicated here defines the rotation, counter-clockwise, of the area displayed.

0 (default) - enter the desired angle of rotation if applicable.

- y: mm

The value indicated here is used as the upper edge of the display.

0 (default) - enter the desired position if applicable.

 **mm**

The value indicated here defines the height of the area that is to be displayed.

210 (default) - enter the desired height if applicable.



(Aspect Ratio / Proportionality)

This option determines, when changes are made to width or height, whether or not the respective other value changes proportionally.

Pressed (default) - proportionality for changes is active.

Not pressed - proportionality for changes is not active.


Perimeter for context:

Defines the area of the source graphic that is dynamically displayed using the following fields.

Active - the option "perimeter for context" is active.



This option is only functional for event display of datapoints!

 **mm**

The value indicated here determines a dynamic area in the source graphic around all objects/symbols of the triggering datapoint/sensor for the display. The value is applied as the distance between the object(s) and the edge of the area.

50 (default) - enter the desired distance if applicable.

 **° (Angle)**

The value indicated here determines the rotation, counter-clockwise, of the displayed area.

0 (default) - enter the desired angle of rotation if applicable.

**Whole Group**

Instead of the objects/symbols linked with the triggering datapoint, all objects of the sensor group are included. A virtual frame with the defined distance to the symbols located outside of it is created around all these objects to define the area displayed.

Active - all objects linked with the triggering datapoint and its sensors determine the area to be displayed.

Inactive (default) - all objects linked with the triggering datapoint/sensor determine the area to be displayed.

**Location links**

With this option objects that have a location link can also be included in the creation of display areas, provided the triggering datapoint/sensor is linked with the respective location.

Active - all objects with the appropriate location link are considered in the determination of the dynamic display area.

Inactive (default) - objects with location link are **not** considered in the determination of the dynamic display area.

**Group links**

With this option objects with a group link can also be included in the creation of display areas, provided the triggering datapoint/sensor is assigned to the respective group.

Active - all objects with the appropriate group link are considered in the determination of the dynamic display area.

Inactive (default) - objects with group link are **not** considered in the determination of the dynamic display area.

▼ Data section: Layers (/L)

In this section you can make definitions concerning the visibility and printability of the layers. By default, the checkboxes of the layers are not activated, meaning that the respective settings from the graphics that are being used are applied. If the settings in the applicable graphics change, these changes have immediate effect on the display defined here.

The settings for the display of the layers are defined here through editing of the checkboxes. The settings for the visibility and printability can be defined only after activation. If these settings are changed in the respective graphic, these will then not have any effect on the display defined here.



The selection and control of the layers is also available for CAD graphics!

**All layers**

By activating this option, all other checkboxes are also activated. This means that the settings currently defined here apply to all layers, provided that individual settings for the layers are not subsequently changed.

Active - through activation the checkboxes of all layers are also activated.

Inactive (default) - through deactivation the checkboxes of all layers are also deactivated.

<Layer Name>

By activating this option, the visibility/printability can be defined for the individual layers here.

Active - the settings defined here apply.

Inactive (default) - the settings from the referenced graphic apply.

**(Visibility Layer)**

The element determines if the layer is visible or not in display.

Active - the layer is visible.

Inactive - the layer is **not** visible.



This option can only be changed if the respective checkbox of the layer is active!

**(Printability Layer)**

This element determines if, during print, the layer is printed as well or not.

Active - the layer is printed while printing.

Inactive - the layer is **not** printed while printing.



The option can only be changed if the respective checkbox of the layer is active!

▼ Data section: Frames (/F)

This data section is only available for WinGuard graphics.

**(Frame / Parameters)**

This table shows the frames of the graphic that have another graphic (parameter column) assigned for display. After selecting a line, the necessary definitions can be made via the following functions:

**Add**

This function opens the dialog, **Frame Settings**, in which a frame can be selected from the graphic and another graphic can be assigned to it. Additionally, you can define the parameters for display of the graphic in the frame here.

**Edit**

This function also opens the dialog, **Frame Settings**, provided that an already existing definition is selected in the table.

**Delete**

With this function the definition selected in the table is deleted following respective confirmation.

▼ **Example: Dialog - Frame Settings**

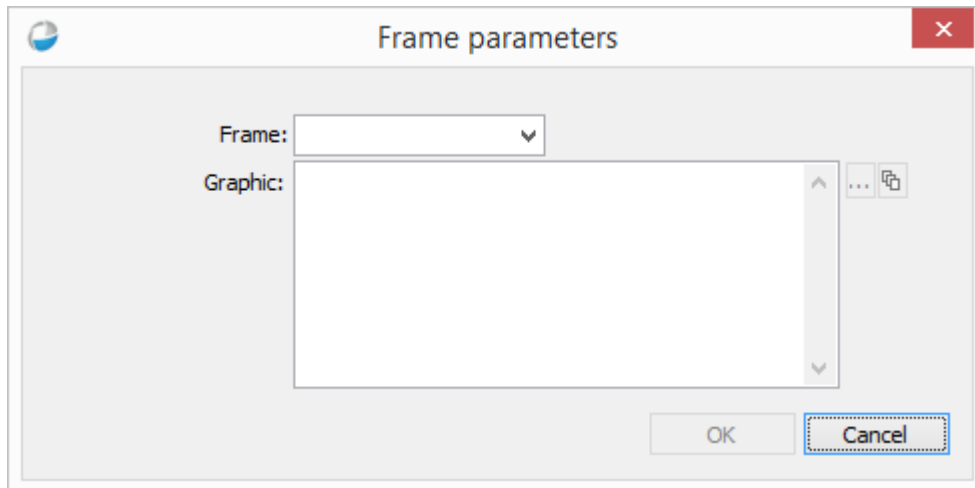


Figure 279: Frame Settings

▼ **Data section: Frame Settings**

Frame:

Here you can select the frame that is to be defined from those defined in the graphic.

Blank (default) - select the frame to be edited if applicable.

Graphic:

In this field the full content of the frame definition is shown. It consists of the path, the name of the graphic, and the parameters that follow for display.



(File selection)

The button opens the dialog, **Select Graphic**, in which you can select the file path and graphic.



(Graphic parameters)

This button opens the dialog, **Parameters for Graphic...**, in which the following settings can be made.

Also opens the WinGuard dialog, **Parameters for Graphic**, in which the settings described in this chapter, specifically in the section [Parameters for Graphic Display \(up to Version 8 X2 Build 53\)](#)⁷⁷⁶ can be made.

▼ **Data section: Other**



Show always in state mode (/S)

This option determines if the graphic should be shown in display mode or state mode in event display.

Active - the graphic is shown in state mode in event display.

Inactive (default) - the graphic is shown in event mode in event display.



During display without event context, the graphic is always shown in state mode!

The parameters that are entered in this dialog and adopted are shown as strings in the entry field. Those who are familiar with the syntax may choose to enter or change the parameter via keyboard directly in this field.

8.4.6 Graphic Content Explorer

The graphic content explorer shows content only if a graphic is open in the graphic editor. Here, all elements/objects of the graphic, such as **grid**, **helplines**, **areas**, and **layers** are listed with the **objects** they contain. This gives you easy and specific access to individual objects, and also provides you with a quick overview of the components of linked objects such as **groups**, **combinations**, and **Powerclips**.

After selection of an object, you can execute the same editing functions via the context menu that are also accessible by right-clicking on the highlighted object in the [Graphic Editor](#) ⁸⁰⁹.

However, the following differences exist compared to the highlighted object in the graphic editor:

- You can highlight/mark objects separately and edit them individually even if they are an element of a group. That is why the context menu contains the function of separating an object from a group.
- It is **not** possible to highlight layers without activating them. As a result, the functions delete and lock are not available via the graphic structure explorer.
- To highlight several objects in the explorer, click on the desired objects while holding down the **<Ctrl>** key.
- You can open a context menu for the grid, helplines, and areas via the graphic structure explorer. These are not accessible via the Graphic Editor window.

Example: Graphic Content Explorer

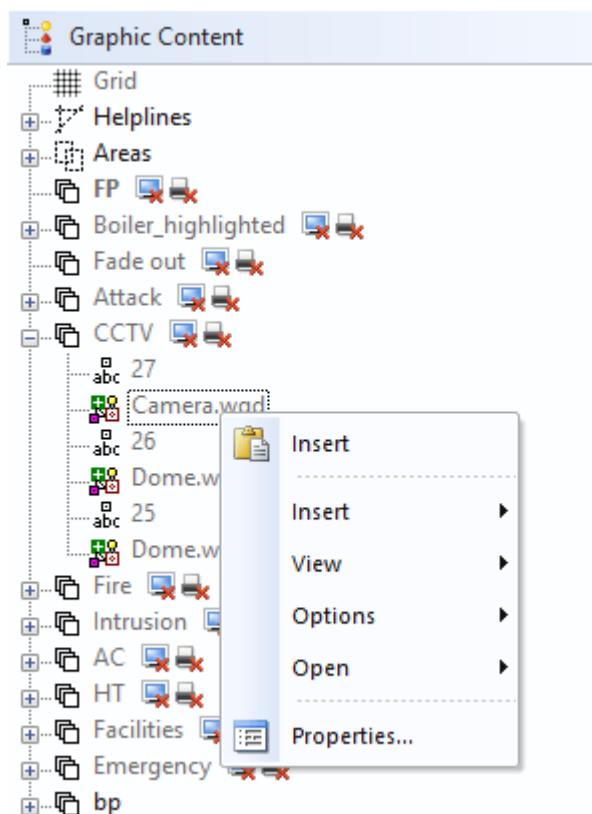


Figure 280:Graphic Content Explorer

▼ Functions: Graphic Content Explorer (Titlebar)



(Close explorer window)

This function closes the explorer window, provided that the function has been activated for the user.

▼ Base elements: Graphic Content Explorer

The explorer window of the graphic content contains four different base elements in which the various objects of the graphics can be found. Which commands are available also depends on these objects. The commands for the objects located in the layers are described in the respective properties of the objects.



Grid



Helplines



Areas



Layer

▼ Example: Context Menu - Grid



Figure 281: Context Menu - Grid

▼ Functions: Context Menu - Grid

- **Visible**
This function turns the visibility of the grid either on or off.
- **Grid Properties ...**
This function opens the dialog, **Properties**, which is described in detail in the section, [Properties Tab](#) ^[846], under [Grid Tab](#) ^[837].

▼ Example: Context Menu - Helplines

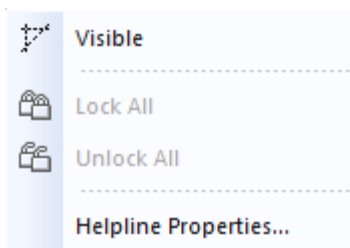


Figure 282: Context Menu - Helplines

▼ Functions: Context Menu - Helplines



Visible

This function turns the visibility of the helplines on or off.



Lock All

This function locks all helplines.



Unlock All

This function unlocks all helplines.

- **Helpline Properties...**

Opens the Properties Dialog that is described in detail in the chapter, [Graphic Properties](#)⁸⁴⁶, with the opened tab, "Helplines".

▼ Example: Context Menu - Specific Helpline

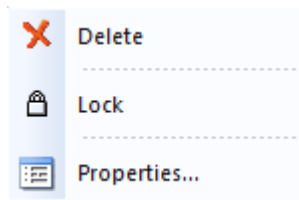


Figure 283: Context Menu of a specific helpline

▼ Functions: Context Menu - Specific Helpline



Delete

This function deletes the highlighted helpline.



Lock

This function locks the highlighted helpline.



Unlock

This function unlocks the highlighted helpline and is only available if the highlighted helpline is locked.



Unlock All

This function unlocks all helplines and is only available if locked helplines exist.



Properties

This function opens the dialog, **Properties**, which is described in detail in the section [Properties Tab](#)⁸⁴⁶ under [Helplines Tab](#)⁸³⁹.

▼ Example: Context Menu - Areas

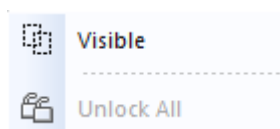


Figure 284: Context Menu - Areas

▼ Functions: Context Menu - Areas



Visible

This function turns the visibility of the areas on or off.



Unlock All

Unlocks the highlighted objects that were previously locked for editing.

▼ Example: Context Menu - Specific Area

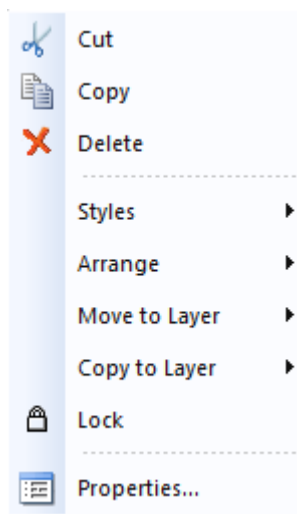


Figure 285: Context Menu - Specific Area

▼ Functions: Context Menu - Specific Area

The functions for editing areas are generally used in the Graphic Editor. The context menu in the Graphic Content Explorer only provides a selection of the possible functions.



Cut

With this function, the highlighted area can be cut out.



Inserting can only be done in the Graphic Editor!

- **Copy**

With this option the highlighted area can be copied.



Inserting can only be done in the Graphic Editor!

- **Delete**


This function deletes the highlighted area.

- **Styles**



These functions are not available here!

- **Arrange**

 *These functions are not available here!*

- **Move to Layer**

 *These functions are not available here!*

- **Copy to Layer**

 *These functions are not available here!*

-  **Lock**

This function locks the highlighted area.

-  **Unlock**

This function unlocks the highlighted area and is only available if the highlighted area is locked.

-  **Unlock All**

This function unlocks all areas and is only available if locked areas exist.

-  **Properties**

This function opens the dialog, **Properties**, that is described in detail in the section [Properties Tab](#)^[846] under [Area Tab](#)^[867].

▼ **Example: Context Menu - Individual Layer**

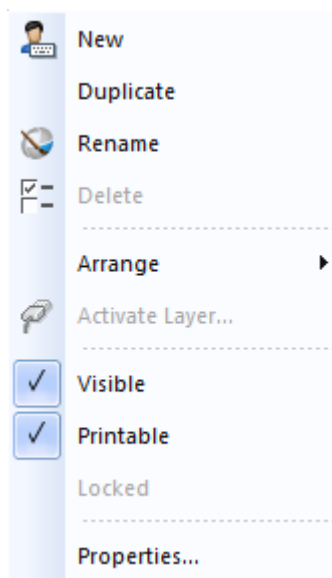


Figure 286: Context Menu - Individual Layer



- **New**

With this function you can add a new layer below the active layer. The dialog, **Name Layer**, is opened for this function.


- **Duplicate**

This function enables you to duplicate the active layer. The duplicated layer is added below the active layer without further confirmation. The name of the duplicated layer is the same as that of the original layer with a consecutive number attached at the end.

- **Rename**

With this function the layer can be renamed. The dialog, **Name Layer**, is opened for this function.

- **Delete**


 *Deleting an active layer is not possible!*

- **Arrange**

With this function you can change the position (hierarchy) of the layer.

You can select from the following options: *to the top, to the bottom, one position up, one position down*.

- **Activate Layer**

 *Activation occurs automatically by selection of the layer!*

Visible


This function turns the visibility on or off. The check symbol to the left of the function indicates if the visibility is turned on or off.

Printable

This function turns the printability of the layer on or off. The check symbol to the left of the function indicates if the printability is turned on or off.

Locked

This function unlocks the respective layer if applicable. The check symbol to the left of the function indicates if the layer is locked or unlocked.

 *Locking is not possible here as the active layer cannot be locked!*



Properties

This function opens the dialog, **Properties**, that is described in detail in the section [Properties Tab](#)⁸⁴⁶ under [Layer Tab](#)⁸⁵⁸.

8.4.7 Symbols

Symbols are fundamentally WinGuard graphics. Symbols are utilized to define frequently-used graphic elements such as sensors, fire detectors, etc. These symbols can be integrated into the actual display graphics. One advantage of symbols is that they are saved only as a reference in graphics and only when the display graphic is loaded is the current symbol retrieved from the library.

Symbols are predominantly used for animated display of datapoint states within graphics. For this purpose, symbols in the graphics are linked with datapoints. Presets for symbol animation are made early on - when the symbol is added. Symbols can be animated via a change in color or image. For color changes, one of the symbol colors is replaced with a color assigned to a certain state upon change into that state. For image changes, the defined symbols defined in the symbol graphic for the respective states are displayed.

If you have executed the [Setup Project Data](#)^[31] and have selected a projection with symbols, you already have a selection of symbols available to you in the symbol folder. The Demo Project Data provides various symbols according to system/installation type, including respective predefined animation, either via color change or image change. A symbol library with Vds symbols (as of January 2015) is also available.

8.4.7.1 Explorer

The symbols explorer shows all graphic files and folders saved in the sub folder **Graphics\Symbols** of the WinGuard Project Folder. What is important for display of the folder in the explorer bar is the name that is assigned in the [Settings](#)^[404] under [System](#)^[424] in the section, sub folders for **Symbols**. In order for the files to be displayed here, they must be in a graphic format supported by the system.

The symbols explorer also has a special feature: to the left of the file name, it also displays the respective symbol as icon.

▼ Example: Explorer - Symbols

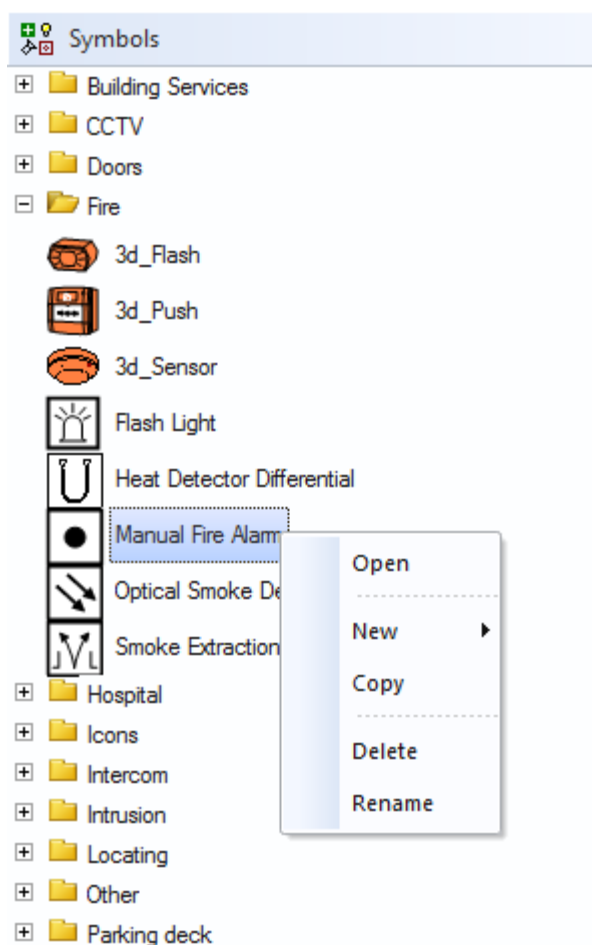


Figure 287: Explorer - Symbols

▼ Functions: Explorer - Symbols (title bar)



(Close explorer window)

With this function the explorer window can be closed, provided that it is activated for the user.

▼ Functions: Explorer - Symbols (general)

The explorer for symbols provide some additional functions. Data structures can simply be displayed with the symbol as an icon. A preview of the symbols in a separate window is not possible.



(One folder up)

This function navigates into the next upper folder.



(Select subfolder)

This function opens the list of the subfolders for selection and shows the actual path.

▼ Functions: Explorer (General)

The symbols explorer does not have general functions. Simply the data structure and a preview of the symbols are shown.

- **Open**
This function opens a window of the Graphic Editor into which the respective symbol is loaded.
- **New**
This function opens a selection with which a new symbol (graphic) can be added to the selected folder with the name, **New Symbol**, or a new folder can be added with the name, **New Folder**. If an element with this name is already in existence, a consecutive number is attached to the name.
- **Copy**
This function generates a copy of the selected symbol file in the same folder under the same name, but with a consecutive number attached to it.
- **Delete**
This function deletes the selected file or the selected folder including all subfolders and content following appropriate confirmation.
- **Rename**
With this function you can change the name of the selected symbol or folder directly in explorer. This function can also be executed through two delayed mouse clicks on the entry.

8.4.7.2 Create Symbols

When creating symbols, as opposed to other graphics, a few special features need to be observed. All symbols must be created as graphics in WGD format and saved in the Symbol folder or a subfolder. Additionally, all graphic elements associated with a symbol must be consolidated together into one group. For symbols, the settings for later animation need to be set accordingly on the [File Tab](#)⁸³¹ of the graphic document.

First, retrieve the menu command **Grafik|New** and open the [Graphic Editor](#)⁸⁰⁹. Add all objects you wish to use, such as rectangles, ellipses, curves, or imported graphic objects (for example, PNG, JPG, etc. files). Edit the objects according to your wishes (filling or pen color, transparency, size, relative position to one another, etc.) and decide whether the animation should occur via color change or via image change.

To create a group, highlight/mark all graphic objects, for example, by moving the mouse pointer into an area of the graphic that does not contain any objects, clicking on that area with the left mouse key and, while holding down the left mouse key, dragging the mouse diagonally over the objects to be marked. While dragging, you will be pulling a dotted line in the form of a rectangle behind the mouse pointer. Once all desired objects are enclosed by the dotted line, release the mouse key - the respective objects are then selected.

Now you select **Graphic|Edit|Group** in the menu or click on the respective symbol in the toolbar. It is easiest to see if the grouping was executed as desired via the [Graphic Content Explorer](#)⁷⁸⁵. From there, you can undo the grouping or highlight/mark individual elements of the group for editing.



Symbol graphics must always be saved in the folder Graphics\Symbols or in a subfolder!



Symbols in the symbol graphics cannot contain a Link Tab!

8.4.7.3 Using Symbols

It is most convenient if you insert symbols into a graphic by dragging a datapoint from the datapoint explorer into the graphic editor (drag&drop). In this manner, the symbol in the graphic already contains the link to the datapoint and, if applicable, a label with the name of the datapoint. This depends on whether the datapoint has been sufficiently supplied.

Sensor types must be established under the menu item **Other|Sensor Types**. This essentially means defining sensor names and assigning a symbol from the symbols library to them. Then you must assign one of the sensor types to the datapoints.

Alternatively, you can drag a symbol from the symbols explorer into the graphic (via drag&drop). However, you must then manually complete and add the [Link Tab](#)⁸⁶⁰ and possibly the [Label Tab](#)⁸⁵⁶ via the **Properties** dialog of the symbol using the buttons on the [General Tab](#)⁸⁵⁴. On the [Symbol Tab](#)⁸⁸², you can also define the type of referencing for the symbol.

8.4.7.4 Symbols with Color Change

For animation by color change, you determine a color for a symbol (animation color) that is later replaced by the respective state color from the animation scheme. To do so, all objects of the symbol must be grouped together.

Don't forget the presets for animation by color change in the Properties dialog of the graphic on the [File Tab](#)⁸³¹.

▼ **ToDo: Create symbol with color change**

Create / Edit Symbol










Retrieval of the graphic editor.
(Menu: **Graphic** or directly via the explorer).




Create a new graphic in the folder, Symbols, or select an existing graphic.

Create / Edit Symbol

-  Create a symbol from graphic objects such as rectangles, curves, bitmaps, etc. and subsequently group all objects together.
 -  *This symbol is used for all states!*
-  Define the animation color.
 -  *The animation color is the color in the symbol that, in display, is replaced by the respective state color from the animation scheme!*
-  Select an animation scheme.
-  Save.
-  Test.

8.4.7.5 Symbols with Image Change







For animation through image change, a separate symbol is created for every state in the graphic. In display, the respective symbol is shown, depending on the state. The position of the objects (groups) in the object stack of the graphic determines the assignment to the state (please see table below). It does not matter if the individual symbols are defined on one or several layers. For more information on this topic, please also see the sections [Working with Layers](#)^[825] and [Submenu: Arrange](#)^[765]. Furthermore, it is recommended that the individual symbols are of the same size. You can use the [Graphic Content Explorer](#)^[785] to review the arrangement of your groups from top to bottom.

 *For symbol graphics that are to be animated by image change, we recommend arranging the symbols on individual/separate layers.*

During display, the object (group) is used from the respective layer (1 - 10), depending on state. For example, the top object is used when the respective datapoint is **idle**, the second for the state, **Alarm**, etc. (please see table below).

Don't forget to define the preset for animation through image change in the Properties Dialog of your graphic on the [File Tab](#)^[831].

▼ ToDo: Create symbol with image change**Create / Edit Symbol**

-  Retrieval of the graphic editor.
(Menu: **Grafik** or directly via the explorer).
-  Create a new graphic in the Symbols folder or select an existing one.
-  Create a layer for every state.
-  Create a symbol for every state on the respective layer from graphic objects such as rectangles, curves, bitmaps, etc. and then compile the objects of every symbol into a group.
 -  *A symbol is used for every state!
The position in the object stack determines the assignment to the state.*
-  Save.

Create / Edit Symbol

Test.

▼ Assignment of drawing level (layer) and state

The following table shows the assignment of layers and states.

Drawing Level (Layer)	Datapoint State	Datapoint Value
1	Idle	Background
2	Alarm	Value exceeded
3	Fault	Value critical
4	Event + Armed	Value normal
5	Off + Off + Disarmed + Lock	-
6	Active	-
7	Unknown	-
8	Pre-alarm + Warning	-
9	RevAlarm + RevFault + RevEvent	-
10	Revision	-



For animation through image change, if a symbol graphic contains less than ten objects, the bottom object is always used whenever there is no individual object for the datapoint state!

8.4.7.6 Use Symbols from AutoCAD

For working with CAD files and using CAD symbols in WinGuard, please read the section [CAD Graphics](#)

797.

8.4.8 Buttons

Buttons allow the user to execute certain commands directly in the graphic per mouse click. WinGuard provides a large number of [Commands](#)⁹⁴⁶ that can be controlled by a button. Buttons can be used for navigation to other graphics, the activation of certain datapoints, and many other functions.

If you do not wish to use the standard button format (rectangular or round) or any of the other templates from the demo project, you have the option of creating user defined buttons for application in graphics. These graphics are handled basically like other WinGuard graphics that, similar to symbols, must be filed in a special place, namely the subfolder **Buttons** of the Graphic folder. A button graphic normally consists of two objects that can be used for the two possible states of the button.

8.4.8.1 Create Buttons

When creating buttons, a few special features need to be observed. All symbols must be established as a graphic in WGD format and saved in the button folder. Furthermore, all graphic elements associated with a button must be gathered into a group.

First, retrieve the menu command **Graphic|New** and open the [Graphic editor](#)⁸⁰⁹. Then add all the objects you wish to use, such as rectangles, ovals, curves, or imported graphic objects (for example, .PNG, .JPG, etc. files). Edit these objects according to your wishes (line and fill colors, transparency, size, relative position in relation to one another, etc.).

To create a group, mark all graphic objects, for example, by mouse clicking in an area of the graphic that does not contain any objects and dragging the mouse over the objects to be marked while holding down the left mouse key. You will drag a dotted line in the form of a rectangle. When all desired objects are within this line, release the mouse key. The respective objects are now selected.








Next, in the menu **Graphic|Edit|Group** select or click on the respective symbol in the toolbar. You can check via the [Graphic Content Explorer](#)⁷⁸⁵ if the grouping was executed properly. From there, you can ungroup the elements if applicable, or mark individual items in the group for editing.


Create a second grouped object for the second state of the button in the same manner. Similar to the symbols with image change, here, too, the position in the object stack defines the display. Objects can be arranged on one or various layers. The upper object is displayed in **Normal** view, the lower object in **Active view**.

Use the [Graphic Content Explorer](#)⁷⁸⁵ to review the arrangement of your groups from top to bottom. As soon as you have saved your file in the folder, **Graphics\Buttons**, this graphic is available for selection in the [Button Tab](#)⁸⁶⁹.

▼ ToDo: Create button

Create / edit button

-  Open the graphic editor.
(Menu: **Graphic** or directly via the explorer).
 -  Create new graphic in the Buttons folder or select an existing one.
 -  Create a layer for both states.
 -  Create a symbol for the two states, **release** and **press**, on the respective layer using graphic objects such as rectangles, curves, bitmaps, etc. and subsequently group the objects of every symbol.
-  *A symbol is used for every state!
The position in the object stack determines the assignment to the state.*
-  Save
 -  Test

 **Button graphics must always be filed in the folder Graphics\Buttons!**

8.4.8.2 Insert Buttons

You can insert buttons into a graphic via various means: via the menu **Graphic|Insert|Button...**, via the context menu of a graphic in the graphic editor, or via a button in the [toolbar](#)⁸¹⁴ to the left of the

graphic editor. When inserting, the dialog **Properties** for buttons is immediately displayed. Here you can make the definitions regarding functionality and appearance of the button.

On the [Button Tab](#)⁸⁶⁹, you can change the mode and thereby the actions of the button when it is clicked, or when a datapoint it may be linked to experiences a change in state ([Link Tab](#)⁸⁶⁰). On the [Button Tab](#)⁸⁶⁹ you can also change the appearance of the button and select from pre-defined forms or user-defined graphics in the button library.

Via the [Command Tab](#)⁸⁴⁶, which encompasses the two sub tabs **press** and **release**, you can determine which of the numerous [commands](#)⁹⁴⁶ available in WinGuard should be executed through the respective button action.

8.4.9 CAD Graphics

WinGuard cannot only process files in its own **.WGD** format, but also supports different bitmap and vector graphics formats. The AutoCAD® vector graphic formats **.DWG** and **.DXF** and the **.DGN**-Format from MicroStation® are of particular importance.

To optimise data supply, WinGuard can detect and interpret specially defined objects in AutoCAD® graphics. This enables the indicated objects such as e.g. datapoints, detectors, areas etc. to be recognised and automatically animated.

It is recommended to use the more compact **.DWG** format. The supported AutoCAD® versions depend on the applied WinGuard version.

Supported AutoCAD®-Versions:

- WinGuard X4 Graphics incl. AutoCAD® 2017

Supported MicroStation®-Versions:

- WinGuard X4 Graphics incl. MicroStation® V8i

The graphics can be imported directly into WinGuard graphics or integrated as objects (as copy or with reference). When using the dynamic connection the most recent graphics are displayed in WinGuard upon their replacement in the corresponding folders. This is automatically executed without having to change the graphics definitions in WinGuard.

AutoCAD® is a trademark from **Autodesk Inc.**

MicroStation® is a trademark from **Bentley Systems Inc.**



The usage of CAD-Graphic references should be the preferred kind of integration.

8.4.9.1 Integration

When using AutoCAD graphics in WinGuard there is the possibility to insert them as objects into WinGuard graphics (.WGD):

- **As reference with referencing to the CAD graphic**
In case of an integration as reference, the current graphic will always be displayed in WinGuard as soon as it has been replaced in the corresponding folder. This is done automatically without having to change the graphic definition in WinGuard.
- **As copy without any further referencing to the CAD graphic**
In case of an integration as copy, the graphic is transferred into WinGuard objects and saved in the WinGuard graphic. Changes (replacement or deletion) of the original CAD graphic are not automatically detected in the WinGuard graphic and thus not displayed. However, this integration form offers the advantage that the display time for large graphics is mostly much less.
- **As import without any further referencing to the CAD graphic**
In case of an integration as import, the graphic is transferred into WinGuard objects and saved in the WinGuard graphic. However, in contrast to the integration as copy, the CAD graphic characteristics will be lost but it will lead to the fact that single elements of the CAD graphics become available and changeable (only for DWG/DXF)

Upon selection of the file the AutoCAD layers to be later displayed in WinGuard can be selected via an additional dialogue. If no particular settings are made for the layers, the following default settings will be applied.

- **DWG/DXF**
The model is always displayed in 2D view, no matter how it looks like in e.g. AutoCAD or what has been lastly chosen in this program.
- **DGN**
It will always be displayed just as in MicroStation®, e.g. the view lastly active in this program. However, if no view was active in MicroStation®, the first view that is found will be displayed (first view of the first view group).
Attention: In MicroStation®, views are windows and can be opened and arranged in any way, however WinGuard can only open one view at the same time.

8.4.9.2 Linked Objects

As a matter of principle there is the possibility to link graphic objects from CAD graphics with objects in WinGuard and to replace them by WinGuard symbols in order to display them. In addition to the linkage with datapoints and their detectors resp. datapoint groups there is also the possibility to assign locations. However, the use of datapoint groups and locations is currently only possible for graphics in DWG/DXF format, not for DGN format. In addition panes can be defined in the CAD graphics that can be later used as graphic sections (display panes) in WinGuard.

Objects for WinGuard:

- Datapoints and their detectors
- Datapoint groups
- Locations
- Areas for display


All objects that shall be actively used in WinGuard have to be defined as blocks in DWG/DXF graphics and as fields in DGN graphics. These blocks resp. fields have to be further marked with attributes resp. tags for definition of the data for the linkage with WinGuard.

Using DGN graphics there is an additionally way to link datapoints with a text of a tag.

Graphic attributes/tags for linkage of CAD graphics with WinGuard:

- **For datapoint name**

WinGuard datapoint names, if necessary with detector number.


 *Datapoint groups are not supported by DGN!*

- **For detector number**

WinGuard detector number.

- **For location**

Location name.

 *Locations are not supported by DGN!*

- **For area**

Name of the area. Areas serve for definition of view areas and are invisible during display in WinGuard.

- **For datapoint category**


WinGuard datapoint category. For undefined datapoint categories the default setting in WinGuard is applied (default datapoint category)

- **For detector type**

Name of the WinGuard detector type.


- **For animation scheme**

Name of the WinGuard animation scheme that shall be used for animation of the object. For undefined animation schemes the default setting in WinGuard is applied (default animation scheme).

 *Animation schemes are not supported by DGN!*

- **For animation color**

Color value (numerical / hex) of the color that shall be animated in the object. For undefined animation colors the default setting in WinGuard is applied (**Color for objects with link Link**).

 *Animation colors are not supported by DGN!*

The evaluation of the information is realized according to a fixed order. First it is checked according to data type resp. group, then according to location and afterwards according to area. This means that e.g. if you would like to link a location, the attribute for **datapoint name** may either not be defined for the object or the value of the attribute/tag has to be empty.



Name changes in WinGuard always require corresponding changes of the definitions in the graphics!



For location and area, no attribute may be defined for the datapoint name, otherwise the attributes for location and area will be ignored!



Datapoint groups and locations do not have their own state!

The animation of these elements can thus only be realized in case of events resp. in the event view but not in the state view!



Datapoint groups, locations, animation colors and schemes are only supported in DWG/DXF format!

8.4.9.3 Functions

Please note that the different graphic formats DWG/DXF and DGN are - even if only partly - treated differently in WinGuard. Thus e.g. when using DGN graphics, all defined fields (except areas) are replaced by WinGuard symbols for display. As for DWG/DXF, this function can be selected as an option so that the original symbols/blocks can be displayed as well. Due to this difference with regard to DGN graphics e.g. the definition of elements for locations and datapoint groups is not applicable in a reasonable way.

Main functions of DWG/DXF and DGN:

Function	DWG/DXF	DGN
Support of datapoints	✓	✓
Support of datapoint groups	✓	✗
Support of locations	✓	✗
Support of panes (Display panes)	✓	✓
Definition of animation colors and animation schemes	✓	✗
Display and color animation of the original symbols	✓	✗
Display and animation by symbol exchange	✓	✓
Color animation for symbol exchange	✓	✓
Image switch for symbol exchange	✓	✓
Reference graphic in WGD (reference)	✓	✓
Save graphic in WGD (copy)	✓	✗
Convert graphic in WGD (import)	✓	✗
Optional resource directory	✓	✓

Display areas of DWG/DXF:

- Model (model and objects)
- Layout (print, model and objects)

Display areas of DGN:

- All (view, model and objects)

Information with regard to the terms:

- **View**
Only displays the saved display area.
 - Default for all DGN models.
 - Does not execute any scalings for layer switches.
- **Objects**
Always contains the complete graphic and executes a FitToExtents.
 - Might execute scalings for layer switches.
- **Model**
Always displays the complete graphic but does not execute a FitToExtents.
 - Does not execute any scalings for layer switches.
- **Print**
Only displays the print area of the paper area.
 - Default for DWG layouts.
 - Does not execute any scalings for layer switches.



The CAD plus license is required for the animation of CAD symbols.

8.4.9.4 Symbol view

The symbol view in WinGuard is dependent from the graphic settings respectively from the attribute definition in the CAD graphics. Using DWG/DXF format you have the possibility to switch between a generally symbol replacement using the datapoint and a symbol replacement depending on the symbol parameter in the graphic. Using DGN format the general symbol replacement is always active.

In the program settings the function for generally symbol replacement in WinGuard (**Settings | Global | Graphic** - section: **DWG/DXF support**, option: **Generally replace linked symbols**) can be activated.



In principle replaced symbols are using position and size from the original CAD symbol!

1. General replacement active

In this case the WinGuard symbol of the sensor type assigned to the datapoint is used. The definition of the CAD sensor type attribute is only used with the special definition "-".

If there is no own definition of an animation scheme or colour defined for the CAD symbol the animation preset of the sensor type symbol is used.



*If there is no sensor type assigned to the datapoint or the sensor type respectively the symbol doesn't exist, the appropriate user defined **default symbol** (if defined) or the **system default symbol** (circle) will be used!*

Exception with CAD symbol view:

#	Description	Symbol
1.	Value sensor type attribute:= "-" (Minus).	CAD



In all other cases the WinGuard symbol is used!



2. General replacement not active

Here by default the CAD symbols are used, only exception to replace the symbol with a WinGuard symbol is, if there appropriate CAD symbol attribute definitions are existing and valid (see table). In this case the symbol will be replaced with the assigned symbol of the WinGuard sensor type.

If there is no own attribute definition of an animation scheme or colour for the CAD symbol the default animation from WinGuard is used.

i *If a WinGuard symbol is used and the sensor type respectively the symbol doesn't exist, the appropriate user defined **default symbol** (if defined) or the **system default symbol** (circle) will be used!*

Exception with WinGuard symbol view:

#	Description	Symbol
1.	Value sensor type attribute:= ... (sensor type exist). i <i>The symbol assigned by the sensor type is used!</i>	
2.	Value sensor type attribute:= "+" (Plus) and datapoint exist. i <i>The symbol assigned by the sensor type of the datapoint is used!</i>	

i *In all other cases the CAD symbol is used!*

8.4.9.5 Hints

Displaying CAD graphics in WinGuard some principles should be noted . This is particularly important if the colour adjustment is activated. In this case all CAD colours are transformed to the specified colours in WinGuard. Additionally some other basic things are helpful to know.

Basic conduct:

If the options to adjust the CAD colours in WinGuard are activated (objects with / without link) all visible objects are shown in the appropriated colour. Filled objects and there frames can not longer be distinct and are shown as one flat object in one colour (e.g. a **wipeout** object with transparent background).

Basic CAD features:

- Different information are to be defined on corresponding layers so that they can be shown/ hidden as and when required.
- Mostly only such file information is reasonable that is required for orientation, e.g. stairs, doors, windows, walls, etc.
- The number of layers and objects is to be kept as low as possible.
- One file per each floor should be generated.
- Legends, title blocks etc. should be deleted if necessary.
- The names of the layers should be plain.
- Do not use filled objects if the colour adjustment is activated (e.g. wipeout objects with transparent background).

Important notes with regard to block/tag definition:

- You are free to define the names of the attributes/tags but they must be the same in all used graphics. The Names must be defined in the WinGuard system settings.
- The drawing elements and visible attributes/tags, e.g. the name, should be defined on different layers so that the name can be hidden later if necessary.
- If possible the element colors should be defined by the layer color.

8.4.10 GIS Graphics

The GIS functionality (**Geographic Information System**), via the integrated GIS viewer, provides display not limited by documents with free navigation based on geo-positions. Moreover, with the option of placing any content as display areas in graphics, the basis for a highly flexible graphic application is available.

If a graphic has been dimensioned with geo-coordinates, it is possible to show maps from an external map provider in the background of this graphic, and to automatically blend in the symbols of datapoints that also have geo-coordinates.



The GIS graphics are integrated by Google® Maps Static API!

8.4.10.1 Dimensioning with GIS-Coordinates

A graphic can be optionally dimensioned with geo-coordinates. You can make the respective definition for the properties of the graphic on the [GIS Tab](#)⁸³⁴. Geo-coordinates can be entered in two ways: via the position and via a respective dot matrix. The document coordinates can be picked with a picker from the document. The corresponding geo-coordinates can be either entered manually or copied via clipboard from other programs.

The defined geo-coordinates can also be adapted interactively in the editor. If you move or zoom a dimensioned graphic with a pressed Shift key, then not the graphic itself, but only the established geo-coordinates are adjusted. A respective effect is clearly visible if a map is shown in the background.

8.4.10.2 Map Display

If a graphic has been dimensioned with geo-coordinates, it is possible to show a map from an external map provider in the background of the graphic. In principle, the maps of various providers can be applied. In the demo-version, Google Static Maps is defined as provider. However, the number of times the service can be accessed per time unit in the demo-version is limited because the maps are accessed without an explicit license key. For unlimited use, such a key required.



For additional information please ask your distribution partner!

8.4.10.3 Datapoint Symbols

If a graphic has been dimensioned with geo-coordinates, it is possible to automatically blend in the symbols of datapoints that also have geo-coordinates. Generally, the symbols are shown in a special **GIS layer** that is automatically administered by the graphic and is always the top layer of a graphic. Whether or not datapoint symbols should be shown automatically can be determined in the Properties of the graphic on the [GIS Tab](#)⁸³⁴.

In graphics dimensioned with geo-coordinates, the GIS layer is also available in editing mode. If a datapoint symbol is dragged via drag&drop within this GIS layer, the symbol is not actually placed in the graphic, but its geo-coordinates are set accordingly. This results in the datapoint symbol appearing in the respective position in the graphic as well.

When moving symbols shown in the GIS layer, only the coordinates of the respective datapoints are automatically adjusted.



It is possible to move symbols between the GIS layer and other layers. In this manner you can supply several datapoints with geo-coordinates together or insert symbols at specific coordinates in a graphic!

8.4.10.4 GIS Viewer

The GIS viewer provides a display mode in which a graphic is always shown to fit the display area 100% (no scroll bars). This is because the functions zoom and move are not based on the graphic document, but rather on the currently defined geo-coordinates. When zooming or moving, simply these geo-coordinates are adjusted. The graphic then shows a different content, but the document coordinates remain the same. Zooming and moving in the GIS viewer thus function the same as in edit mode with held-down shift key.



This can be used in the GIS viewer for graphics by placing objects outside of the GIS layer. These remain fixed in their position during zooming and moving, while the map with symbols appears to be moving in the background!

Whether a graphic should be displayed in GIS view mode can be defined in the properties of the graphic on the [File Tab](#)⁸³¹. However, it is not necessary to explicitly add a graphic with respective settings and geo-coordinates to use the GIS viewer. Instead of loading a "real" graphic file, it is possible to simply load a geo-position that is then displayed in the GIS viewer.

▼ Position parameters

Entering a position graphic is possible as an alternative to entering a graphic file. Defining such GIS viewer content is done in the following format:

< GIS> [<Parameter>=<Value>[,<Parameter>=<Value>] ...]

Parameter	Default value	Possible entries	Description
/lat or /latitude	49.997	-80° .. 80°	Geographical latitude in decimal degrees. An entry greater than 80° and lower than -80° is not supported in these areas due to the large projection error.
/lon or /longitude	8.654	-180 .. 180°	Geographical longitude in decimal degrees.
/map	Satellite	Road Satellite Hybrid	Road map Satellite map Hybrid map
/transparency	0	0 - 100	Transparency of the map display in percent.
/zoom	500m	0m - 1000km	Minimum visible distance in display area in both directions. Without an entry the unit "m" is applied.
/area	(0,0,200,200)	(left,top,width, height)	Paper size in mm



Latitude as well as longitude must be entered for definition of valid GIS viewer content. All other entries are optional!



<GIS> instead of a graphic name for datapoint graphics, the geo-coordinates of the datapoint are automatically selected. Latitude and longitude entries can be omitted!



In the GIS viewer as well as all graphics with geo-coordinates, the coordinates at the mouse position are shown in the bottom window margin!

8.4.11 Other

This section provides further information with regard to functions and special elements for visualization of graphics. For example, information concerning the view field of cameras in the WinGuard graphics can be found here.

8.4.11.1 Field of View

The current view field as well as zoom setting of a camera can be visualized approximately as a graphic view field at the camera symbol in WinGuard. The visualization is possible both in a static form - for fixed cameras - as well as dynamically for controllable **PTZ** cameras. For dynamic visualization, both the used camera as well as the interface have to enable a corresponding acknowledgment of the PTZ status. The values for pan (**P**), tilt (**T**) and zoom (**Z**) are added to the status of the camera datapoint and, for most interfaces, also displayed in the status text.

The view fields are displayed as circle segment (corresponding to the view field of the camera) with the current status color of the camera symbol with a transparency further increasing to the outside, the length of display symbolizes the zoom level.

In order to enable visualization and correct alignment, the north alignment has to be entered in degrees both in the graphic (in the **GIS** characteristics) as well as for the camera (at the datapoint). Further optional indications such as horizontal view angle and assigned focal length optimize the display.

The visibility of the view fields can be dynamically activated and deactivated by the user. Via the settings, the initial visibility as well as the size of display can be configured.

▼ Visualization of view field

ToDo: Visualization of view field



The corresponding definitions have to be made in the settings in the section **Graphic**, subsection **FOVs** (Field Of View).
(Menu: **System | Settings -> Global | Graphic | FOVs**)



Open the characteristics of the graphic (datapoint and superordinated graphics with frames) and select on the tab **GIS** under Dimension **North angle** and then define the **North angle**.



Open the characteristics of the symbol graphic and select on the tab **GIS** under Dimension **North angle** and then define the **North angle**. This is used for the basic rotation of the symbol in the datapoint graphic.



For the concerned camera datapoints, defined the respective indications on the tab Camera (north angle is mandatory!).



Test

North angle

By the value called north angle, the north alignment of cameras and graphics is defined. Indication is made by values from 0°-359° degrees and describes the deviation from the exact north angle in clockwise direction. For a graphic, a north angle of 0° means that north is located exactly at the top, 90° exactly right, 180° exactly at the bottom, etc.



The north angle must be always defined at the top level in a graphic structure e.g. a graphic with frames!

The angle itself will be overwritten by the definitions of the integrated frame graphics!



*The north angle of a graphic is defined in the characteristics on the tab **GIS**. If no north angle has been defined for a graphic, no view fields will be displayed in this graphic!
Symbol graphics can, but must not have a north angle definition!*



*The north angle of a camera is defined at the datapoint on the tab **Camera**. If no north angle has been defined for a camera, no view field will be displayed for this camera!*

View angle

The view angle describes the angle between two lines drawn from the center of the camera through the margins of the image. It is differentiated between the diagonal view angle (between two diagonally opposite corner points) and the horizontal view angle (between left and right margin) as well as the vertical view angle (between top and bottom margin).

For visualization in WinGuard, only the horizontal view angle is important. This angle is indicated at the datapoint of the camera on the tab **Camera** with the corresponding focal length for 1.0 x zoom.

Taking the view angle and the corresponding focal length, the sensor size of the recording chip can be calculated. Depending on this sensor size once calculated, the relating adapted view angles for other focal lengths (for changed zoom values) can be calculated.

Focal length

The focal length is an optical size of the camera objective, indicated by the manufacturer. It describes the distance of the sensor to the lens in mm. For PTZ cameras, the focal length is not fixed but changes linearly with the optical zoom. For such cameras, usually a focal length range (from, to) is indicated.

Using focal length and sensor size, the view angle can be calculated. In addition, from the ratio of focal length to sensor size, it can be determined whether the camera is currently in the tele section (focal length > sensor size) or in the wide angle section (focal length < sensor size).

Sensor size

With their sensor (in a certain size) and their objective (with a specific focal length), cameras represent an optical overall system from which the view angle relevant for visualization of the view field is resulting. Sensor size, focal length and view angle are in direct connection. If two of these values are indicated, the third value can be directly calculated based on those values.

Here, the sensor size is calculated internally based on view angle and focal length and serves then as a basis for calculation of the adapted view angle depending on the zoom (change of focal length). Depending on the ratio of focal length to sensor size, it is further defined whether and to which extent the display is realized in tele or wide angle section. This is symbolized by the length of the view field that is adapted correspondingly.

8.4.12 Create Event Graphic

In this section you will find a brief example on how to proceed in creating an event graphic using CAD graphics as background graphics.

▼ ToDo: Create / Edit Graphics

Edit Graphics


- ➔ Retrieve Graphic Editor.
(Menu: **Graphic** or directly via the explorer).
- ➔ Integrate external graphics into the WinGuard database (create/follow respective folder structure).
- ➔ Create base graphics.
 - Integrate external graphics (for example, DWG) into own graphics (one graphic per floor).
 - Define/select sections and layers.
 - Mark position of graphic!
- ➔ Create datapoint/sensor graphic (one graphic per floor).
 - Use of base graphics for ground plan/layout (own layer).
 - Use / apply own layer for systems.
 - Create areas (if necessary).
- ➔ Supply datapoint/sensor graphics with datapoints/symbols.
 - Supply datapoints with sensor types beforehand - symbols!
 - Consider object/symbol properties such as visibility, animation, etc.!
 - With or without label? etc.
- ➔ Create / modify frames for event display.
- ➔ Supply datapoints through the assignment of datapoint/sensor graphics using the frames.
- ➔ Assign datapoint/sensor graphics to locations using the respective frames (if necessary).
- ➔ Test

8.4.13 Test Graphic

You can test if the interactive elements such as buttons, symbols, variables, etc. are functioning as planned as early on as the graphic design phase. This is the purpose of the test mode. Additionally, you can define an incident in whose context the test for graphics in graphic display should occur.

You can open the dialog, **Test Context** via the menu command **Functions|Set Test Context...** . Here you have the option of defining an incident for a datapoint that should be simulated in test mode (please see: [Set Test Context](#)⁹³¹).

You can check how the graphic responds via the menu command **Graphic|Test Graphic**. As an

alternative to this menu command, you can also use the test button located in the [top toolbar](#)  of the graphic editor. You end the test mode by reselecting the menu command or pressing the test button again.

During test mode, symbols, variables, or all graphic objects that reference a datapoint are displayed in the graphic the way they would be during event display (in relation to the event scenario that was defined in the test context).

In test mode, you can also click on buttons or other active elements that have commands assigned to them and thereby activate the respective command.



You cannot edit the graphic in test mode!

8.5 Graphic Editor

The graphic editor in WinGuard provides all basic functions to create and edit graphics in the system. This allows you to not only define graphic objects, but also to link them to datapoints in order to generate state-dependent representations. In the system, graphics can be retrieved / displayed anytime either manually or automatically, for instance in an event. Moreover, you can create navigation graphics and integrate them into the system accordingly. Integrating other graphic formats into one's own graphics such as DWG, JGP, etc. is also easily possible.

Local toolbars are located on the window margins of the graphic editor. Via the buttons in these bars, you can access the major functions of the editor. These are also accessible via the menu item **Graphic**.

The main area of the window forms the drawing surface. Within the drawing surface, the display area is framed by a dotted line. This is the area that is visible when the graphic is later displayed during event display or printed. Here you can also define various areas so that during display, only those areas can be selected for display.

▼ Example: View of the graphic editor

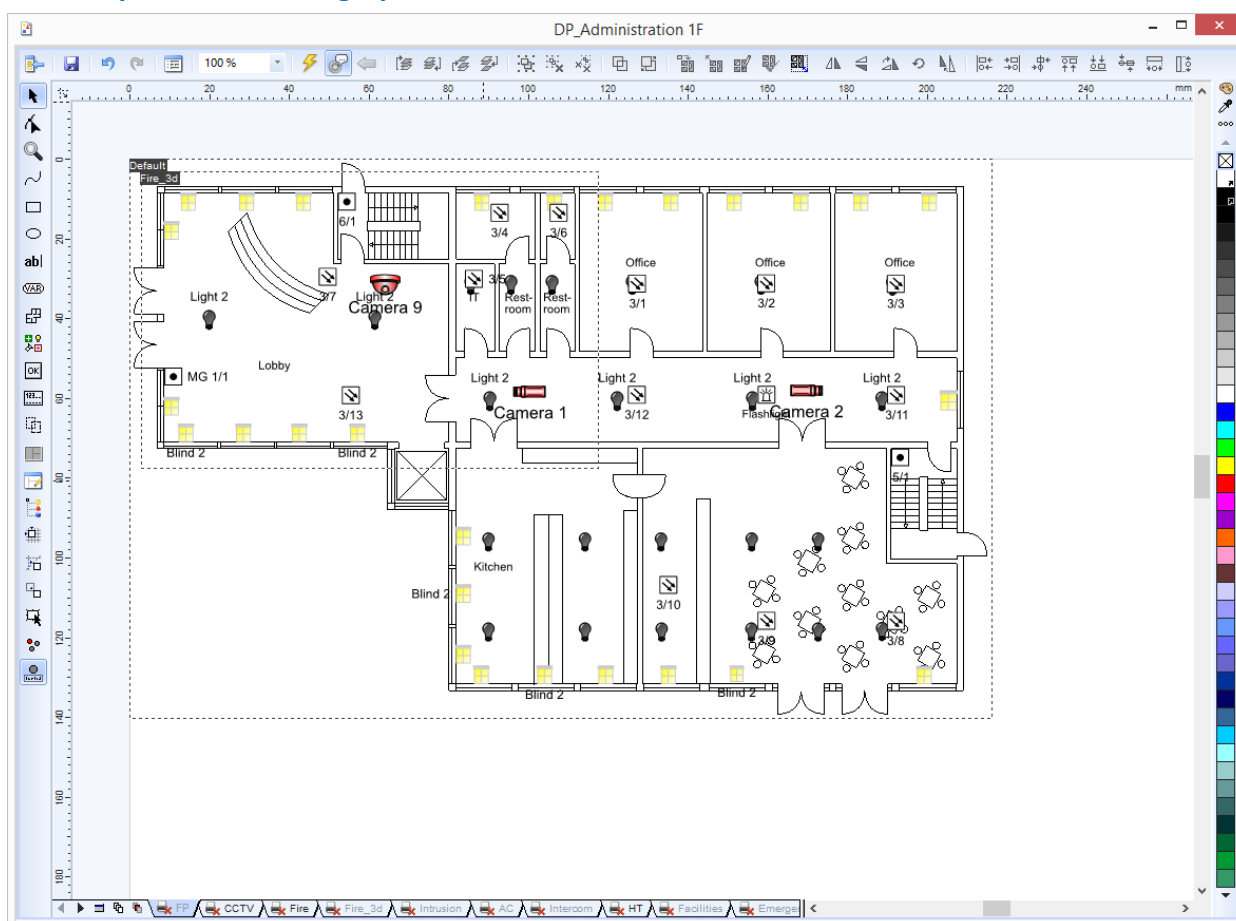


Figure 288: View of the graphic editor

During display, a graphic is enlarged (proportionally) to best fit the respective window. The display area defines the part of the graphic that must be visible. The pre-defined drawing size and other parameters can be adjusted via the settings (please see [Graphic](#)⁴⁸⁵). For existing graphics, paper size, display area size, etc. can also be modified later via **Properties**. Corresponding context menus are available for all graphic menus as well as the display area. These can be opened with the right mouse key.



The Graphic Content Explorer is a very important tool for editing graphics. It enables an overview of the individual objects and their structuring in the graphic. Furthermore, only via the Graphic Content is it possible to access individual elements of a group and edit them directly without having to dissolve the group.

8.5.1 Working with the Mouse and Keyboard

Here we would like to give you basic helpful information on working with the graphic editor. While you will be familiar with some topics through working with other popular graphic programs, we want to take this opportunity to summarize a few points.

Inserting objects via toolbars

If you have clicked on a button in the [Toolbar](#)⁸¹⁴ for the insertion of an object, the object cannot be moved into the graphic from the toolbar by drag&drop. Instead, you release the mouse key after clicking on the button and then re-click it after moving the mouse pointer into the desired spot in the graphic.

Drag & Drop from the Explorers

You can drag elements per drag&drop from the Explorers for **Datapoints**, **Graphics**, and **Symbols** into a WinGuard graphic.

Highlighting objects in a graphic

There are three ways to highlight objects:

Lead the mouse pointer to the desired graphic object and then click on it with the left mouse key. If you would like to highlight several objects, hold down the **<Shift>** key while you click on the desired objects individually.

Move the mouse pointer into an area of the graphic that does not contain any objects. Click on that area with the left mouse key and while holding down the left mouse key, drag the mouse diagonally over the graphic. While dragging, you will be pulling a dotted line in the form of a rectangle behind the mouse pointer. Once all desired objects are enclosed by the dotted line, release the mouse key.

Open the [Graphic Content Explorer](#)⁷⁸⁵ and highlight the desired object in the list. If several objects should be highlighted, hold down the **<Shift>** key while clicking on the objects individually.

Highlighting objects in layers

Professional graphics work generally requires the use of several layers.

If you would like to highlight a graphic object, the layer on which the applicable object is located must be active and visible.

If you wish to highlight several objects located on different layers, there is button for this located in the [Bottom Toolbar](#)⁸¹⁹ of the graphic editor.

Working with access points

A highlighted/marked graphic object is surrounded by several so-called access points.

Corner points:

If you click on one of the corner points, you can move the point via drag&drop. The result is that the object is enlarged / reduced while the relationship of the side lengths is maintained. The corner point diagonally across from the point you are manipulating remains fixed in its position.

Side points:

If you click on one of the side points, you can move it by drag&drop and thereby compress or stretch the object.

Center point:

If you click on the center point, you can move the entire object in its original size per drag&drop to any other position.

When clicking on the center point, the view of the other access points changes, as does their function.

Now you can rotate the object per drag&drop via its corner points. On the sides, you can distort the object in such a way that the side of the object frame held by the mouse is moved, while the opposing side of the object frame remains in its position.

Right-clicking on access points

A single right click on an access point opens the object-specific context menu. Drag&drop with the right mouse key opens a context menu that gives you the choice of moving or copying the object to the position of the mouse pointer, or canceling the action.

Moving objects via the keyboard

If a graphic object is highlighted/marked, you can change the position of that object using the arrow keys on the Windows keyboard. This allows you to execute small changes in position more precisely than per drag&drop.

Keyboard tools for creating curved objects

When adding curves, you have the option that each respective next junction point, which you establish via a left-click, is moved automatically in such a way that the line in the next multiple is drawn at a 45° angle. All you have to do is hold the **<Shift>** key prior to setting the next junction point.

If you click the Back button in the upper toolbar while creating the curve, then the entire curve with all previously set junction points is removed. But if you instead press the **<Delete>** key on the Windows keyboard, only the junction point established last is removed.

Self-defined shortcuts

In the Menu under **Other|Shortcuts...** you can assign every menu command available in WinGuard to a key or key combination. This allows you to create especially fast and easy access to frequently-used commands via, for example, the function keys of the Windows keyboard.

8.5.2 Toolbars

The graphic editor features various toolbars that are arranged along the borders on a standard basis. You can activate / execute the respective functions via the icons available there. Not all functions are available at all times as these directly depend on the object that was selected.

8.5.2.1 Top Toolbar

Once you have the graphic editor window up on the screen, you will see a toolbar across the top of the graphic display window. In addition to basic functions such as opening or saving, the buttons contained therein also provide many additional functions relating to editing and arranging graphic objects. Here you can also control the Powerclip function, or switch the graphic into test mode to check the proper functioning of interactive elements.

The individual functions of the top toolbar are described in detail below.

▼ Example: Top Toolbar

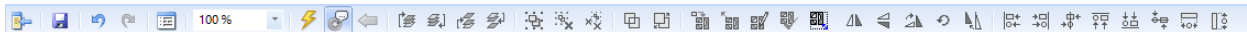


Figure 289: Graphic Editor - Top Toolbar

▼ Functions: Top Toolbar



Select

The currently opened graphic in the graphic editor is selected in explorer.



Save

The currently displayed graphic is saved under its present name without prior confirmation. For new graphics, the dialog, **Save Graphic As**, opens in which you can define the folder and the name of the graphic.



Undo (<Alt>+<Back>)

The function/action executed last is undone.



Repeat (<Ctrl>+Y)

The function/action undone last is redone/repeated.



Graphic Properties

This function opens the dialog **Graphic Properties** whose functions are described in detail in the sections [Overview graphic tabs](#)^[828], [- Graphic document](#)^[831], [- General](#)^[846] and [- Objects](#)^[867].



Zoom

This function adjusts the display of the graphic into the graphic editor window in such a way that the narrower part of the page takes up X % of the editor window. The value X can be entered via the keyboard or selected from the list.



Test Mode on/off

This function turns the test mode on or off. If the test mode is active, you can review which objects in the graphic are animated and what the animation looks like / how the interactive objects react (buttons or variable fields).



Show Current States

If the test mode is active, the interactive elements respond depending on the current state of the linked datapoints (**State View**).



Back

During active test mode, the command, **Switch Graphic**, is triggered. In this manner the previously-shown graphic can be retrieved again.



To Front

The selected object(s) will be moved to the very top in the object stack of the layer (to the foreground). Then the objects will be displayed above the other objects of the layer.

**To Back**

The selected object(s) will be moved to the very bottom in the object stack of the layer (to the background). Then the objects will be displayed behind all other objects of the layer.

**Forward One**

The selected object(s) will be moved one position forward within the object stack.

**Backwards One**

The selected object(s) will be moved one position backwards within the object stack.

**Group**

In case several objects are marked, they can be grouped. It is also possible to group groups with each other or with other objects.

**Ungroup**

This function ungroups the marked group again into its original elements.

**Ungroup All**

Ungroups the marked group incl. contained subgroups.

**Combine**

Using this function, selected objects of the type curve, rectangle, ellipse or text can be combined to one joint object of the type curve.

**Uncombine**

Combined objects can be uncombined again, however the single components are objects of the type curve. Rectangles, ellipses or texts cannot be restored.

**Place inside container (- Powerclip)**

Upon activation of this function, the mouse pointer is displayed as a broad arrow. By clicking on the frame of a container (rectangle, ellipse or closed curve), the selected objects are grouped to a powerclip object. All parts of the objects out of the container become invisible.

**Extract content**

In case a powerclip object is selected, this function can be used to reverse the command **Place inside container**. All objects are removed from the container and stored as single objects in the graphic on the object stack.

**Edit content**

This function allows to edit a powerclip object. The powerclip object is put visually in the background so that the original objects become visible and can be edited.

**Finish editing**

With this function, the content editing of a powerclip is finished.

**Adjust container**

By activation of this function, the form of the container can be edited. The nodal points of the powerclip object (container) become visible and the form and location of the object can be changed.

**Align Left**

If several objects have been selected in one graphic, the objects will be moved in such a way that their leftmost points will be on a common vertical line. The object that has been most left will remain unchanged in its position.

**Align Right**

If several objects have been selected in one graphic, the objects will be moved in such a way that their rightmost points will be on a common vertical line. The object that has been most right will remain unchanged in its position.

**Align Top**

If several objects have been selected in one graphic, the objects will be moved in such a way that their most top points will be on a common horizontal line. The object that has been most top will remain unchanged in its position.

**Align Bottom**

If several objects have been selected in one graphic, the objects will be moved in such a way that their most bottom points will be on a common horizontal line. The object that has been most bottom will remain unchanged in its position.

**Center Vertically**

If several objects have been selected in one graphic, the objects will be moved in such a way that all centers will be aligned to the common vertical center line.

**Center Horizontally**

If several objects have been selected in one graphic, the objects will be moved in such a way that all centers will be aligned to the common horizontal line.

**Same Width**

If several objects have been selected in one graphic, the broadest object will remain unchanged and the more narrow objects will be stretched to the width of the broadest object.

**Same Height**

If several objects have been selected in one graphic, the highest object will remain unchanged and the objects with a lower height will be stretched to the height of the highest object.

8.5.2.2 Left Toolbar

Once you have pulled up the window of the graphic editor, you will see a toolbar to the left of the graphic display window. Via the symbols in the toolbar (buttons) you can activate various tools, add objects, or access options such as show helplines and grid that are available in the editor. With a single click you can also retrieve the section, [Graphic Content](#)^[785], in Explorer, or the Properties Dialog. The properties of the individual object types are described in the sections [Graphic Tabs - Graphic Document](#)^[831], [- General](#)^[846], and [- Objects](#)^[867].

Below, the individual buttons of the left toolbar are described in greater detail.

▼ Example: Left Toolbar

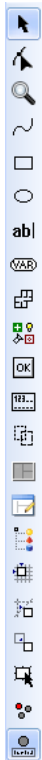


Figure 290: Graphic Editor - Left Toolbar

▼ Functions: Left Toolbar



Selection

In case this function is active, objects can be selected. The objects can be selected by mouse click and moved or changed in size by holding the left mouse button pressed. Via right click, a context menu for editing can be opened.



Shape

In case this function is activated, the form of curves, rectangles or ellipses can be changed. By clicking on the object, the nodal points become visible. Their position can be changed by holding the left mouse button pressed. By clicking on a nodal point at a curved line, the control points become visible. By dragging them, the curve shape can be changed.



Zoom

In case this function is activated, the zoom can be maximized, minimized or the view can be moved. Using the left mouse button, the zoom is maximized, the right mouse button minimizes the zoom. Turning the mouse wheel forward or backwards has the same effect. By clicking and dragging with the mouse, the image section is moved. If a rectangle is drawn by holding the right mouse button pressed, the rectangle will be displayed as zoom area upon release of the button.

**Curve**

In case this function is activated, nodal points can be created by clicking into the graphic. These nodal points are, as a standard, linked with a straight line.

If the left mouse button is held pressed and the mouse pointer is moved, a curve with variable shape will be generated between the previous and the selected nodal point.

By holding the right mouse button pressed, a line can be freely drawn.

**Rectangle**

In case this function is activated, a rectangle/square can be inserted using the left mouse button.

The left mouse button has to be held pressed at the desired position and the rectangle must be drawn with the mouse (by holding the left button further pressed).

If the shift key is pressed during this processed, a square will be created.

**Ellipse**

In case this function is activated, an ellipse/circle can be inserted.

The left mouse button has to be held pressed at the desired position and the ellipse must be drawn with the mouse (by holding the left button further pressed).

If the shift key is pressed during this processed, a circle will be created.

**Text**

By selection of this menu item, the insertion of texts is activated. Upon clicking into the graphic, the object is inserted and the dialog **Graphic settings** is opened in which the text, position, etc. can be defined.

**Variable**

By selection of this menu item, the insertion of variables is activated. Upon clicking into the graphic, the object is inserted and the dialog **Graphic settings** is opened in which e.g. the type can be selected from a list of available variables.

**Graphic**

By selection of this menu item, the dialog **Insert graphic file** and the explorer for graphics is opened. Graphics of the proprietary WinGuard format **wgd**, the **vector formats wmf, emf, dwg, dgn, dxf** and **sld** as well as **Bitmap formats bmp, jpg, png, gif** and **tiff** can be used.

**Symbol**

By selection of this menu item, the explorer window **Symbols** is opened from which symbols can be inserted into the graphic via drag & drop.

**Button**

By selection of this menu item, the insertion of buttons is activated. Upon clicking into the graphic, a button is inserted and the dialog **Graphic settings** is opened.

**LCD Display**

By selection of this menu item, the insertion of LCD displays is activated. Upon clicking into the graphic, an LCD display is inserted and the dialog **Graphic settings** is opened. In this way, texts from external attachments can be displayed as running text within a graphic, provided that the interface is supporting this function.

**Area/Frame**

In case this function is activated, a **Area** can be defined using the **left** mouse button and a **Frame** by using the **right** mouse button.

The corresponding mouse button must be held pressed at the desired position and then the corresponding rectangle has to be drawn with the mouse (by holding the left button further pressed). A pane will be displayed by a short dotted and a frame by a long dotted frame line.

In a **Area**, a section for display of another graphic can be defined (comparable with the image of a camera).

In a **Frame**, other graphics can be loaded and displayed by referencing them. For display, a corresponding section of the referenced graphic can be used here as well (comparable with the camera image on a monitor).

**Pane (insert)**

By selection of this menu item, the insertion of panes is activated. Upon clicking into the graphic, a pane is inserted. With the help of the function **Edit panes**, the panes can then be further defined and supplied with contents such as e.g. layouts, video monitors, graphics, etc.

**Edit Panes**

In case this function is activated, a selected pane can be edited. the editing functions correspond to the display panes in the layouts (see: [Layouts](#)^[604] / [Edit](#)^[605]).

**Graphic Content**

Opens the [Graphic Content](#)^[785] section in explorer.

**Adjust To Grid**

In case this function is active, objects will be adjusted to grid if they are moved or newly created.

**Adjust To Helplines**

In case this function is active, objects close to a helpline will be adjusted to the helpline if they are moved or newly created.

**Adjust To Objects**

In case this function is active, objects close to a nodal point, a vertical or horizontal line of an object, will be adjusted correspondingly if they are moved or newly created.

**Handle As Filled**

In case this function is active, non-filled objects can also be marked with the mouse pointer by clicking into the interior of the object.

**Linked Object Mode**

In case this function has been activated, newly drawn curves, rectangles and ellipses are automatically provided with a link to the datapoint marked in the explorer. In addition, the visibility settings will be set to **visible depending on content** and the animation settings to **none**.



Only those linked objects whose link refers to the currently marked datapoint are displayed!



Add labels automatically

In case this function is active, a datapoint that is moved into the graphic via drag & drop will be automatically assigned with a label containing the datapoint name.

8.5.2.3 Right Toolbar

Using the toolbar on the right side of the graphic editor you can execute functions with regard to color design. For example, if you have selected an object, you can apply the filling color / outline color with left / right mouse click.

Example: Right Toolbar



Figure 291: Graphic Editor - Right Toolbar

Functions: Right Toolbar



Select Color Scheme

With this function a list of the color schemes available in the system is displayed. If additional color schemes have been defined (Customizer, [Individual Adjustments](#)⁵⁸⁰), you can apply these to the graphics here.



Pipette

With the pipette, colors from one object can be transferred to another. First, select the object that should receive the color. If you activate the pipette function (note the change in mouse pointer) and then click on a colored object, that selected color (of the colored object) is transferred.



Color selection

This function opens the dialog, [Color selection](#)⁹³³, which provides various mechanisms for selecting and defining colors.

- **Color bar**

Here colors can be applied to objects directly. The left mouse key applies filling color, the right mouse key applies outline color.

8.5.2.4 Bottom Toolbar

When you have the window of the graphic editor up on the screen, you will see a status bar on the bottom edge.

There you can scroll through the layers of a graphic and activate individual layers. There are also other functions (buttons) that are described below.

▼ Example: Bottom/Left Toolbar

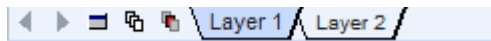


Figure 292: Graphic Editor - Bottom/Left Toolbar

▼ Functions: Bottom/Left Toolbar

◀ ▶ Move Layer Tabs

With these two functions, you can move the visible area of the layer tabs if not all layers can be displayed in the status bar due to a high number of layers.

☰ Layer Control Panel

Retrieval of the [layer control panel](#)⁸²⁶ via which you can activate layers, make them visible or printable, or lock them. You can also create or delete layers, as well as change their order, via the control panel.

The control panel also contains buttons that allow you to work across several layers and enable you to render non-active layers invisible.

📄 Work across layers

This function allows you to mark/highlight objects in different layers and edit them together.

📄 Fade out non-active layers

The active layer is shown in the foreground.

The non-active layers are faded out, meaning that they are displayed partially transparent in the background (preset, please see section: [Graphic](#)⁴⁸⁵).

• Layer

The other elements in this function bar are the layers themselves. By clicking the right mouse key, the respective layer is selected as the active layer. With the left mouse key, you can open a respective context menu to edit the layer.



Via right-clicking on a layer in the status bar, you open the context menu that is described under [Context Menu Layer](#)⁸²⁴!

8.5.3 Context Menus

Various context menus are available for the definition of properties of individual graphic objects and the graphic itself. In turn, some properties, and thereby their context menus, depend on other properties. Below you will find descriptions of the basic properties / functions.

8.5.3.1 Context Menu for Graphic Objects

The context menu for graphic objects varies depending on multiple criteria such as: whether just an individual or several objects was/were marked; whether you are dealing with a group of objects; whether you are dealing with a curve; or whether the curve was created via the conversion of other

object types or the combination of several objects.



To highlight/mark several objects, the editor provides the following options:

- Highlight/mark an object via mouse click; select several objects by holding down the Shift key while clicking on individual objects.
- Move the mouse pointer into an area of the graphic that does not contain any objects. Click on that area with the left mouse key and while holding down the left mouse key, drag the mouse diagonally over the objects to be marked. While dragging, you will be pulling a dotted line in the form of a rectangle behind the mouse pointer. Once all desired objects are enclosed by the dotted line, release the mouse key. All marked objects now feature junction points.

▼ Example: Context Menu for a Single Graphic Object

The screen shot below shows the example of a context menu for a single graphic object (not a group). The section between the two lower dividing lines of the context menu may also contain additional or other items.

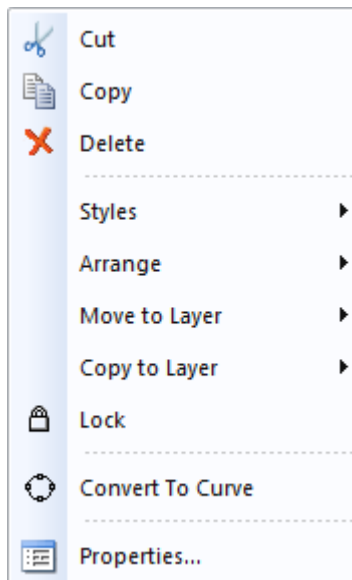


Figure 293: Context Menu of a single graphic object



If a marked object is locked for editing, the context menu is fundamentally different. Please see the sections below on this topic.

▼ Functions: Context Menu for Graphic Objects

The following table also lists the menu items not contained in the example. The actions respectively refer to the selected object(s).



Cut

The selected objects are removed from the graphic and copied onto the clipboard.



Copy

The selected objects are copied onto the clipboard.



Delete

The selected objects are removed from the graphic.

- **Styles**

This function opens a submenu with the functions for the styles. The description of the individual functions can be found in the section [Context Menu for Styles](#)^[822].

- **Arrange**

This function opens a submenu with the functions for arranging objects. The description of the individual functions can be found in the section [Submenu Arrange](#)^[765].

- **Move to Layer**

With this function the selected objects can be moved into one of the existing layers of the opened graphic.

- **Copy to Layer**

With this function the selected objects can be copied into one of the existing layers of the opened graphic.

**Lock**

This function blocks the editing of the selected objects. If an object is already locked, a different context menu is shown (compare with: [Context Menu Locked](#)^[822]).

**Combine**

Objects of the type curve, rectangle, ellipse, or text can be combined to form an object of the type, Curve.

**Uncombine**

The combined objects can be turned back into their individual parts. However, the individual parts can only be objects of the type, curve. Rectangles, ovals, or texts cannot be regenerated.

**Convert to Curve**

Objects of the type text, rectangle, or oval can be converted into an object of the type, curve.

**Group**

If several graphic objects have been marked, these can be gathered into a group. It is also possible to group groups with one another or with other objects.

**Ungroup**

This function dissolves the selected groups into their original elements. Existing groups remain as groups.

**Ungroup All Groups**

Dissolves the selected groups including any existing groups.

**Graphic Properties**

This function opens the dialog **Graphic Properties** whose functions are described in detail in the sections [Overview graphic tabs](#)^[828], [- Graphic document](#)^[831], [- General](#)^[846] and [- Objects](#)^[867].

8.5.3.2 Context Menu for Locked Objects

Using this context menu, locked objects can be released for editing.

▼ Example: Context menu for locked objects

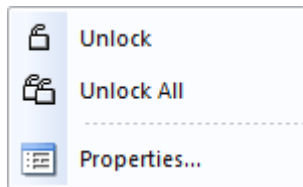


Figure 294: Context menu for locked objects

▼ Functions: Context menu for locked objects

Unlock

A selected object that was locked for editing is unlocked.

Unlock All

All locked objects in the graphic are unlocked - not just the selected one.

Graphic Properties

This function opens the dialog **Graphic Properties** whose functions are described in detail in the sections [Overview graphic tabs](#) ^[828], [- Graphic document](#) ^[831], [- General](#) ^[846] and [- Objects](#) ^[867].

8.5.3.3 Context Menu for Styles

Using this context menu, properties of objects can be transferred to other objects. This applies to properties of pen, fill, font, etc.

▼ Example: Context Menu for Styles

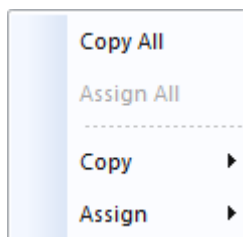


Figure 295: Context Menu for Styles

▼ Functions: Context Menu for Styles

- **Copy All**

This function copies the properties of an object defined in the dialog, **Properties**, under the tabs pen, fill, and font to the clipboard.

- **Assign All**

This function assigns the properties defined in the dialog, **Properties**, under the tabs pen, fill, and font to the selected object.

- **Copy**

After manual selection, this function copies only the respective properties of an object defined in the dialog, **Properties**, under the tabs pen, fill, and font into the clipboard. It is thus necessary to manually differentiate if you wish to copy the properties from the pen, fill, or font tabs to the clipboard.

- **Assign**

After manual selection, this function assigns only the respective properties of an object defined in the dialog, **Properties**, under the tabs pen, fill, and font, placed on the clipboard, to the object. It is thus necessary to manually differentiate if you wish to assign the properties from the pen, fill, or font tabs from the clipboard to the object.

8.5.3.4 Context Menu for Display Area (Graphic)

You can open the context menu of the display area by right mouse clicking on an area in a graphic that does not contain objects.

▼ Example: Context menu for the display area (graphic sheet)

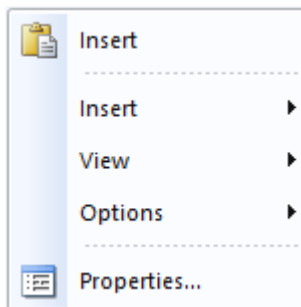


Figure 296: Context menu for the display area

▼ Functions: Context menu for display area (graphic sheet)



Insert

With this function the content of the clipboard is inserted into the graphic.

- **Insert**

This function opens a submenu in which various functions for the insertion of new objects such as text, variable, graphic, etc. into the graphic are available. The individual elements can be found in the Menu Item [Graphic](#)^[759] under [Submenu Insert](#)^[764].

- **View**

This function also opens a submenu with functions that allow you to define the visibility of: grid, guides, areas, etc. You can find the individual functions in the section [Menu Item Graphic](#)^[759] under [Submenu View](#)^[770].

- **Options**

This function also opens a submenu that contains graphic editor tools such as adjust to grid, adjust to helplines, etc. You can find the individual functions in the section [Menu Item Graphic](#)^[759] under [Submenu Options](#)^[771].



Graphic Properties

This function opens the dialog **Graphic Properties** whose functions are described in detail in the sections [Overview graphic tabs](#)^[828], [- Graphic document](#)^[831], [- General](#)^[846] and [- Objects](#)^[867].

8.5.3.5 Context Menu for Layers

The context menu for layers can be opened by clicking with the right mouse key on one of the Layer Tabs. Here, functions for the layers such as create new layer, copy, delete, etc. are available.

Context Menu of the Layers

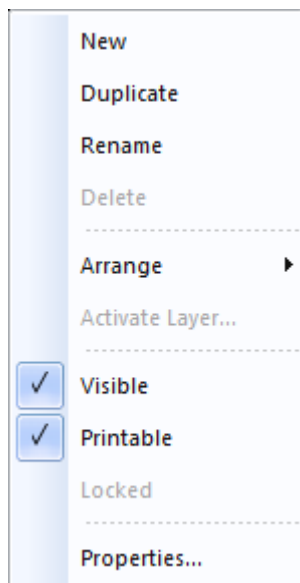


Figure 297: Context Menu for Layers

Functions: Context Menu for Layers

- **New**

The dialog, **Name Layer** is opened for the definition of the name for the new layer. After entering the name and pressing the **<Enter>** key, the new layer is inserted/added to the right of the active layer.
- **Duplicate**

The active layer is copied with content and inserted/added to the right side of the layer to be copied. The name of the new layer is automatically generated by adding a number to the old name.
- **Rename**

The dialog, **Layer Name**, is opened to rename the layer.
- **Delete**

This function deletes the selected layer. It can only be applied to non-active layers. Deletion is executed without further confirmation!

- **Arrange**

This function opens a submenu in which the position of the layer can be changed in the hierarchy with the functions **To the top**, **To the bottom**, **One up**, and **One down**.

- **Activate Layer...**

The dialog, **Select Layer**, via which the active layer can be selected, is opened.



The active layer can also be selected with a left click with the mouse!

- **Visible**

This function allows you to turn the visibility of the layers on or off.

- **Printable**

This function allows you to determine if the layer can be printed or not.

- **Locked**

This function allows you to lock layers. Editing objects in a layer is only possible if the layer is not locked.



This function is only available for non-active layers!



Graphic Properties

This function opens the dialog **Graphic Properties** whose functions are described in detail in the sections [Overview graphic tabs](#)^[828], [- Graphic document](#)^[831], [- General](#)^[846] and [- Objects](#)^[867]

8.5.4 Working With Layers

The WinGuard graphic editor enables you to define individual levels in a graphic that can be edited independently from one another. Such a level is referred to as a layer. You can think of layers as transparent sheets of film on which you can draw and can design certain parts of a drawing. By placing the films - layers - one on top of the other, the entire drawing is formed.

By changing the order in which the layers are on top of one another (stacked), it can be determined which objects may be covered by other objects. It can further be determined if a layer is to be shown on the screen or printed. Thus the display of the graphic can be defined differently depending on the output device. The visibility of layers can be directly controlled when retrieving graphics via links, for example with datapoints, or other buttons (please see: [Visibility of Layers](#)^[827]).


Example


A displayed graphic contains two different frames: one for the display of the layout plan of the building floor, and one, for example, for the display of buttons to switch the visibility of datapoints of varying datapoint categories (fire, intrusion, etc.). Depending on the selected data type, in the frame with the plan, only the layer with the layout plan for the floor itself and the layer with the respective datapoints is shown. All other layers are faded out.

The purpose of linking a graphic with datapoints is that in cases of an event, (for example, alarm or fault), a graphic is automatically pulled up. You can determine which layers should be shown and not shown so that the WinGuard user immediately has the best possible overview over the essential information of the graphic.

8.5.4.1 Editing Layers


Located below the drawing surface is the area for layer selection (please also see: [Bottom toolbar](#)⁸¹⁹). The order of the layers is defined in such a way that the furthest layer on the left represents the top layer and each subsequent layer to the right represents a layer arranged lower. After adding a new graphic, only one layer is initially defined. It is named **Layer 1**. If an already existing graphic is displayed, the layers are shown with their names. The order of the layers can be changed via drag&drop with the left mouse key. Through icons, the tabs show additional information such as whether the respective layers are locked or if the visibility or print release is deactivated.

The respective layer can be activated for editing by clicking on one of the tabs. Adding objects always occurs on the active layer. You can only select and edit existing objects if they are located on the currently active layer. As described in the section [Bottom toolbar](#)⁸¹⁹, there is a button on the left () that allows you to select objects spread over several layers together, so that these objects can then be moved or aligned together.

You can also access additional editing options for a layer via the [Layer Control Panel](#)⁸²⁶ () or via the [Context Menu Layer](#)⁸²⁴. The context menu for layers can be reached by right-clicking on one of the layer tabs or via the [Graphic Content Explorer](#)⁷⁸⁵.

8.5.4.2 Editing Dialog

The dialog, **Layer**, (also referred to as Layer Control Panel) provides various editing options such as activate/deactivate, change in layer hierarchy, change in visibility, etc. You can also get a brief overview of the properties of the various layers via the dialog.

The dialog is retrieved via the button () located in the [bottom toolbar](#)⁸¹⁹.

▼ Dialog: Layer

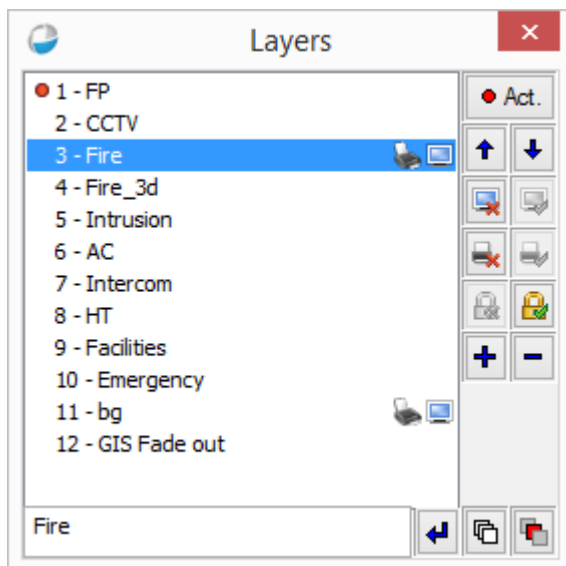


Figure 298: Layer Control Panel

▼ Layer Control Panel: Buttons

Active

With this function the selected layer is activated and can be edited.

 **(Move layer one position up)**

The selected layer is moved one position **up** in the hierarchy.

 **(Move layer down one position)**

The selected layer is moved **down** one position in the hierarchy.



(Turn off visibility)

The visibility of the selected layer is turned off.



(Turn on visibility)

The visibility of the selected layer is turned on.



(Lock print)

The printability of the selected layer is turned off.



(Print release)

The printability of the selected layer is turned on.



(Lock editing)

The selected layer cannot be edited (locked/blocked).



(Editing release)

The layer can be edited (unlocked/unblocked).



(Add layer)

Below (behind) the selected layer, a new layer is added.



(Delete layer)

The selected layer, including all content, is deleted after respective confirmation.



(Work across layers)

If this function is active, objects located in different layers can be marked and edited together.



(Fade out non-active layers)

If this function is active, all non-active layers are faded out, meaning they are partially transparent, and the active layer is displayed in the foreground.



The value for the transparency is pre-determined in the Settings under [Graphic](#) ⁴⁸⁵.



(Apply layer name)

Rename: Give marked layer the name indicated in the entry field to the left of the button.



You can switch between the respective active buttons, entry field, and layer list via the tab key. Within the layer list, you can change the layer markings using the <arrow>-keys of the keyboard. You can mark several layers by holding down the <Shift> key.

8.5.4.3 Visibility

For every individual layer of a WinGuard graphic, you can separately define, either via the [Context Menu Layer](#) ⁸²⁴ or via the [Editing Dialog](#) ⁸²⁶, its visibility for display and its printability.

But there are cases in which you wish to display the same graphic with a different setting for the visibility of layers. For such cases, WinGuard offers the option to override the implicit definition - the layer configuration contained in the graphic file - with an explicit definition. In all areas of WinGuard in which you can refer to graphics, for example the editing dialogs for locations or datapoints, or graphic-related commands such as **Switch graphic** or **Print graphic**, you can find entry fields for graphic path, graphic name, and parameters as well as two buttons for opening the respective dialogs. The chapter [Parameters for Graphic Display](#)^[776] contains a detailed description of the settings that allow you to explicitly define the visibility or invisibility of layers and to activate or inactivate the print release.

As an alternative to using these dialog windows, in all these areas, you can also explicitly define the visibility of the individual layers of the graphic by entering one or more parameter sets after the selected graphic file name. A parameter set has the following format: `/L<Layer-Name>:S<+|->P<+|->`.

If a layer name is entered after the `/L` the command takes effect on the respective layer – provided such a layer with the respective name exists in the graphic. If the entry of a layer name is omitted, the command takes effect on all layers of the graphic.

The colon is followed by `S+` or `S-` to turn the screen display for the respective layer either on or off. If this entry is omitted, `S+` is implicitly applied. The same applies to `P+` or `P-` as it relates to visibility in printing.


Several of these kinds of parameter sets can be entered sequentially and are processed from left to right. For example, the parameter entry `/L:S+P-/LEscape:S-P-` first activates the visibility for all layers on the screen and deactivates it in print. Subsequently, the explicit visibility for the layer with the name **Escape** is turned off on the screen.

When changing the graphic via a function such as [Switch pane](#)^[1041] or [Switch graphic](#)^[1039], the current parameter entry is also applied to the newly loaded graphic. If there is a parameter entry in the graphic parameter field of the respective command, for example for the visibility of layers, this parameter is **additionally** applied. For the graphic that should be newly displayed then, a parameter set applies that is created through the joining of the parameter sets for the original and the new graphic. This process continues, meaning that if you switch from the second graphic per command to a third, and from a third to a fourth, etc., the parameter sets are respectively connected and applied to the graphic that is to be newly displayed.

8.5.5 Graphic Properties

Objects used in graphics have various properties that can be edited with the dialog, **Graphic Properties**. The dialog itself contains various tabs with respective definitions, depending on the object that was selected. Via the functions **Apply** or **Apply Now** (↗) the settings / changes are transferred to the objects. The dialog also allows you to edit the properties of multiple objects simultaneously.

You can access the **Graphic Properties** dialog in several ways:

- Via the menu **Graphic|Properties**.
- Via right-clicking on a selected object, in the display area, or in a layer in the display window of the graphic editor, and then selecting the respective function in the context menu that is shown.
- Via the button  in the [Top Toolbar](#)^[811] of the graphic editor.
- Via the context menu of an object in the [Graphic Content Explorer](#)^[785].

▼ Example: Dialog - Graphic Properties

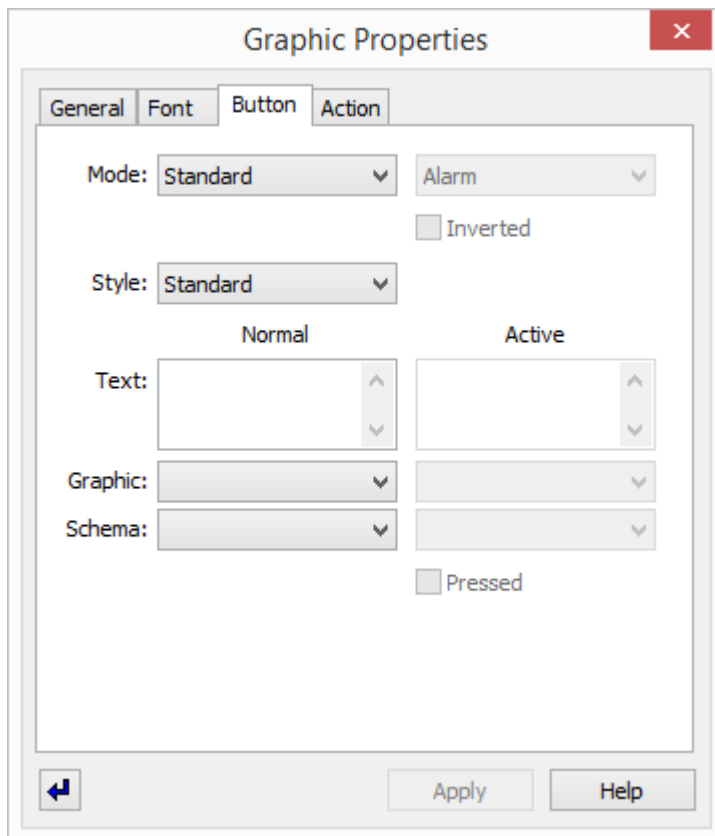
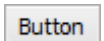


Figure 299: Dialog - Graphic Properties

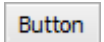
Regardless of the object type and the tab that is displayed, the following functions are always available in the dialog:

▼ Functions: Dialog - Graphic Properties



Apply

Upon clicking of the button, all changes will be applied.



Help

This button opens the online help.



Apply immediately

This function defines if changes of the definitions or settings shall be applied immediately or by activating the function **Apply**.

pressed - Changes are taken over immediately.

not pressed (default) - Changes are not taken over immediately.

▼ Tabs: Dialog - Graphic Properties

Depending on the type of the selected object, various tabs are available:

Object type	Tabs
Display area	GIS, Pen, Filling, Font, Page, Ruler, Grid, Helpline, File

Object type	Tabs
Layer	Layer
Area	General, Area
Frame	General, Graphic
Curve	General, Pen, Filling, Curve
Rectangle	General, Pen, Filling, Rectangle
Ellipse	General, Pen, Filling, Ellipse
Text	General, Filling, Font, Text
Variable	General, Filling, Font, Variable
Symbol	General, Symbol
Button	General, Font, Button
Display Area	General, Display Area
LCD Display	General, Filling, Font, LCD Display
Graphic	General, Graphic
Powerclip	General, Pen, Filling



The **General Tab** contains functions for adding further tabs (Type: Link, Label, Action, and Display). Depending on the type of object, not all may be available for selection!

8.5.6 Graphic Document Tabs

The tabs described here are only available in the dialog, **Graphic Properties** of the graphic document. Here you can define various basic settings and aids such as grid, rule, helplines, etc.

The dialog can be opened by not selecting an object, meaning that you click with the left mouse key into an empty area of the graphic and then open the context menu with the right mouse key, and select the item, Properties, there. Alternatively you can open the dialog when no object is selected by clicking the icon for opening the Properties in the top toolbar of the graphic editor.

8.5.6.1 File Tab

In this tab you can define various tools such as grid or ruler. Additionally, you can also define numerous settings like background color and font.

▼ Dialog: Graphic Properties (File Tab)

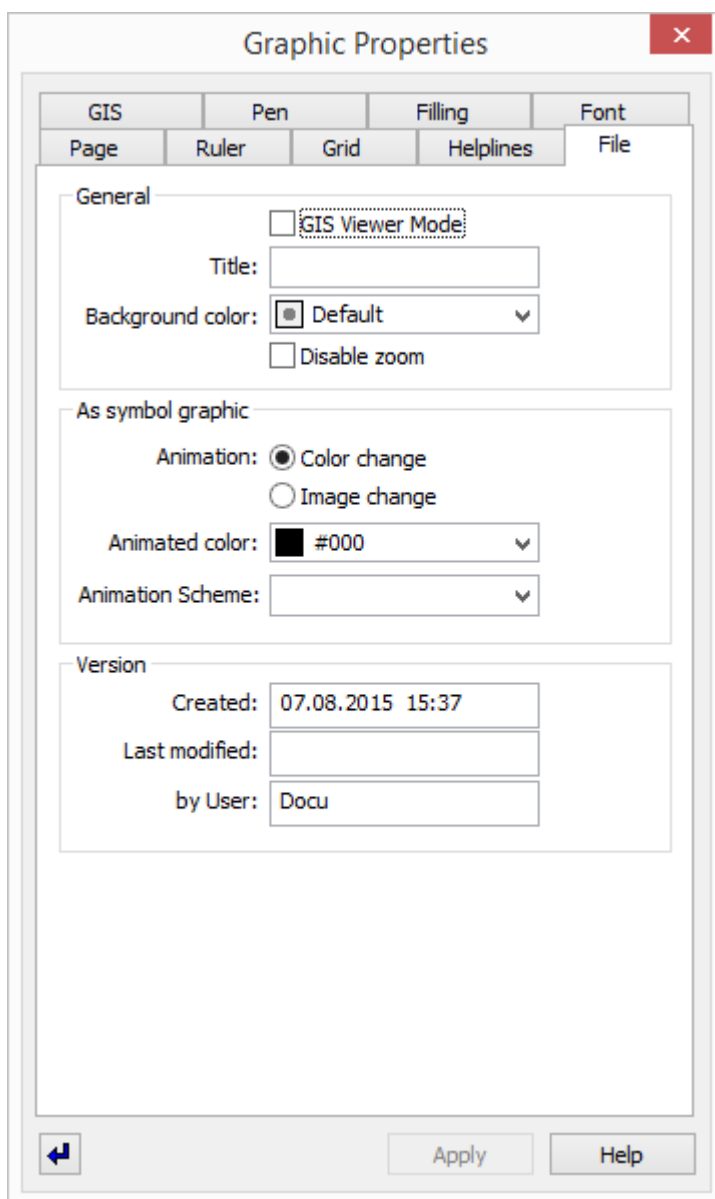


Figure 300: Dialog - Graphic Properties (File Tab)

▼ Data section: General

GIS Viewer Mode

With this option you can determine if, during display, the graphic is shown in normal graphic view or in GIS view ([Graphic / GIS](#)⁸⁰³ - **Geographic Information System**).

Active - the graphic is displayed in GIS view.

Inactive (default) - the graphic is displayed in normal graphic view.

Title:

Here you can define a title for the graphic document. This title is then also displayed as title in the layout, provided that no other explicit title was defined. If no title is entered, then the file name without path or file extension is used as the title of the document.

... - enter the title if applicable.

▼ **Background color:**

Here you can define the background color via the [Color Palette](#)⁹³³ or the Windows dialog **Color Selection**.

... - define the background color if applicable.

Disable zoom

This option allows you to activate/deactivate the zoom function for display/test mode in the graphic.

Active - zooming is no longer possible.

Inactive (default) - zooming is possible.

▼ Data section: As symbol graphic

These settings are only applicable if the graphic is used as a symbol and saved in the WinGuard folder, **Symbols**. These settings are ineffective otherwise!

Animation through:

This option determines if the animation of the symbol occurs via a color change or via a change in image. The respective color for the display of the individual states can be defined here via the animation scheme. For a change in image, the object used for the respective state is defined through the position of the object in the object stack (please see: [Symbols](#)).⁷⁹⁰

Color change

Active (default) - states are animated via color change.

Image change

Active - the states are animated via image change.

▼ **Animated color:**

Here you can define the color that should be used for the color change. This means that this color replaces the respective state color from the animation scheme during display.

black (default) - this color is used as animated color.

... - select the animated color or enter it directly, if applicable.

(RGB value: 3 hexadecimal values, each between 00 and ff - e.g. #B2B2B2)



The color selected here must also be present in the symbol!



This definition is only used under the option color change!



Animation scheme:

Here you can define an animation scheme for the color change. The animation scheme can be selected or its name can be directly entered. If the field remains blank, the default animation applies ([please see: Settings](#)^[404] - [Graphic](#)^[485]).

Blank (default) - the default animation scheme is used.

... - select an animation scheme if applicable or enter it directly.



This definition is only used under the option, color change!

▼ Data section: Version



Created:

Here the date and time the graphic was created is displayed.



Last modified:

Here the date and time of the last change to the graphic is displayed.



By user:

Here the ID of the user who made the last change to the graphic is displayed.

8.5.6.2 GIS Tab

Via this tab a graphic can be optionally dimensioned with geo-coordinates. In this manner, you can define coordinates, map settings, and the visibility of symbols. The GIS map is always displayed on the lowest level of the hierarchy, meaning that it is always shown below the other graphic layers.

▼ **Dialog: Graphic Properties (GIS Tab)**

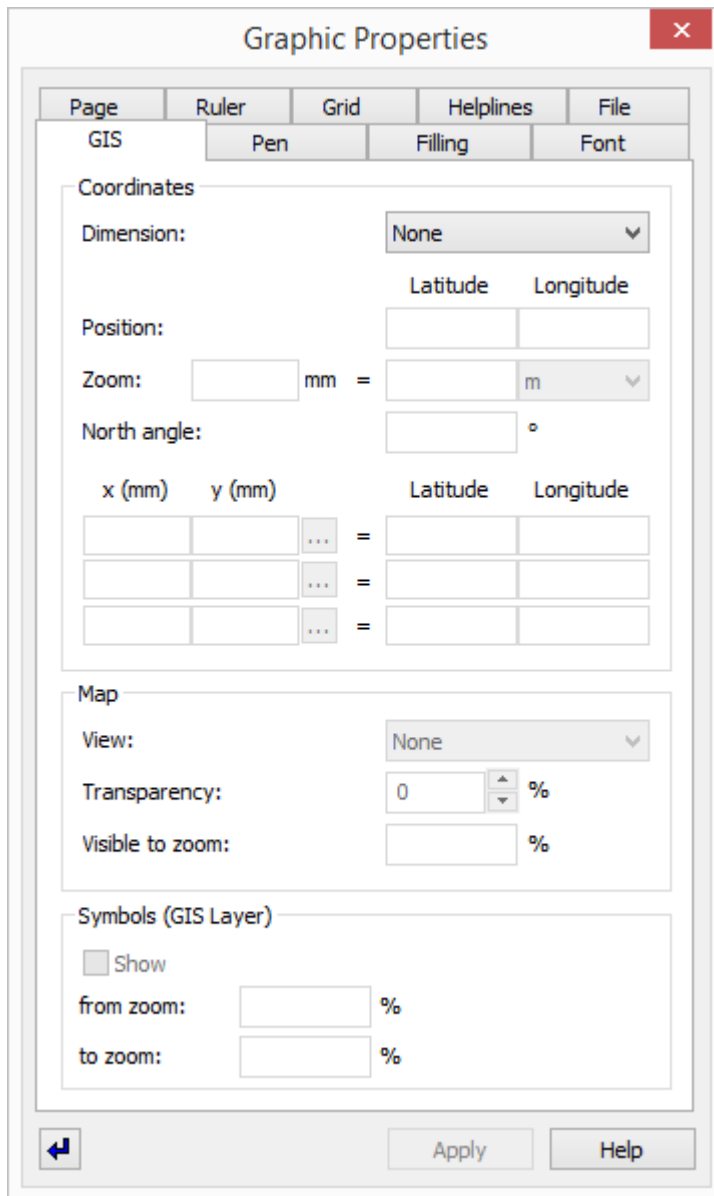


Figure 301: Dialog - Graphic Properties (GIS Tab)

▼ **Data section: Coordinates**

The adjustable coordinates data depends on the dimension selection. The two types available can be converted into one another if necessary.

i For graphics pre-defined for the GIS Viewer, dimensioning should be done with a center point position!

▼ Dimension


With this option you can determine the type of dimension in the GIS graphic.

None (default) - GIS dimensioning is inactive.

Position / Zoom - the graphic is displayed in GIS view.

Dot matrix - the graphic is displayed in GIS view.

North angle - activating FOVs for cameras.

 For display of the view fields in a graphic, it is decisive whether the north angle has been defined for the graphic. Only if the north angle is defined, view fields will be visualized!

1. (Optional)

The following settings are only available under the dimension type **Position / Zoom**. Only one geo-coordinate (the center of the paper) is entered, additionally the zoom level, and, if applicable, the north angle.

Position: (Latitude and Longitude)

Here you can define the latitude and longitude in decimal coordinates.

... - enter the required coordinates if applicable.

▼ **Zoom:**

With these settings, the relationship between the drawing scale and the actual distance is defined (in m or km).

... - enter the respective zoom parameters.

North angle: ... °


Here the north angle is defined for the map. The entry can range between -360° and +360°.

0 (default) - no rotation, meaning that the map is aligned north.

... - enter the respective north angle, if applicable.

2. (Optional)

The following settings are only available for the dimension type, Dot matrix. Here the document coordinates are given their respective geo-coordinates.

 **After entry, the dimension type reverts to Position / Zoom!**

(x (mm) / y (mm) = latitude / longitude)

Here you can define the document coordinates that can be picked from the document with a picker. The applicable geo-coordinates are either entered manually, or copied from other programs via the clipboard.

... - enter the applicable transformation information or select it.

▼ Data section: Map

In this section, you can make definitions pertaining to the view of the GIS map. You can select from various map views such as road, satellite, or hybrid. The definitions of the transparency and the visibility depend on the zoom level.



The settings defined here for map display are simply presets for the graphic. These can later be changed dynamically via the respective functions in the **Graphic** menu or via respective buttons in the toolbar!

View:

Via this selection, the view of the GIS map is determined.

None (default) - the GIS map is not visible.

Roads - the roads view of the GIS map is shown.

Satellite - the satellite view of the GIS map is shown.

Hybrid - the hybrid view (road + satellite) of the GIS map is shown.

... - select the desired view.

Transparency: ... %

Via this setting, the GIS map can also be displayed somewhat faded out. At a setting of 100% , the map is then no longer visible.

0 (default) - the map is visible at a normal level.

... - select the desired transparency using the arrow keys or enter it directly (0 - 100%).

Visible to zoom: ... %

With this setting, you can make the visibility of the GIS map dependent on the selected zoom level. If a graphic is zoomed to or beyond the level defined here, the GIS map is faded out.

Blank (default) - the map is always visible.

... - enter the desired zoom level at which the map becomes invisible.

▼ **Data section: Symbols (GIS Layer)**

In this section, you can make definitions for the display of symbols.

Show:

Here you can fundamentally turn the display of the GIS layer including the display of its associated symbols on or off.

Active - the GIS layer is shown/displayed.

Inactive (default) - the GIS layer is **not** shown/displayed.

from zoom / to zoom: ... %

With these two settings, you can make the visibility of the GIS layer dependent on the selected zoom level. If the graphic is zoomed below or above the values entered here, the GIS layer is not shown.

Blank (default) - if both elements are blank, the GIS layer is always visible.

... - enter the desired limits of the zoom levels.

8.5.6.3 Grid Tab

The grid is a tool that helps you align objects within a graphic. The grid is therefore not shown in the display mode of a graphic, but only in the graphic editor. You can also access the grid via the [Graphic Content Explorer](#)⁷⁸⁵. From there, by right-clicking on **Grid**, you can retrieve the context menu in which you select **Set up grid**.

▼ Dialog: Graphic Properties (Grid Tab)

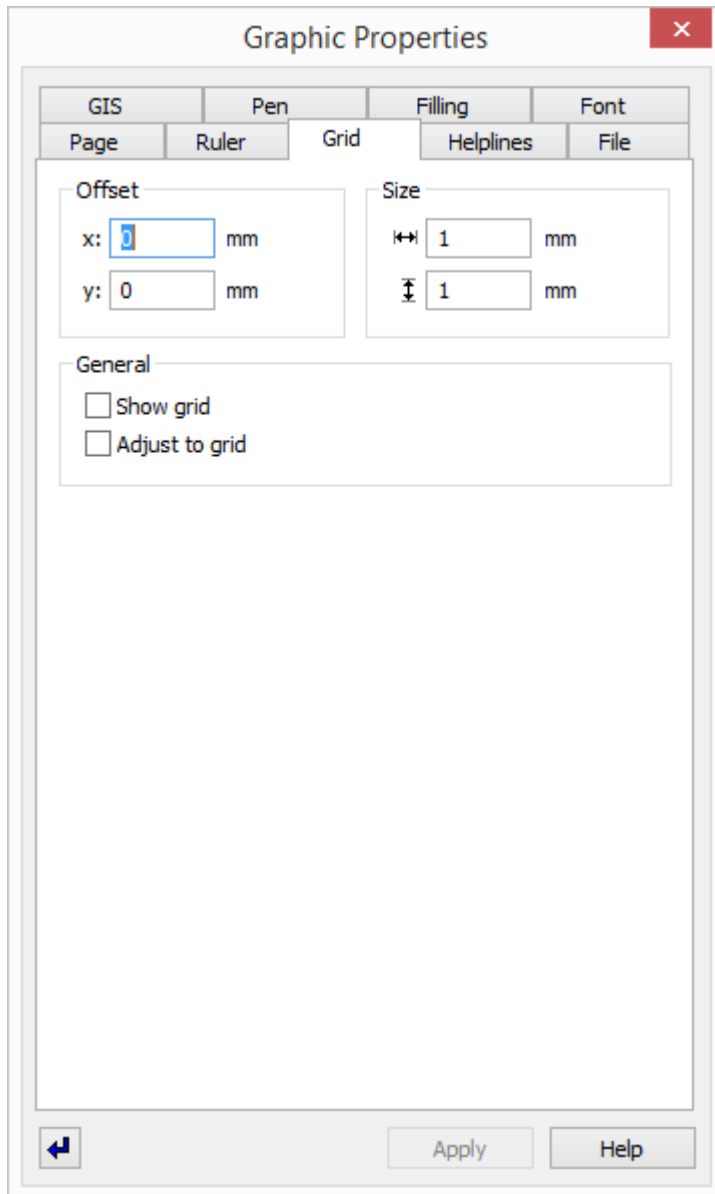


Figure 302: Dialog - Graphic Properties (Grid Tab)

▼ Data section: Offset

x: ... mm

With this definition, the grid can be moved to right on the X axis with respect to the 0 position.

0 (default) - the grid is not moved.

... - enter the desired offset to the right if applicable.

y: ... mm

With this definition the grid can be moved down on the Y axis with respect to the 0 position.

0 (default) - the grid is not moved.

... - enter the desired offset down if applicable.

▼ Data section: Size

⇄ ... mm

Here you can determine the grid width, the distance between grid points horizontally.


... - enter the desired grid width.

I ... mm

Here you can define the grid height, the distance between grid points vertically.

... - enter the desired grid height if applicable.



Grid width and height can be predetermined in the System Settings under [Graphic](#)  485.

▼ Data section: General

**Show grid**

With this option the display of the grid can be turned on or off.

Active - the grid is visible.

Inactive (default) - the grid is invisible.

**Adjust to grid**

With this option you can activate the alignment of objects on the grid. If this function is active, objects placed manually near grid points are grabbed by these grid points and automatically attached/aligned to them.

Active - objects placed near grid points are aligned on them.

Inactive (default) - objects are not aligned on grid points.

8.5.6.4 Helplines Tab

Helplines are tools that help you to adjust objects within a graphic. They are therefore not shown in display mode, but only in the graphic editor. Alternatively, you can access helplines via the [Graphic Content Explorer](#) ⁷⁸⁵ by highlighting Helplines and opening the Properties dialog via right-clicking. You may also highlight the heading **Helplines** in the graphic structure and select **Set up helplines** by right-clicking.

▼ Dialog: Graphic Properties (Helplines Tab)

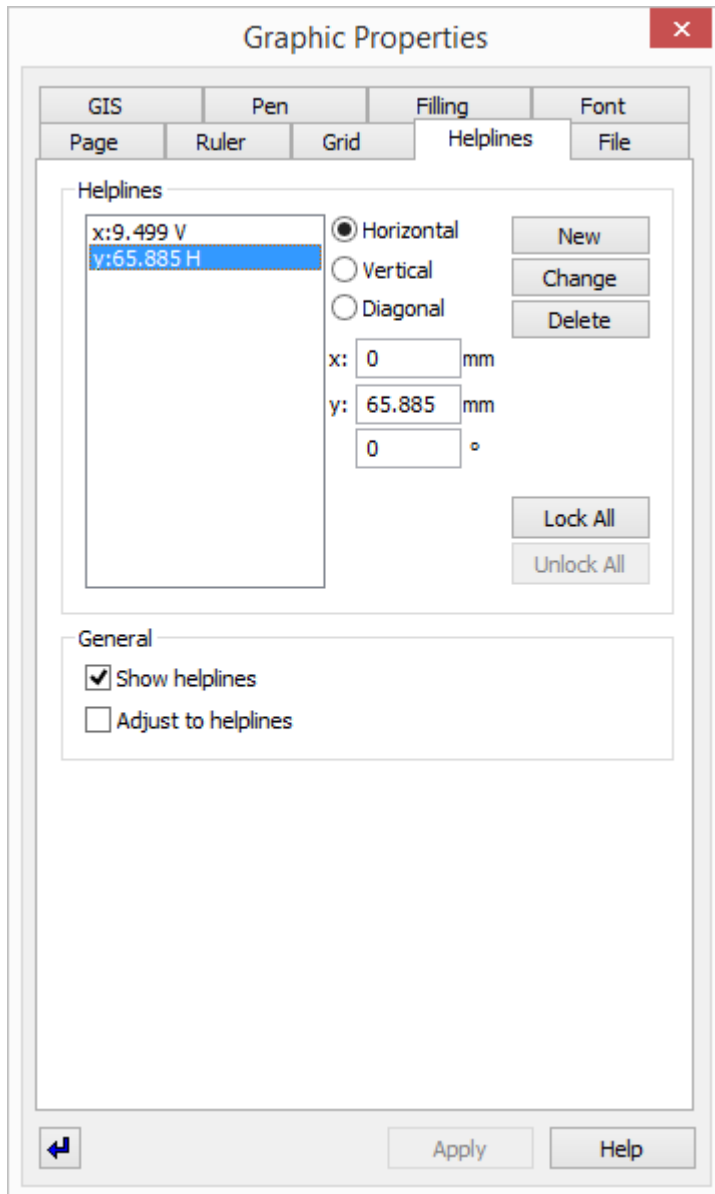


Figure 303: Dialog - Graphic Properties (Helplines Tab)

▼ Data section: Helplines

Helplines

If helplines have already been defined for this graphic, these can be highlighted and subsequently edited or deleted in this list. A helpline highlighted here is also differentiated in the graphic by color, and the parameters are visible in the respective fields.

... - select the helpline to be edited, if applicable.

(Optional - Alignment)

The position/alignment of the selected helpline can be defined using the three following options.

**Horizontal**

Active - the helpline is defined as horizontal with the y value on the Y axis.

**Vertical**

Active - the helpline is defined as vertical with the x value on X axis.

**Diagonal**

Active - the helpline is defined as diagonal and intersects the point x / y in the coordinates system. The rotation is determined by the indicated angle, counter clockwise.

x: ... mm

Here the X coordinate is defined which the vertical or diagonal helpline should intersect.

... - enter the X coordinate.

y: ... mm

Here you define the Y coordinate which the horizontal or diagonal helpline should intersect.

... - enter the Y coordinate.

(Angle) °

Here you define the angle of the diagonal helpline. The angle is determined in relation to the horizontal, counter clockwise.

... - enter the angle.

New

With this function, a new helpline with the described properties is established.

Change

If a helpline is highlighted in the selection list to the left, with this function, the defined properties are applied to it.

Delete

This function deletes the helpline highlighted in the selection list to the left.

Lock All

With this function all helplines can be locked. Changing or deleting helplines is then no longer possible.

Unlock All

With this function all helplines can be unlocked again. Changing or deleting the helplines is then possible again.

▼ Data section: General



Show helplines

With this option the visibility of helplines in the graphic editor can be turned on or off.

Active (default) - the helplines are visible.

Inactive - the helplines are invisible.



Adjust to helplines

With this option adjustment/alignment of objects to helplines can be activated. If this function is active, objects that are manually placed near a helpline are grabbed by the helpline and automatically attached/aligned to it.

Active - objects near helplines are aligned/attached to them.

Inactive (default) - objects are not aligned/attached to helplines.



Other properties of the helplines such as color, weight, etc. cannot be defined!

8.5.6.5 Page Tab

Here you can define the paper format. It is used as standard area for display and print as long as the default area of the graphic was not explicitly defined. If the default area was modified, then the modified version applies as the standard view or print format and the page entries only serve as orientation guides.

▼ Dialog: Graphic Properties (Page Tab)

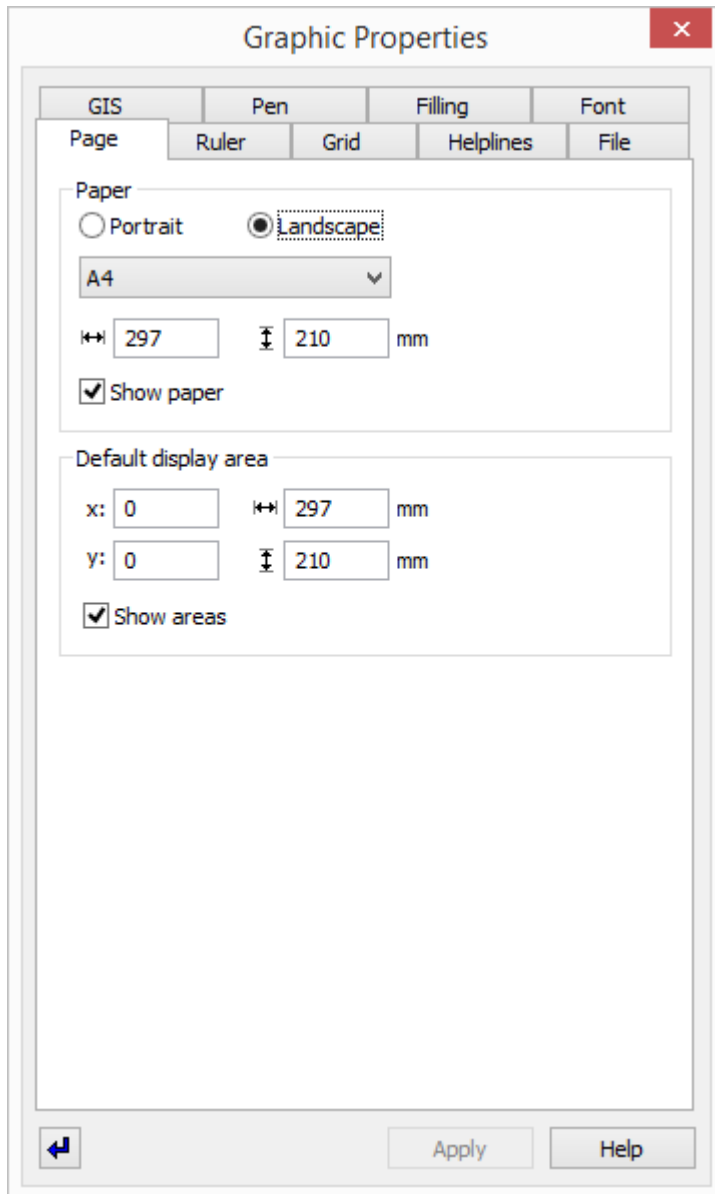


Figure 304: Dialog - Graphic Properties (Page Tab)

▼ Data section: Paper

1. **(Optional)**
With the two following options you can define the paper format.
 - Portrait**
Active - defines the page in portrait format.

Landscape



Active (default) - defines the page in landscape format.

 (Paper size)

Here you can apply a predefined or user defined paper size/format to the page. The respective paper dimensions are shown in the fields that follow and can also be defined there.

You can select from **A4 - A0** and **user defined**.

... - select the desired format.

  ...  ... mm

Here the paper width and height for the selected paper format are displayed, or can be entered directly.


... - enter the desired paper width and height if applicable.

 Show paper

With this option you can turn the visibility of the paper page either on or off.

Active (default) - the page is visible.

Inactive - the page is invisible.

 Data section: Default display area
 x: ...  ... mm

Here you can define the position of the left edge and the extension into direction X of the default display area in relation to the origin coordinate.

... - enter the desired position and extension into direction X, if applicable.

 y: ...  ... mm

Here you can define the position of the upper edge and the extension into direction Y of the default display area in relation to the origin coordinate.

... - enter the desired position and extension into direction Y if applicable.

 Show areas

With this option you can turn the visibility of the defined display areas on or off.

Active - the areas are visible.

Inactive (default) - the areas are invisible.

8.5.6.6 Ruler Tab

The ruler is a tool that helps you position or align objects within a graphic. You can define settings concerning the unit of measurement, scale, origin, and visibility of the ruler. The ruler is not visible in the display mode of a graphic, only in the graphic editor.

▼ Dialog: Graphic Properties (Ruler Tab)

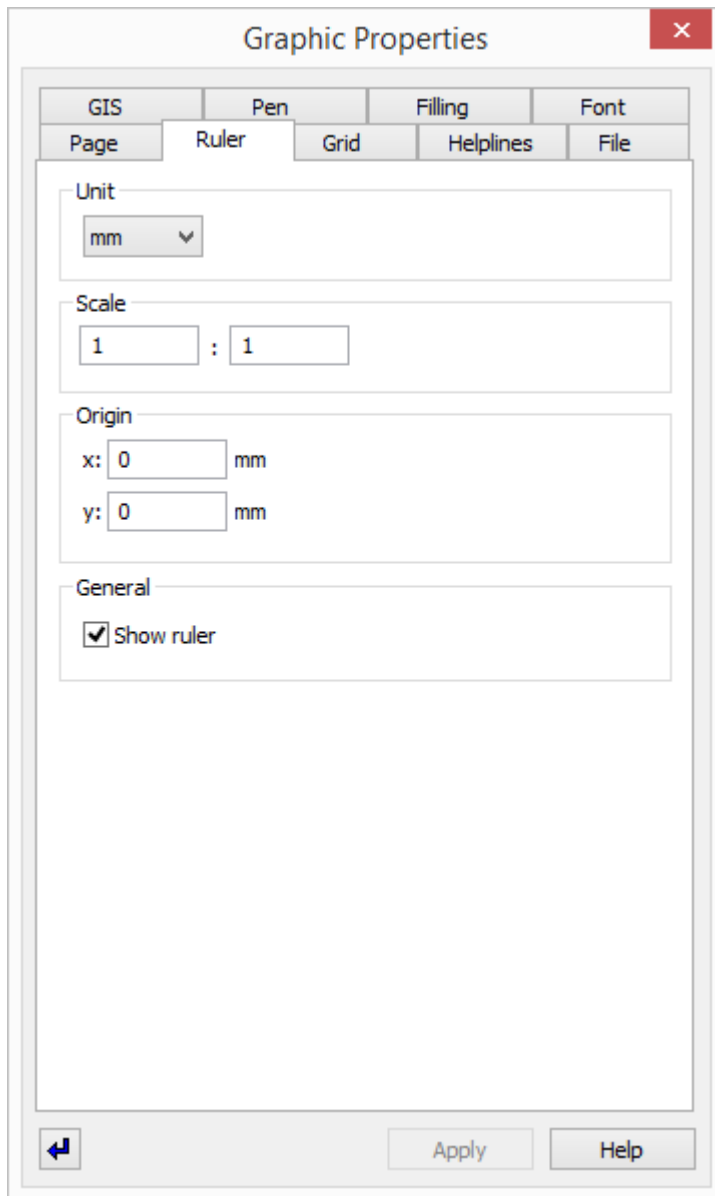


Figure 305: Dialog - Graphic Properties (Ruler Tab)

▼ Data section: Unit

▼ (Unit)

With this selection the unit of measurement for the ruler is defined. You can select from the metric units *mm*, *cm*, *m*, and *km*.

mm (default) - millimeters are used for the unit of measurement.

... - select the desired unit of measurement for the ruler.

▼ Data section: Scale

(Scale)

Via these two values you can define a scale ratio.

1 : 1 (default) - no scale ratio is active.

... - enter the desired ratio if applicable.

▼ Data section: Origin

x: ... mm

With this definition the ruler can be moved to the right in relation to the left edge of the paper (please see: [Page Tab](#)⁸⁴²).

0 (default) - no movement occurs.

... - enter the desired move to the right, if applicable.

y: ... mm

With this definition the ruler can be moved down in relation to the upper edge of the paper (please see: [Page Tab](#)⁸⁴²).

0 (default) - no movement occurs.

... - enter the desired move down, if applicable.

▼ Data section: General

Show Ruler

This option determines if the visibility of the ruler is turned on or off.

Active (default) - the ruler is shown.

Inactive - the ruler is not shown.

8.5.7 General Graphic Tabs

The tabs described here are part of the properties of most objects. Here you can define settings such as filling, font, actions, etc.

The dialog can be opened by selecting the object, opening the context menu with the right mouse key, and then selecting the item, Properties, there. Alternatively, you can open the dialog by clicking on the icon for opening the Properties in the top toolbar of the graphic editor once an object has been selected.

8.5.7.1 Action Tab

You can control a variety of commands from graphic objects. These commands are listed and described separately in the chapter, [Commands](#)⁹⁴⁶. The tab required to define commands, **Action** (tab), can be retrieved for most objects via the **General** Tab. This tab is always available for **buttons**.

The tab itself features two subordinated definition areas (tabs) that allow you to define the functions for **pressing** or **releasing** a button.

i *If only one action should be executed, the definition should be made on the **Release** tab!*

▼ Dialog: Graphic Properties (Action Tab)

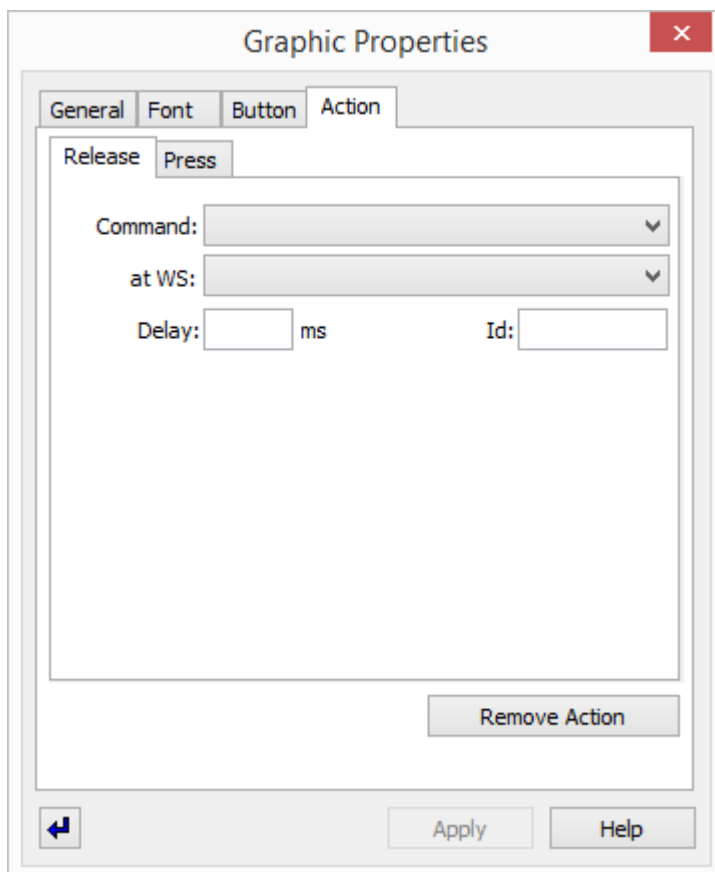


Figure 306: Dialog - Graphic Properties (Action Tab)

▼ Subordinated Tabs

- **Release**
Here you can define the action that should be executed after the left mouse key is released following a click (pressing) on a graphic object.

- **Press**
Here you can define the action that is executed when pressing on the graphic element with the left mouse key.



*Release / Press may be defined differently in the Action tab of a Properties Dialog for buttons. Please see the explanation regarding the **Mode** field on the [Button Tab](#).*

▼ Example: Data section Release / Press

▼ Command:

Here you can define the [command](#), with parameters if applicable, that should be executed when clicking on the symbol/object. You can select from all available commands in WinGuard, for example **Switch Pane**, **Start application**, etc.

Blank (default) - no command.

... - select the desired function.

▼ at WS:

Here you can select the workstation on which the command should be executed. If no workstation is selected, the command is always executed on the local workstation. (Only functional with local commands such as the activation of camera images on monitors or the playing of sounds).

Blank (default) - the command is executed on the local workstation.

Server - the command is executed on the **active server**.

Hot-Standby - the command is executed on the **Hot-Standby Server**.

... - select the desired workstation if applicable.

Delay: ms

Here you can define a delay in the execution of the command by the number of milliseconds entered here.

Blank (default) - no delay.

... - enter the desired time delay if applicable.



Commands with parameters generally should not be delayed because the parameters may be lost due to the delay!

ID:

Here you can assign an ID (text) to a command so that a pending command can be stopped during the delay with the command [Remove command](#).

Blank (default) - no ID available.

... - enter the desired ID if applicable.

Remove Action

With this function the **Action** Tab, including all information entered on it, is removed.



Only the fields indicated here are always available. Depending on the command selected, a different display may appear with additional definition options. You can find detailed information about commands in the section [Commands](#).

8.5.7.2 Display Tab

This tab is optional and can be added via the **General** tab. Using the settings provided here, you can define additional parameters for object display. For example, you can limit the zoom size of an object and define a respective fixpoint. You also have the option of preventing the rotating of objects when the graphic is rotated (for example, the symbols for datapoints or sensors).

▼ Dialog: Graphic Properties (Display Tab)

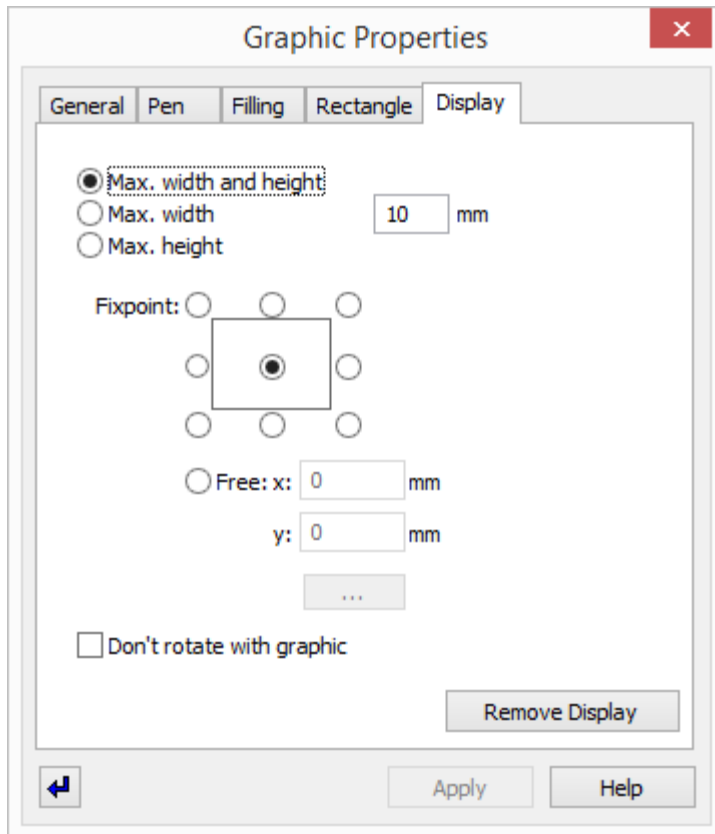


Figure 307: Dialog - Graphic Properties (Display Tab)

▼ Data section: Display

1. **(Optional)**


Using the following options, the maximum size for display of the object is defined.

- Max. width and height**
Active (default) - the maximum size entry applies to the height and width of the object.
- Max. width**
Active - the maximum size entry applies only to the width of the object.
- Max. height**
Active - the maximum size entry applies only to the height of the object.

mm

Here the maximum size for object display is defined.

10 (default) - depending on the selected option the object is limited to 10 mm during display.

 *The entry always refers to the scale of the drawing!*

2. (Optional)

Fixpoint:

With this option you can define the position of the fixpoint for the object in case the object cannot be further enlarged in a zoom display on account of the size limitations defined for height and/or width.

Center (default) - the fixpoint is the center of the object.

... - select the desired fixpoint position if applicable.

Free:

This option allows you to freely define the position of the fixpoint. The position must then be defined in the following fields.

Active - the function for defining the fixpoint freely is active. Define the position.

 x: mm

Here you enter the X-value for the fixpoint of the object.

... - enter the desired fixpoint position on the X axis.

 y: mm

Here you enter the Y value for the fixpoint of the object.

... - enter the desired fixpoint position on the Y axis.

 ...

After activating this button, the graphic fixpoint selection is active. Now you can determine the fixpoint definition through a click in the graphic. The position is automatically applied to the respective fields.

... - select the desired fixpoint position.

Don't rotate with graphic

With this option you can deactivate the rotating of objects as part of the rotation of the graphic/frame/pane, or powerclip. This means that the object is not rotated.

Active - the object is not **rotated** in graphic rotation.

Inactive (default) - the object is also rotated in graphic rotation.

 Remove Display

Using this function, the **Display Tab** is removed without further confirmation and all settings defined there are deleted.

8.5.7.3 Filling Tab

This tab is available for the **display areas** as well as for objects of the types: **curve**, **rectangle**, **ellipse**, **text**, **variable**, **LCD-display**, and **powerclip**. Here you can define the color, pattern, and degree of transparency for filled objects.

▼ Dialog: Graphic Properties (Filling Tab)

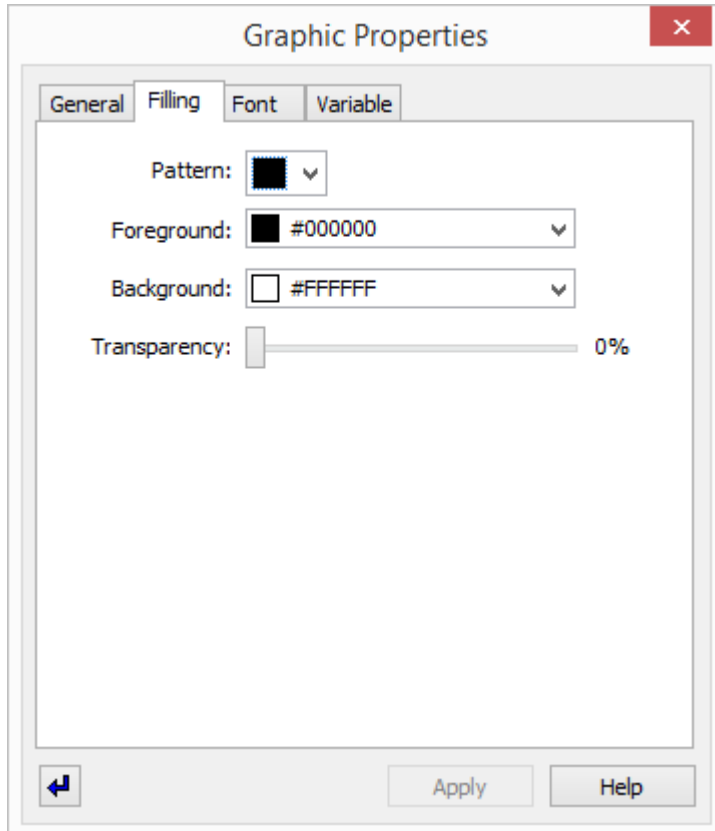


Figure 308: Dialog - Graphic Properties (Filling Tab)

▼ Data section: Filling

Here you can assign a pattern as filling to a closed object. You can select from a variety of hatchings, a solid fill, or various color gradients. The uppermost element (**X**) in the selection represents **no filling**. For a solid color filling, only the **foreground color** is applied. For hatchings and color gradients, both colors are used.



Non-filled areas cannot be addressed with the mouse. This also applies to objects of 100% transparency!



Pattern:

Here you can assign a respective pattern as object filling.

X (default) - no filling is applied.

... - select the desired pattern for the filling, if applicable.



Only closed objects can be displayed filled!

**Foreground color:**

Here you can select the color that is shown as **black** in the pattern examples in the selection list (please see: [Color Selection](#)⁹³³).

#000000 (default) - the color black is predefined.

... - select the desired color or enter it directly, if applicable.

(RGB value: 3 hexadecimal values, each between 00 and ff - e.g. #B2B2B2)

**Background color:**

Here you can select the color that is shown as **white** in the pattern examples in the selection list (please see: [Color Selection](#)⁹³³).

#FFFFFF (default) - the color white is predefined.

... - select the desired color or enter it directly, if applicable.

(RGB value: 3 hexadecimal values, each between 00 and ff - e.g. #B2B2B2)



The color is not visible with a solid filling!

**Transparency:**

The transparency determines the transparency/diaphanousness of the filling/area. Transparency is entered in percent (%).



At a transparency of 100%, the area is displayed as not filled!



*For objects of the types **curve**, **rectangle**, **ellipse**, and **powerclip**, the filling applies to the space enclosed by the outline of the object. For **text**, **variable**, and **LCD display** on the other hand, the filling applies to the text!*



If the filling is defined in the Properties Dialog of the Display Area, it applies only indirectly, namely as predefinition for the next object added to the graphic!

8.5.7.4 Font Tab

This tab is available in the **display area** and objects of the types: **Text**, **Variable**, **Button**, and **LCD Display**. Here you can select from the fonts provided by Windows and define the respective settings.

▼ Dialog: Graphic Properties (Font Tab)

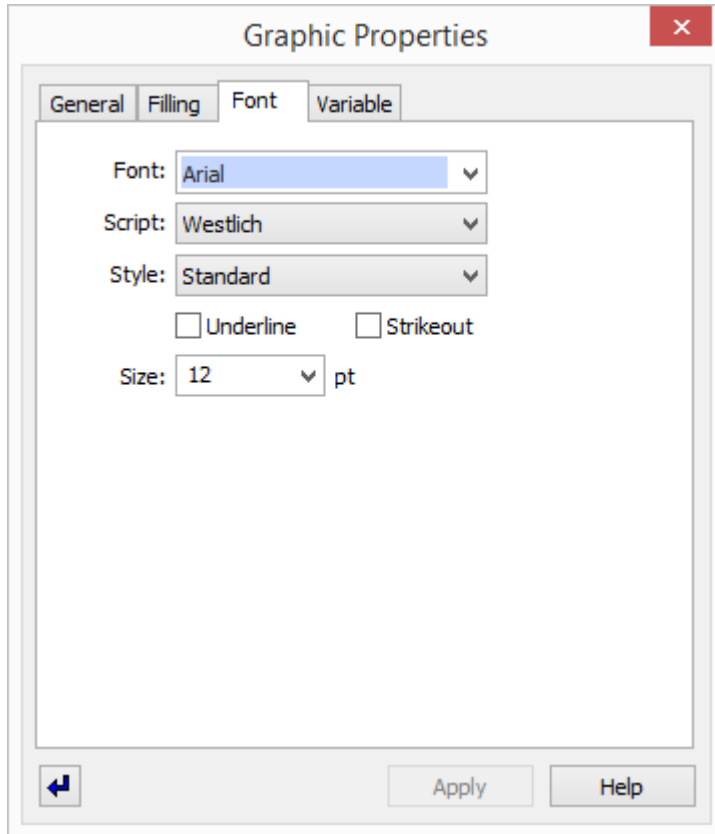


Figure 309: Dialog - Graphic Properties (Font Tab)

▼ Data section: Font

▼ Font

The font for the object is defined via this selection. The fonts available in Windows® are selectable.

Arial (default) - the font Arial will be used.

... - select the desired font.

i Please note that the selected font is also available on all your clients!

▼ Script

The script characteristics for the font can be defined, such as e.g. Western letters, Central European, etc.

... - if required, select the desired script.

i The scripts available here depend on the selected font!

Style

The font style such as e.g. regular, italic, bold, etc. can be defined here.

... - if required, select the desired style.



The styles available here depend on the selected font!

**Underlined**

This option activates or deactivates the underlining of texts.

active - the text will be displayed underlined.

inactive (default) - the text will be displayed **not** underlined.

**Strikeout**

This option activates or deactivates the striking-through of texts.

active - the text will be displayed strikeout.

inactive (default) - the text will be displayed **not** strikeout.

**Size: ... pt**

The size of the text in pt (1/72 inch) is defined here.

... - select the desired size or enter it directly.



The font size can often also be adapted graphically using the mouse (e.g. by enlarging the text object)!

8.5.7.5 General Tab

This tab is available for objects of the types: **Area, Frame, Curve, Rectangle, Ellipse, Text, Variable, Symbol, Button, VideoDisplay, LCD Display, Graphic, Powerclip, and Label**. This tab serves to define the position and extent of a graphic, provides an option to lock editing, and offers buttons for the addition of the tabs **Link, Label, Action** or **Display**.

i Depending on the object type, some buttons may be inactive. If the applicable tab was already added, then the button is also inactive!

▼ Dialog: Graphic Properties (General Tab)

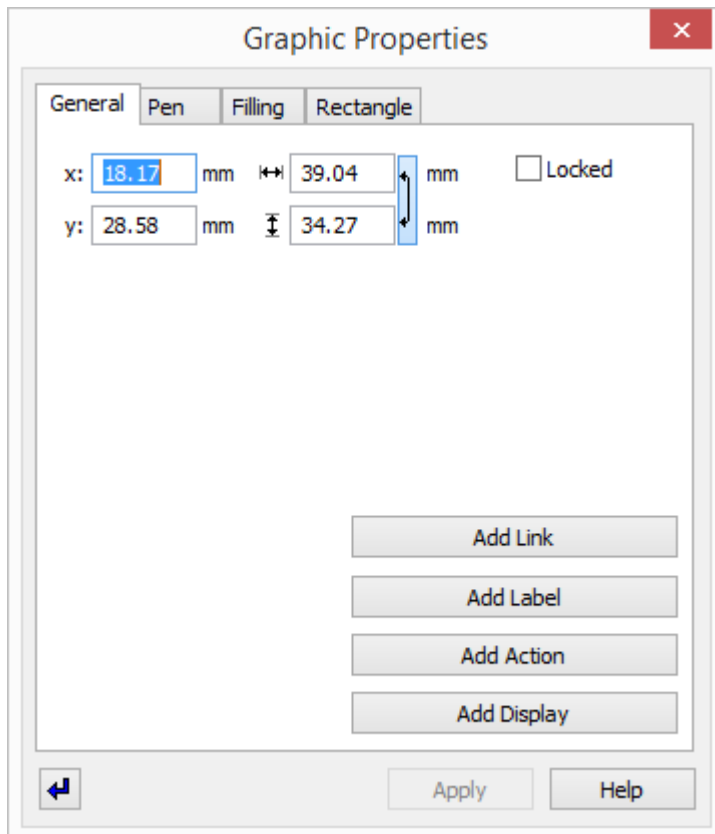


Figure 310: Dialog - Graphic Properties (General Tab)

▼ Data section: General

- x: mm**
The value entered here is used as the position for the left edge of the object.
... (default) - enter the desired position if applicable.
- mm**
The value entered here determines the width of the object.
... (default) - enter the desired width if applicable.
- y: mm**
The value entered here is used as the position for the top edge of the object.
... (default) - enter the desired position if applicable.



The entered value determines the height of the object.

... *(default)* - enter the desired height if applicable.



(Aspect ratio / Proportionality)

This option determines if, when changes are made to width or height, the respective other value is proportionally adjusted or not.

Pressed (default) - the proportionality for changes is activated.

Not pressed - the proportionality for changes is deactivated.



Locked

This option determines if the object can be edited (all options on all tabs are deactivated).

Inactive (default) - editing is **not** locked.

Active - editing is locked.



Add link

The **Link** tab is added to the Properties.



Add Label

The **Label** tab is added to the Properties.



Add Action

The **Action** tab is added to the Properties.



Add Display

The **Display** tab is added to the Properties.

8.5.7.6 Label Tab

This tab is optional and may be added via the **General** Tab. A label is a caption for graphic objects. One special feature of a label is its link with its graphic object. This means that when an object is moved, the label is automatically moved with it. A label may also display the name of the linked datapoint.

i A label has its own **Properties** dialog which, in addition to the **Label** tab, also contains the tabs: **General, Filling, and Font!**

i Some of the label definitions can be predefined in the System Settings under [Graphic](#) 

Dialog: Graphic Properties (Label Tab)

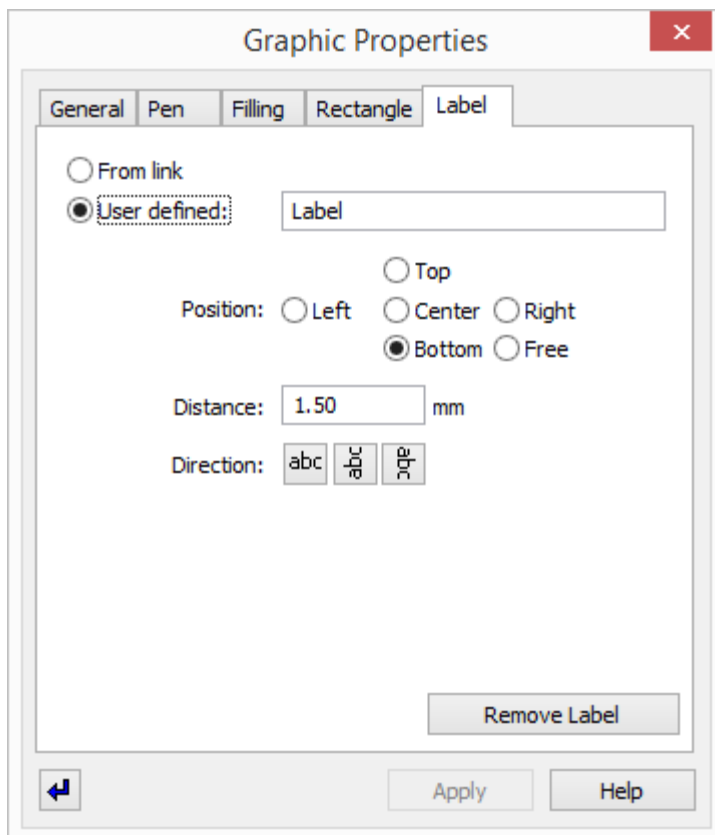


Figure 311: Dialog - Graphic Properties (Label Tab)

Data section: Label

1. **(Optional)**

Using the two following options you can determine if, for an object with a link, the content of the label is user defined, or if it contains the name of the linked object (datapoint or location).

From link

Active - the label text from the link is applied.

i Only functional if the object has a respective link!

User defined

Active (default) - the label text shown in the next entry field is applied.

 (Text)

Here you can define a text for the label of the object.

... - enter the desired text if applicable.

2. **(Optional)**

Here you can select the position of the label relative to the graphic object. If you select the option, **free**, the other selection options are ineffective - you drag the label via mouse to the desired position.

 Position:

You can select from the options: **Left**, **Right**, **Top**, **Bottom**, **Center**, and **Free**.

... - select the desired position or define it.

 Distance: mm

Here you define the distance, in mm, between the closest edges of the label and the graphic object.

... - enter the desired distance if applicable.

 Direction: abc

With the following three options, you can define the direction of the text. You can select from: horizontal, rotated 90° counter clockwise, and rotated 90° clockwise.

 Remove Label

With this function, the **Label** tab and thereby the label, including all settings entered for it, is removed.

8.5.7.7 Layer Tab

This tab is only available for layers. Layers are individual levels in a graphic that can be edited and displayed separately from one another. Graphics in WinGuard also work with layers, meaning that the drawings are built up with several layers/levels. These layers contain the individual objects. Through easy fading in and out of individual layers, the graphic display can be tailored to the application purpose of the drawing.

▼ Dialog: Graphic Properties (Layer Tab)

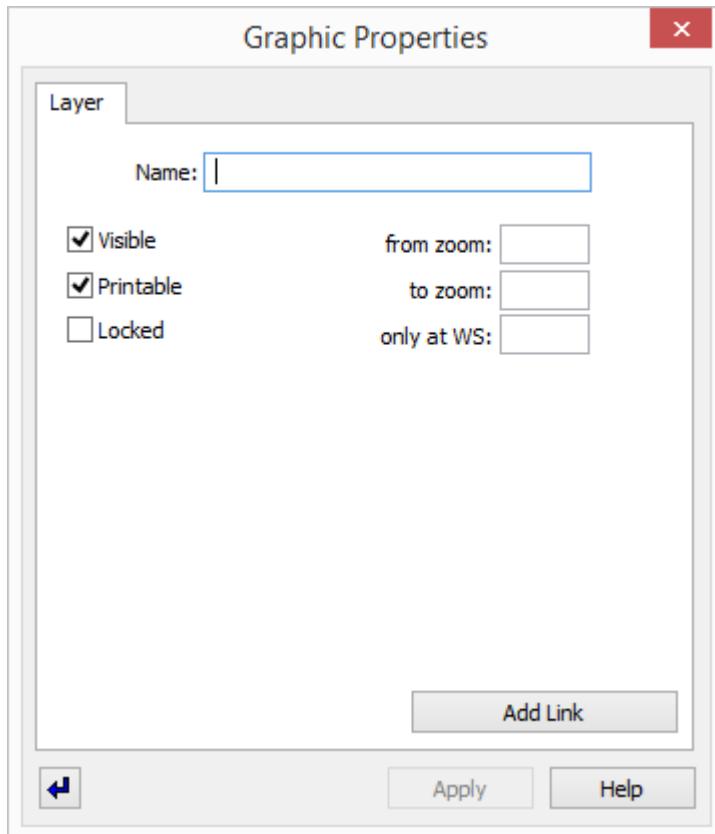


Figure 312: Dialog - Graphic Properties (Layer Tab)

▼ Data section: Layer

Name:

Here you can assign a name to a layer.

Blank (default) - the names Layer 1..n are automatically assigned by the system.

... - enter the name of the layer if applicable (recommended).



Visible

Here you can define the preset for the layer in terms of its visibility.

Active (default) - the layer is visible.

Inactive - the layer is **not** visible.



Printable

Here you can define the preset for the layer in terms of its printability.

Active (default) - the layer is printable.

Inactive - the layer is **not** printable.

Locked

With this option, a layer can be locked for editing.

Active - the layer cannot be edited.

Inactive (default) - the layer can be edited.

 from zoom:

Here you can define starting at which zoom level the layer is visible in display. This means that at zoom levels lower than the value (%) defined here, the layer is invisible.

Blank (default) - no respective limit is defined.

... - enter the desired zoom level (%), if applicable.

 to zoom:

Here you can define up to what zoom level the layer remains visible in display. This means that if the zoom level exceeds the value (%) defined here, the layer becomes invisible.

Blank (default) - no respective limit is defined.

... - enter the desired zoom level (%), if applicable.


 only at WS:


Here you can define at which workstations (WSs) the respective layer should be fundamentally visible (multiple workstations should be entered separated by a comma).


Blank (default) - the layer is visible at all workstations.

... - enter the workstation(s) at which the layer should **not** be displayed.

 Add Link

With this function, the [Link tab](#)  is added to the Properties. However, several limitations with respect to the link definitions of graphic objects apply.

 Here, there are many limitations with respect to the link definitions of graphic objects!

 **Please note that a layer with a link is only displayed depending on the link!**

8.5.7.8 Link Tab

This tab is optional and can be added via the **General** tab. Here you can establish a connection (link) to a datapoint, a datapoint group, or a location. Depending on events, or also current states, the graphic objects can be animated using these links.

Some definitions or their visibility are directly dependent on others, thus, for layers or deactivated animation, respective definition elements may be faded out.



Links to locations and datapoint groups are only supported for event display!

▼ Dialog: Graphic Properties (Link Tab)

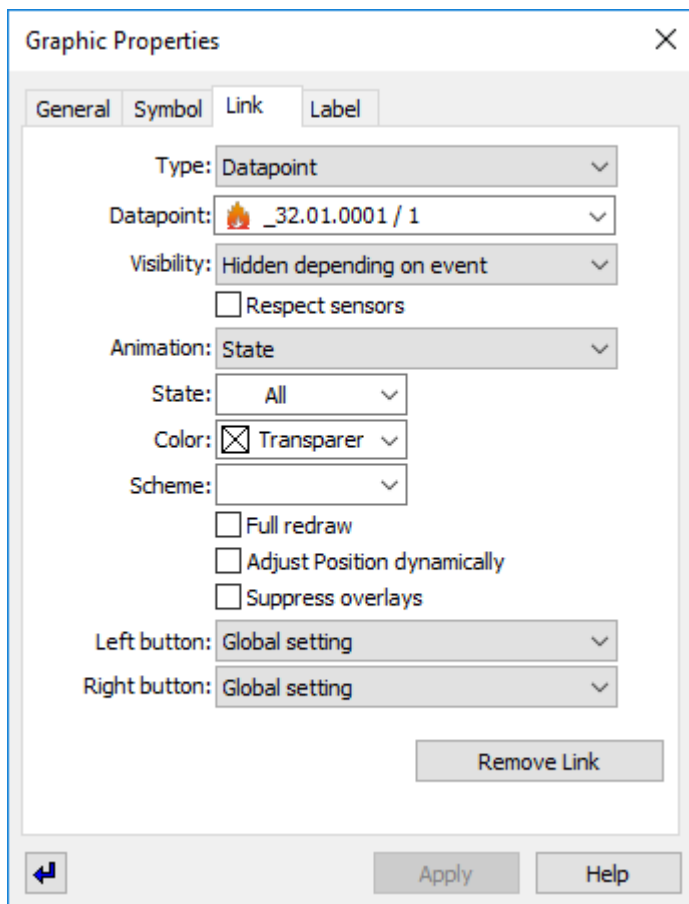


Figure 313: Dialog - Graphic Properties (Link Tab)

▼ Data section: Link

Type:

Here you can define the type of link.

Datapoint (default) - a datapoint is used as a link.

Group - a datapoint group is used as a link.

Location - a location is used as a link.

▼ Datapoint / Group / Location:

Depending on the link type, here you can define the respective name. Selection lists are available for all types.

None (default) - the link is undefined and not functional.

... - select a respective element.

▼ Visibility:

Here you can define the mode for the visibility of the object. Visibility also depends on the type of view: **event view** or **state view**.

Standard - the object is always visible.

Hidden depending on event - the object is not always visible.

- Event view - only objects in reference (context) to the event are visible/shown, all other objects with this setting are hidden.
- State view - all objects are shown/visible.

Shown depending on context - the object is not always visible.

- Event view - only the objects with reference (context) to the event are shown, all other objects with this setting are not shown/visible.
- State view -- all objects are **not** visible.

Respect sensors

This option determines whether for datapoints with sensors (for example, sensor groups), only the object that is linked with the alarm-triggering sensor is displayed in the graphic, or if all sensors that are assigned to the same datapoint are displayed.

Active - only the triggering sensor is shown.

Inactive (default) - all sensors of the sensor group are shown.

i *This setting is only effective for event view and if the visibility is **not** set on standard!*

▼ Animation:

With this selection you can define the type of animation for the object. The type of animation also depends on the datapoint category.

None - the object is not animated.

State - the object is animated depending on the state of the datapoint.

Value (filling) - the object (curve, ellipse, or rectangle) is animated depending on the actual value and the value range of the datapoint by being displayed with the respective filling.

i *This animation is only functional for datapoints of the type, value, and objects that are closed.*

Value (Rotation) - the object is animated depending on the current value and the upper/lower value limits of the datapoint by being shown with the respective rotation. Additionally, the angle can also be defined here.

i *This animation is only functional for datapoints of the type, value.*

Selection - if the object is selected or deselected depending on selection of the linked datapoint via the command [Select Datapoint](#)¹⁰⁰⁶, then the object switches between the animation states 0 and 1 (deselected and selected), which normally correspond to the states, idle and alarm. Selection, for example, can affect the command [Switch audio](#)⁹⁶⁷ if instead of a specific datapoint, the parameter **<Selection>** was defined.

State: (only for state and selection)

Here you can define the animation of the symbol for all or an individual state.

All (default) - animation applies to all states.

... - select the desired state if applicable.

 Color: (only for state and selection)

Here you can select the animation color for the object. In display, this is the color that is replaced by the respective state color (please see: [Color Selection](#)⁹³³).

Transparent (default) - no animation color is selected.



*For symbols, **Transparent** refers to the animation color from the symbol!
The color should always be **Transparent** for symbols if possible!*

... - select the animation color if applicable or enter it directly.

(RGB value: 3 hexadecimal values, each between 00 and ff - e.g. #B2B2B2)

 Scheme: (only for State and Selection)

Here you define the [animation scheme](#)⁶⁰¹ for the object, or, in other words, the assignment of the respective state colors.

Blank (default) - for symbols, the animation scheme of the symbol is used. For other objects, the default animation scheme defined in the system settings is applied.



For symbols, the scheme should always remain blank if possible!

... - select an animation scheme if applicable or enter one directly.

 Segments: (applies only to value (filling))

With this option, you can determine a scale/subdivision for the object to be filled with the number of segments defined here.

Blank (default) - no scale/subdivision into segments is defined and the filling is displayed proportionally.

... - enter the desired number of segments, if applicable.

 from zero (only applies to value (filling))

With this option you can create a defined zero point in the scale, dependent on the value range of the datapoint.

Active - the zero point is respectively displayed/respected.

Inactive (default) - no zero point is displayed.

 Angle: (only applies to value (rotation))

With this option you can set the degree/angle of rotation for the object, dependent on the value range of the datapoint.

Blank (default) - corresponds to an angle of 360 degrees.

... - enter the desired angle (0 - 360 degrees).



Full redraw

With this option you determine if, for changes, the object is simply redrawn or first deleted and then completely redrawn. If the object is not fully redrawn, parts of the object may not be displayed correctly with transparency or a screen change.

Active - when updating, the object is first deleted and then redrawn.

Inactive (default) - when updating the object is only redrawn.



*It is recommended that this **option** is always activated!*



Adjust Position dynamically

With this option, the position of the object can be dynamically changed through information of the datapoint.

Active - dynamic positioning is active.

Inactive (default) - dynamic positioning is **not** active.



This option is only functional if the datapoint, in turn, is supplied with information by the interface!



Suppress overlays

With this option, the viewing of overlays e.g. the field of view from cameras can be deactivated.

Active - the viewing of overlays is deactivated.

Inactive (default) - Overlays werden ggf. dargestellt.



The basic activation of overlays is dependent from the system, graphic and datapoint settings!



Left click: / Right click:

With these two selection lists you can define the actions that should occur with a left / right mouse click.

No action - a click does not have a function.

Preset (default) - the function defined in the system settings under [Graphic](#)⁴⁸⁵ is executed.

Datapoint-specific action - the action defined under the [Action Tab](#)⁸⁴⁶ for this object is executed.

Show context menu - the context menu with commands is displayed, provided this is a controllable datapoint.

Show control panel - the datapoint-specific control panel, or, (if not in existence), the main control panel is opened.

Show main control panel - the main control panel is opened.

Switch selection - if the value **Selection** has been selected in the animation field, then it is possible to switch between the state select /deselect.

Button

Remove Link

With this function, the tab is removed without further confirmation and all settings defined there are deleted.

Color assignment for animation "Value (Filling)"

1.

Limit exceeded

Value > Datapoint limit Max-Hi.

2. **Value critical (high)**
Limit Max-Hi > Value > Limit Max-Lo.
3. **Value normal**
Limit Max-Lo > Value > Limit Min-Lo and Value > 0.
5. **Value critical (low)**
Limit Min-Lo > Value > Limit Min-Hi.
6. **Limit fallen short of**
Limit Min-Hi > Value.

8.5.7.9 Pen Tab

This tab is available for the **display area** and for objects of the types: **Curve**, **Rectangle**, and **Ellipse**. Here you can define properties of object outlines such as line style, width, and color, etc.

▼ Dialog: Graphic Properties (Pen Tab)

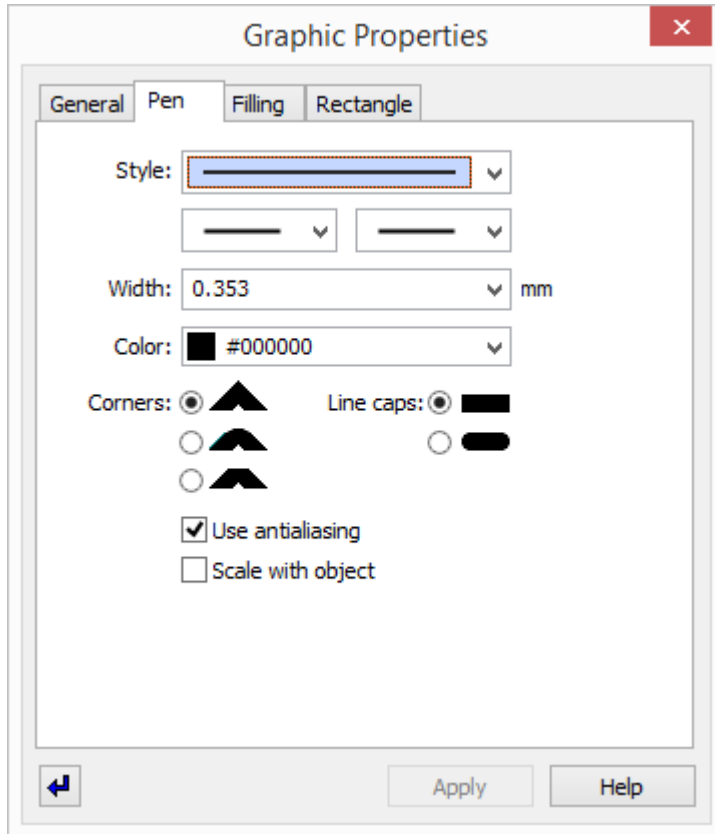


Figure 314: Dialog - Graphic Properties (Pen Tab)


▼ Data section: Pen

▼ Style

Here you can define the line style, for instance, solid, dotted, etc.
... - select the desired line style.

▼ (Line begin / Line end)

Here you can select an additional shape for the beginning or end of a line such as an arrow, point, etc.
... - select the desired shape for the beginning/end of the line, if applicable.

 *This is only functional for lines that are **not** closed!*

▼ Width: ... mm

This definition determines the line width in mm.
... **-select** the desired line width or enter it directly.




**Color:**

Here you can define the line color.

#000000 (default) - the color black is predefined (please see: [Color Selection](#)⁹³³).

... - select the desired color or enter it directly, if applicable.

(RGB value: 3 hexadecimal values, each between 00 and ff - e.g. #B2B2B2)

 Corners: (, , )

With these three options, you can define the line design in the corners.

... - select the desired shape if applicable.

 Line caps: (, )

With these two options, you can define the design of the line ends.

... - select the desired form if applicable.

 Use antialiasing

With this option you can influence the smoothness of the line edges.

Active (default) - smoothing of the edges is active.

Inactive - smoothing of the edges is turned off.



*It is recommended that this option is **always** activated!*

 Scale with object

With this option, the line width can be adapted to the current scale (zoom). This means that the line is enlarged or reduced if the object is enlarged or reduced in size.

Active - the line width is scaled with the object.

Inactive (default) - the line width remains constant.



The definition of the pen in the display area functions as a preset for newly-added objects!

8.5.8 Graphic Object Tabs

The tabs described here are general properties of various objects. Here you can define settings such as filling, font, commands, etc.

The dialog can be opened by selecting the object, opening the context menu with the right mouse key, and selecting the item, Properties, there. Alternatively, the dialog can be opened by clicking on the icon for opening the Properties in the top toolbar of the graphic editor, once the object had been selected.

8.5.8.1 Area Tab

This tab is only available for objects of the type, **Area**. During the display of graphics, these areas serve to determine the minimum display area or print area.

▼ Dialog: Graphic Properties (Area Tab)

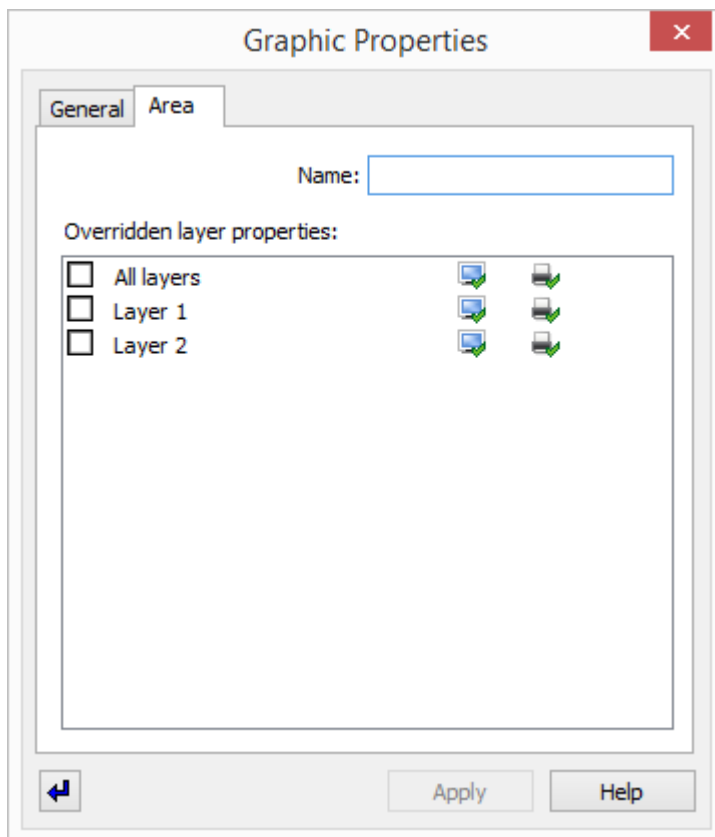



Figure 315: Dialog - Graphic Properties (Area Tab)

▼ Data section: Area

Name:

Here you can define the name of the area.

Blank (default) - enter the name of the area.

 *Areas without a name are subsequently not available for selection!*

**Overridden layer properties:**

This table shows the layers and their visibility / printability. Here you can modify the settings for the area, meaning that when the area is subsequently selected for display, the settings defined here are applied. However, these settings can be re-modified there.

... - define the desired settings if applicable.



In order define or change a setting here, you must first mark the respective layer on the left. For these layers, the respective definition shown here applies!

8.5.8.2 Button Tab

This tab is only available for objects of the type, **Button**. Depending on the definition, with buttons you can start commands, control datapoints, display graphics, etc.

▼ Dialog: Graphic Properties (Button Tab)

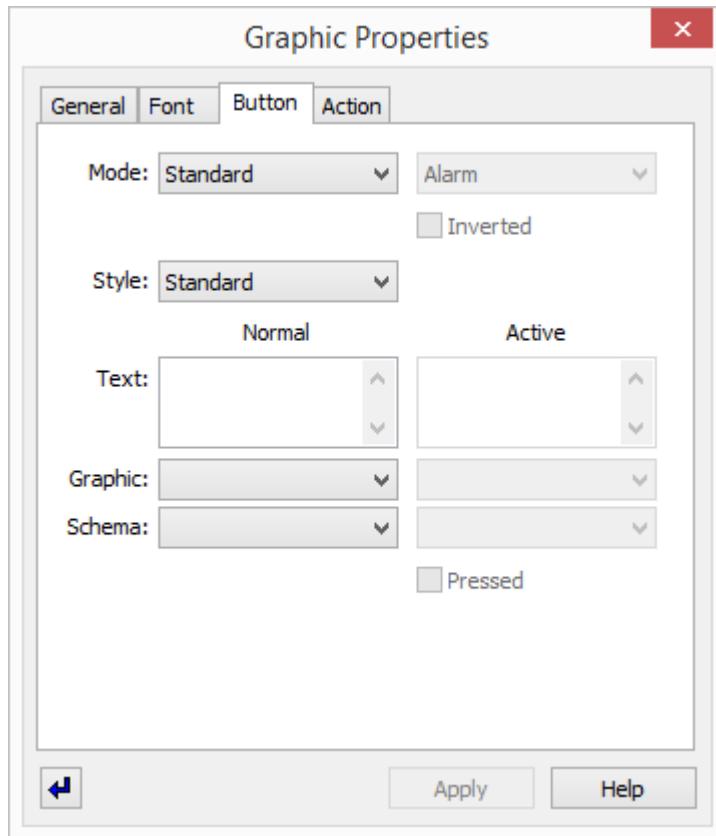


Figure 316: Dialog - Graphic Properties (Button Tab)

▼ Data section: Button

▼ Mode:

Via this selection list, the mode and thereby the fundamental functioning of the button is defined.

You can select from the following elements:

Standard (default) - with this option, a click on the button and the release of the button triggers the actions defined on the [Action Tab](#)^[846] under **Press** and **Release**.

The look of the button prior to clicking and following release is the same. While the mouse key is held down, a button in the styles **Standard** and **Round** is shaded differently and in the **User defined** style, it is displayed in the second object of the button graphic.

Toggle - with this option the function changes between each of two clicks. The view of the button changes between the settings that were defined on the [Button Tab](#)^[869] in the columns **Normal** and **Active**.

- The first click (with release) on the button initiates the action defined on the [Action Tab](#)^[846] under **Press**.
- The second click (with release) initiates the action defined on the [Action Tab](#)^[846] under **Release**.

State - with this option a click on the button initiates the actions defined on the [Action Tab](#)^[846]. The appearance of the button (without link) acts like it does in the **Standard** mode.

- If the button is not linked to a datapoint, the action that is defined on the **Press** tab occurs, while the **Release** tab does not have a function.
- If the button is linked to a datapoint and it is in idle mode, the action defined on the **Press** tab ensues.
- If the button has a link to a datapoint and the datapoint is in the state defined on the button tab in the column **Active**, then the action defined on the **Release** tab is executed.

You can link a button to a datapoint via the [Link Tab](#)^[860]. If the mode is set on **State**, the appearance of the button changes depending on the state of the datapoint. It does not matter if the change in state was executed through the button action or not.

The settings in the column **Active** on the [Button Tab](#)^[869] determine the appearance of the button when the datapoint is in the state selected there. In all other states of the datapoint, the appearance of the button is determined by the settings in the column **Normal**.

Selection - in reference to a [link](#)^[860] to a datapoint with the animation type, **Selection**, the appearance of the button changes between the looks for **Normal** and **Active** depending on whether the applicable datapoint is selected or not. In **Selection** mode the button can only initiate an [Action](#)^[846] if it is defined on the **Press** tab.

▼ (State)

Here the datapoint states such as **Alarm**, **Pre-alarm**, **Warning**, **etc.** are available for selection to define the Active state of the button (assignment of the selected state to the button settings in the **Active** column).

All other datapoint states (with the exception of the one selected) lead to the button settings defined under **Normal**.

... - select the desired state if applicable.



This selection is not available in Standard mode!

Inverted

Using this option, the appearance of the button for **Normal** and **Active** can be switched for display.

Inactive (default) - regular display of the button.

Active - inverted display of the button.

 Style:

Via this selection the style of the button display can be defined. The following styles are available for selection:

Standard - like those of standard Windows buttons (rectangular, light gray).

Round - like those of standard Windows buttons (round, light gray).

Invisible - independent of the settings in the fields **Text**, **Graphic**, and **Scheme**.

Example: placing the button over an image, so that the user, when clicking on the image, can initiate the respective button function.

User defined - no pre-assignment, exactly what is assigned in the fields **Text** and **Graphic** is shown.

 Text: Normal

Here you can define a text (multiple rows/lines possible) for display on the button for idle mode.

Blank (default) - no text is displayed on the button.

... - enter the desired text if applicable (multiple rows/lines possible).

 Text: Active

Here you can define a text (multiple rows/lines possible) for display on the button for the state defined under **State**.

Blank (default) - no text is displayed on the button.


... - enter the desired text if applicable.


 Graphic: Normal

Here you can define a graphic (file in WGD format from the Graphic subfolder Buttons) for display on the button in idle state.

- **Standard** or **Round** - the graphic is adjusted to fit the defined form.
- **Invisible** - the selection has no effect; no graphic is visible.
- **User defined** - only the selected graphic is displayed.

Blank (default) - select a graphic if applicable.

 *The appearance depends on the selection made under **Style**!*

 *The assignment for the style **User defined** also applies to the Active appearance of the button. If a change in the graphic is desired between **Normal** and **Active**, then the selected graphic must contain two objects for the respective display!*

▼ **Graphic: Active**

Here you can define a graphic (file in WGD format from the Graphic subfolder Button) for the state defined under **State**.

- **Standard** or **Round** - the graphic is adjusted to fit the defined form.
- **Invisible** or **User defined** - the selection has no effect.

Blank (default) - select a graphic if applicable.

i *The appearance depends on the selection made under **Style**!*

▼ **Scheme: Normal**

Here you can assign an [Animation Scheme](#)⁶⁰¹ for the color design of the button for the idle state.

Blank (default) - select a graphic if applicable.

i *How the individual colors of the animation scheme are applied is covered in the table below!*

▼ **Scheme: Active**

Here you can assign an [Animation Scheme](#)⁶⁰¹ for the color design of the button for the state defined under **State**.

Blank (default) - select a graphic if applicable.

i *How the individual colors of the animation scheme are applied is covered in the table below!*

Show as pressed

With this option, the display of the two states can be switched.

Blank (default) - select a graphic if applicable.

i *For the styles **Invisible** and **User defined** this function does not have any effect!*

i *To better differentiate buttons in the states **Normal** and **Active**, it is recommended that you define and assign two different animation schemes. These should vary, in particular, with respect to colors 0 and 3 (text and background)!*

i *If you wish to assign different colors to the button in the style **Standard** or **Round**, you must create an animation scheme. The states listed in the editing dialog there are irrelevant in this case. When assigning colors, the following table should be observed!*

▼ **Button colors from animation schemes**

Color	Description
0	Text
1	Bright light color
2	Light color
3	Background
4	Shadow color

Color	Description
5	Dark shadow color

8.5.8.3 Ellipse Tab

This tab is only available for objects of the type, **Ellipse**. Ellipses are bowed, generally closed curves. Via respective settings, you can also define segments and arcs. A circle is a special type of ellipse.

▼ Dialog: Graphic Properties (Ellipse Tab)

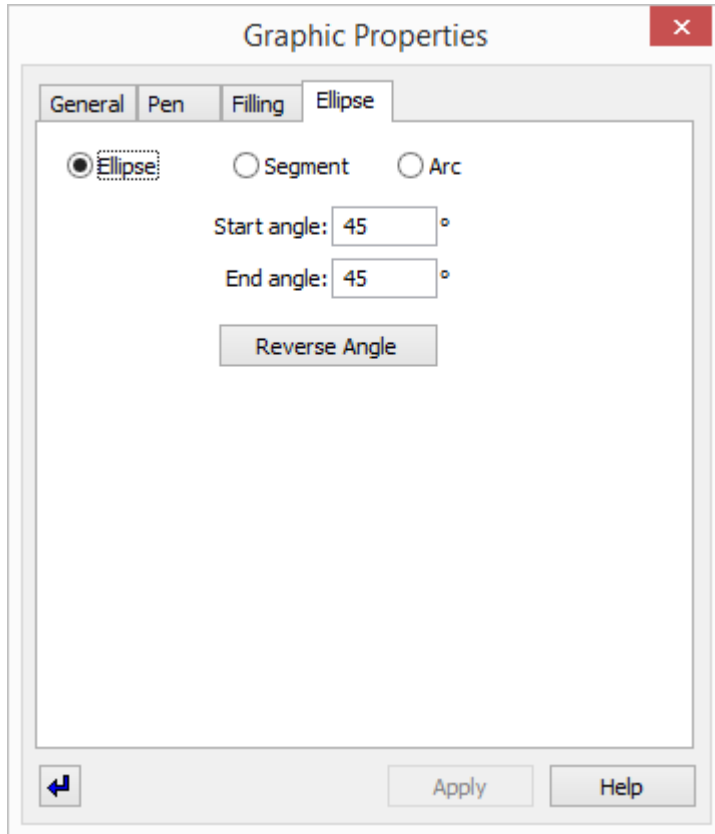


Figure 317: Dialog - Graphic Properties (Ellipse Tab)

▼ Data section: Ellipse

(Optional display)

The display of the ellipse can be defined via the following three options. These options allow you to not only display the full ellipse, but also just a segment or an arc. For a segment, the ends of the ellipse arc are connected to the center point with a straight line. For a segment and arc, the respective opening is determined by the defined angles.



Ellipse

Active (default) - the full ellipse/circle is displayed.



Start and end angles are ignored here!



Segment


Active - only the respective segment, depending on the defined start and end angle, is displayed.



Here the difference between the end angle and start angle is displayed, the rest is cut!

 **Arc**

Active - only the respective arc, depending on the defined start and end angle, is displayed.

 *Here the difference between end angle and start angle is displayed, the rest is cut!*

 Start angle: °

This entry defines the start point of the segment/arc from the horizontal, counter-clockwise.
... - enter the desired start angle, if applicable.

 End angle: °

This entry defines the end point of the segment/arc from the horizontal, counter-clockwise.
... - enter the desired end angle, if applicable.

 Reverse angle

This function allows you to switch the values entered for start and end angles.

8.5.8.4 Graphic Tab

This tab is only available for objects of the type, **Graphic**.

▼ Dialog: Graphic Properties (Graphic Tab)

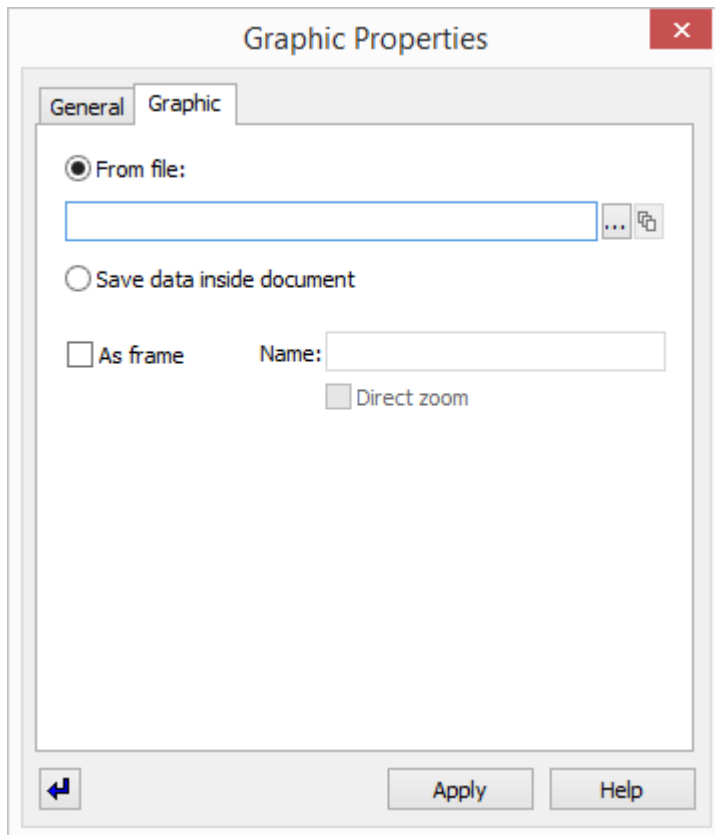


Figure 318: Dialog - Graphic Properties (Graphic Tab)

▼ Data section: Graphic

There are basically two options that are available for the graphic file. The graphic can be referenced here, or, after loading, can be saved (without referencing) as objects converted in WinGuard.

1. **(Optional)**

From file

Active (default) - the graphic **references** the graphic defined in the next field, meaning that the graphic is reloaded from this file for every display.

i *Subsequent changes to or deletion of the entered graphic have a **direct** effect on display!*

(Graphic name)

This field contains the file path, the graphic name and the display parameters. The data can be entered with the help of corresponding dialogs (that can be opened with the following buttons) or alternatively also directly.

Blank (default) - no function.

... - select the graphic and parameter or enter the data directly.

i *Path and file name have to be entered in relation to the graphic subdirectory!*

**(File selection)**

The button opens the dialog **Select graphic** from which the file path and graphic can be selected.

... - select the graphic.

**(Graphic parameter)**

The button opens the dialog **Parameter for graphic ...** in which the corresponding settings can be made.

... - if necessary, define the parameters.

2. **(Optional)** **Save data inside document**

Active - the entered graphic is converted into WinGuard objects that are then saved in the graphic (imported).



*Subsequent changes to or the deletion of the entered graphic have **no** effect on the display!*

**As frame**

Here you can determine if the graphic should be integrated as a regular object or as an object in a frame. The display as frame has the advantage that the content of a frame can still be changed through the definition of display parameters.

Active - the graphic is integrated as a frame.

Inactive (default) - the graphic is integrated as a regular object.

Name:

Here you can define the name of the frame.

Blank (default) - the frame does not have a name and cannot be explicitly addressed later.

... - enter the name of the frame if applicable.



If a graphic contains several frames, these should have different names!

**Direct zoom:**

This option determines if the content of a frame during display can be zoomed or not.

Active - the content of the frame can be zoomed independently.

Inactive (default) - the content of the frame cannot be zoomed.

8.5.8.5 Curve Tab

This tab is only available for objects of the type, **Curve**. Curves are lines that can be freely drawn or drawn from one junction point to another. The connections between the junction points can be straight or bowed (curved).

▼ Dialog: Graphic Properties (Curve Tab)

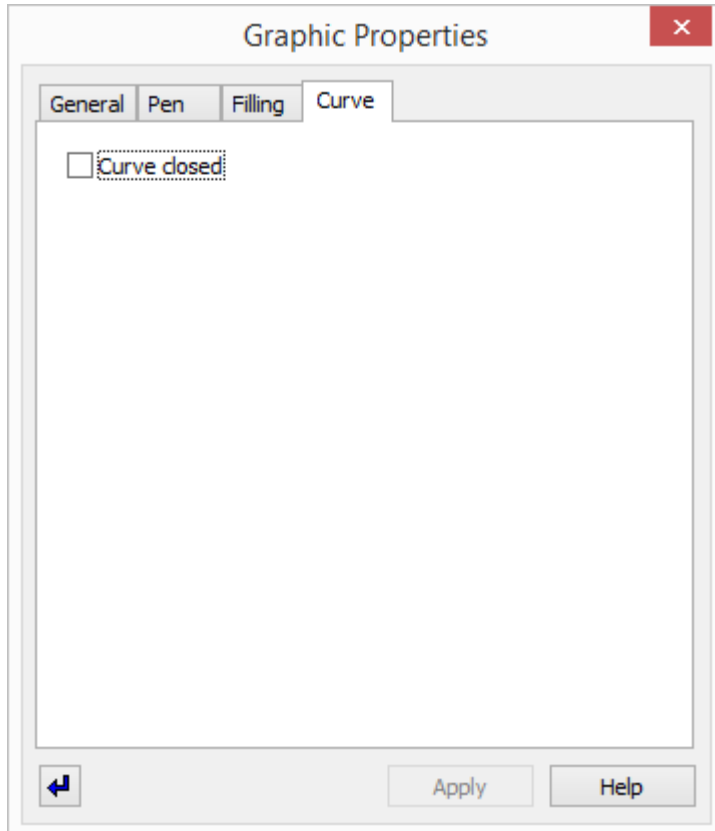


Figure 319: Dialog - Graphic Properties (Curve Tab)

▼ Data section: Curve

Curve closed

With this option, the two ends of a curve can be connected and the curve thus be closed. A straight element is automatically entered between the first and the last junction point of the curve.

Active - the curve is automatically closed.

Inactive (default) - the curve is **not** automatically closed.

i *Only closed curves can be filled!*

8.5.8.6 LCD Display Tab

This tab is only available for objects of the type, **LCD Display**. With this object, you can have scrolling text that is sent to datapoints via an external interface displayed in a graphic.

▼ Dialog: Graphic Properties (LCD Display Tab)

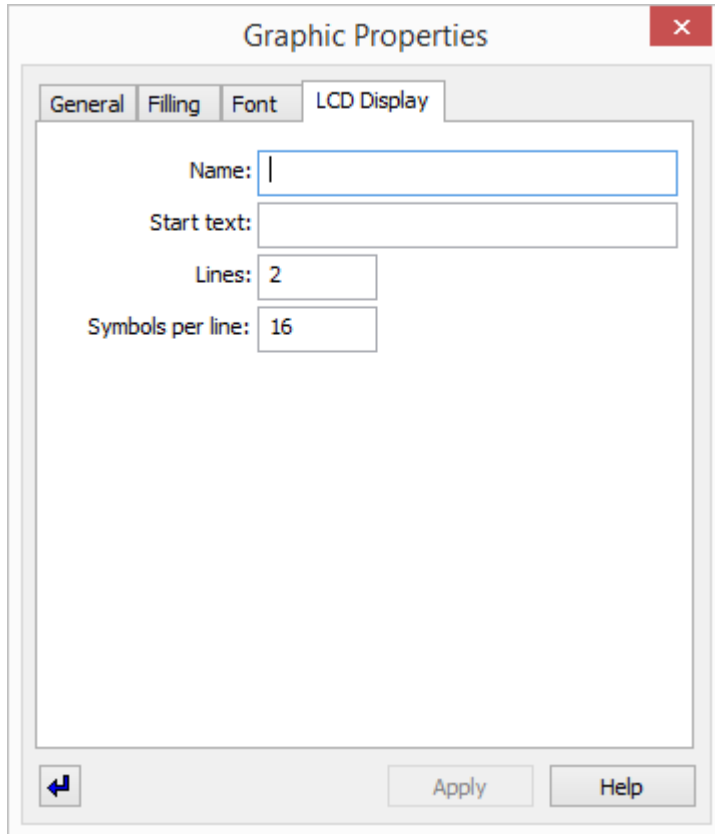


Figure 320: Dialog - Graphic Properties (LCD Display Tab)

▼ Data section: LCD Display

Name:

Here you can define the internal name for the LCD display. This is required to identify the LCD display when addressing it.

Blank (default) - the LCD display does not have a name.

... - enter the name for the LCD display.

Start text:

Here a default for the display is defined with a text. This text is shown as long as no other text is transmitted by the interface.

Blank (default) - the LCD display does not show a default text.

... - enter a text if applicable.

Lines:

Here you define the maximum number of lines during display.

2 (default) - a maximum of two lines is displayed.

... - enter the desired number of lines if applicable.

Symbols per line:

This entry defines how many symbols can be maximally displayed in one line of the LCD display.

16 (default) - maximum of 16 symbols are displayed per line.

... - enter the desired number of symbols if applicable.

8.5.8.7 Rectangle Tab

This tab is only available for objects of the type, **Rectangle**. A rectangle is a kind of parallelogram (equiangular parallelogram) and also includes trapezoids. A square is a special type of rectangle (equilateral - all sides are the same length). The angle between all four sides is always 90 degrees. In WinGuard, properties similar to those available with closed curves apply here. One specialty option is rounded corners. In extreme cases, a rectangle can be transformed into an ellipse with this option.

▼ Dialog: Graphic Properties (Rectangle Tab)

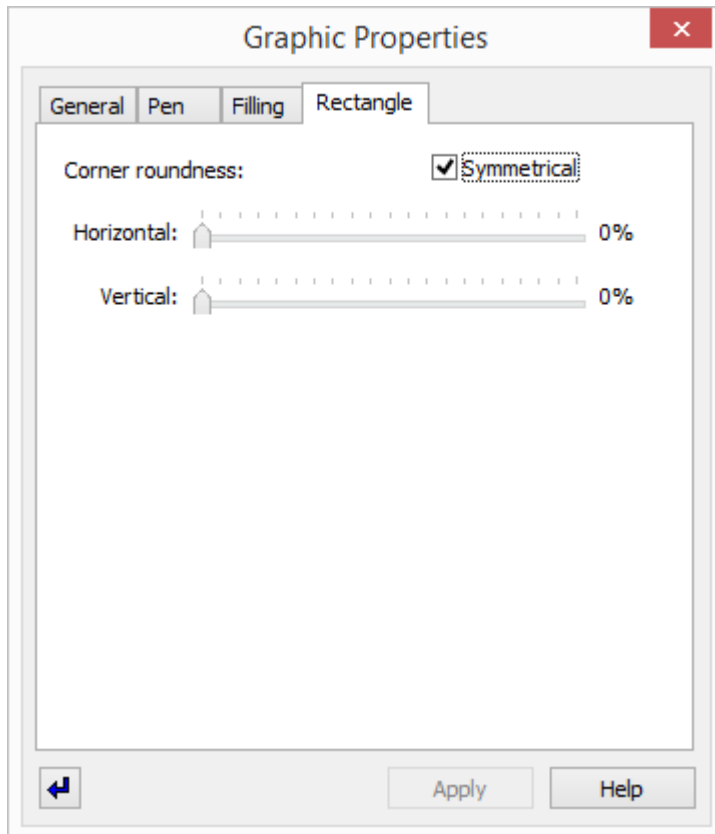


Figure 321: Dialog - Graphic Properties (Rectangle Tab)

▼ Data section: Rectangle

Symmetrical

This option determines if the rounding of corners is symmetrical (X and Y depend on one another) or not (X and Y are independent of one another).

Active (default) - corners are rounded symmetrically.

Inactive - corners can be rounded independently of one another.



Horizontal / Vertical: ... %

Using the two slide rulers, you can define the percentage the corners should be rounded with respect to the length or height of the rectangle.

0 (default) - no roundness is defined.

... - determine the desired roundnesses (0 - 100%), if applicable.

8.5.8.8 Symbol Tab

This tab is only available for objects of the type, **Symbol**. In WinGuard, symbols are graphics in the proprietary WGD format that are saved in the graphic subfolder, **Symbols**. Symbols can be animated and, via links to datapoints, can display their respective states. Symbols are not inserted into graphics as a copy, but are referenced. This means that after a symbol has been edited, the changed symbol is used the very next time the graphic is displayed. Referencing can be accomplished via the sensor type or directly via the symbol graphic.

▼ Dialog: Graphic Properties (Symbol Tab)

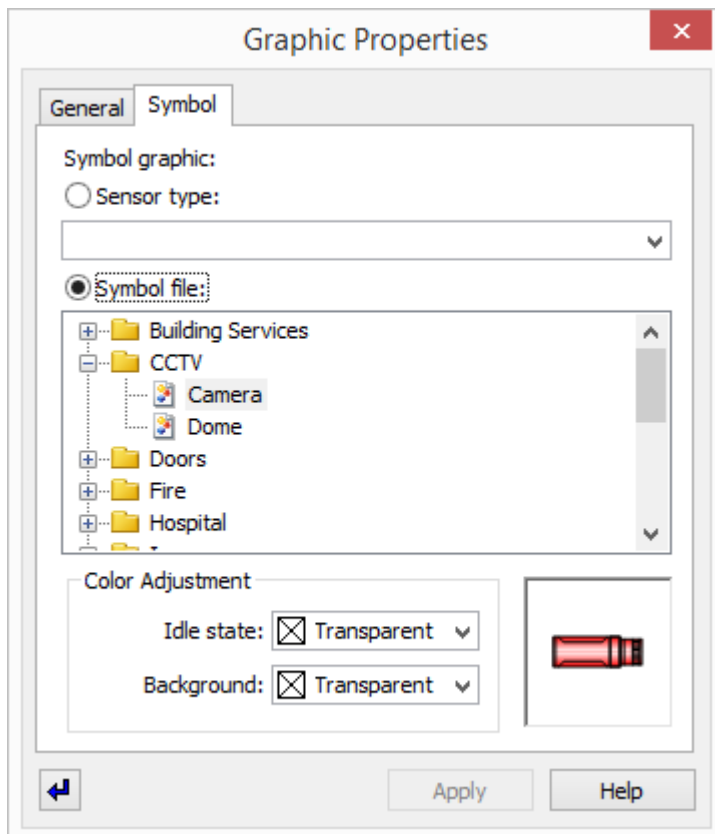


Figure 322: Dialog - Graphic Properties (Symbol Tab)

▼ Data section: Symbol

Option - Symbol graphic

Using the two following options, you can determine if the referencing of the symbol should occur via the sensor type or directly via the symbol file.

Sensor type:

Active (default) - referencing occurs via the sensor type of a datapoint.

(Datapoint)

With this selection you can determine the datapoint whose sensor type defines the symbol to be used.

<from link> (default) - the symbol is determined by the sensor type of the datapoint linked in the tab, **Link**.

... - select the reference datapoint for the symbol, if applicable.

Symbol file:

Active - referencing of the symbol occurs directly via the name of the symbol file.

 (Symbol explorer)

Here a view of the symbol directory in explorer is shown. You can select the symbol directly via this directory.

... - select the symbol (file name).

 (Symbol view)

A preview of the symbol selected in explorer is shown in the lower right hand corner.

▼ Data section: Color Adjustment

Here you can make color adjustments for the display of the symbol.

 ▼ **Idle state**

Through this definition, the color for the idle state of the symbol can be overridden. This means that for idle, the elements in animation color are replaced with the color selected here.

Transparent (default) - the color of the animation scheme is used.

... - select the desired idle color, if applicable.

(RGB value: 3 hexadecimal values, each between 00 and ff - e.g. #B2B2B2)

 ▼ **Background**

Through this definition the color for the background of the symbol, should it be transparent, can be defined. Thereby, symbols that consist only of lines can also be shown as filled.

Transparent (default) - no additional background is shown.

... - select the desired background color, if applicable.

(RGB value: 3 hexadecimal values, each between 00 and ff - e.g. #B2B2B2)

i *With respect to maintenance, especially with large-scale projects, it is recommended that modifications to individual symbols in the graphic itself are avoided. Instead, modifications should be made globally to the symbol itself in the symbol folder or in the respective animation scheme!*

8.5.8.9 Text Tab

This tab is only available for objects of the type, **Text**. With these texts respective information can be displayed in the graphics.

▼ Dialog: Graphic Properties (Text Tab)

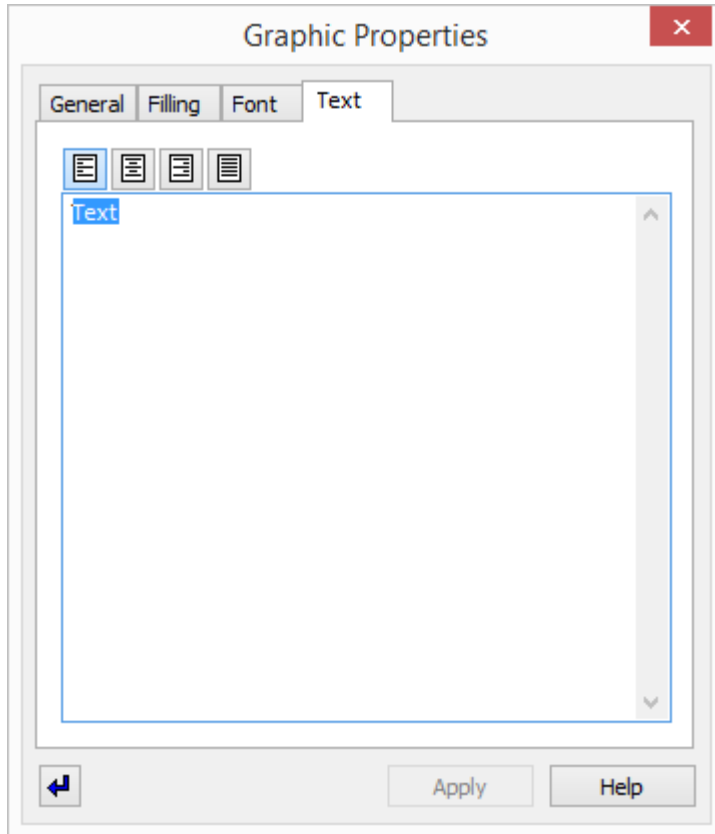


Figure 323: Dialog - Graphic Properties (Text Tab)

▼ Data section: Text



(Aligned left)

The text is shown aligned left in the text field.



(Centered)

The text is shown centered in the text field.



(Aligned right)

The text is shown aligned right in the text field.



(Justified)

The text is shown justified in the text field.



(Text)

Here you can define the text for display.

... - enter the text.

8.5.8.10 Variable Tab

This tab is only available for objects of the type, **Variable**. Depending on the variable type, its contents are filled with information in the context of datapoints, their sensor state, interfaces, etc.

▼ Dialog: Graphic Properties (Variable Tab)

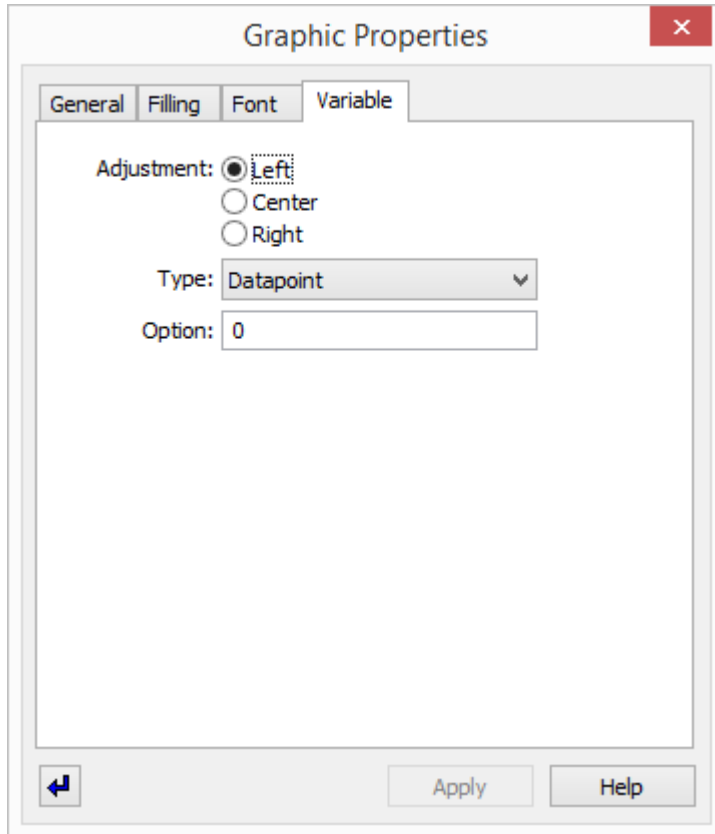


Figure 324: Dialog - Graphic Properties (Variable Tab)

▼ Data section: Variable

Adjustment:

Using these options, the alignment of the text in the variable field can be defined.

Left (default) - the text is aligned left.

Center - the text is aligned in the center.

Right - the text is aligned right.

Type:

This selection list defines the type of the variables.

... - select the type of the variables.

Option:

In this field, optional parameters can be defined for different variable types.

Example: Only the first element of the location structure (etc.) can be selected for the variable **Location** by indication of the parameter **1**.

... - if necessary, indicate an option for the variable.



The variable types available and the available options are described in the section [Variables](#) ⁹³⁹!

8.5.9 Display Areas in Graphics

To integrate varying elements such as layouts, video monitors, texts, etc., you can insert display areas into graphics. These have the same function as the display areas in layouts in other instances. Any contents can thus be placed into graphics via display areas. With respect to the editing of embedded display areas, the graphic editor acts like the editor used to edit layouts. You can think of a display area as a layout that is quasi embedded in the graphic. Its areas are not organized via splits, tabs, etc., but are positioned via the display area objects of the graphic. Everything else functions in the same manner.

For editing embedded layouts, the function **Edit Pane** is available. If this function is active, the embedded display areas have the same look and function as with editing in the layout editor. Via the context menu, you can split areas, insert tabs, define content, etc. Drag&drop is also possible between areas. However, editing graphics is not possible if this function is active. This means that with this function, you are switching between the editing of a graphic and the editing of an embedded layout.

With the test mode of the graphic, the test mode for the embedded layout is also activated. In principle, you could say that the graphic editor provides an alternative form of graphic layouts.



Video displays from earlier WinGuard versions are fully compatible. Video displays found in existing graphics are automatically converted to display areas with the same function!

8.6 Texts

In WinGuard, texts are used in many ways. First, similar to graphics, they serve to aid in the visualization and processing of events and, for example, provide information on measures that should be taken. You can assign a text to every datapoint/sensor that is then displayed by that datapoint automatically in cases of an event. Texts can also be controlled interactively by the user so that respective workflows can be defined for the respective case of application. Additionally, texts are also used for the creation and display of reports. Like graphics, texts are not just limited to display. For example, equipped with respective fields, texts can serve as forms for the entry of information. You can control many program responses through texts with condition elements. WinGuard utilizes proprietary file format for texts (**.WGT**).

The system provides you with an integrated text editor with an extensive array of functions. With the text editor, all WinGuard text modules can be created or edited. Text Editor functions are outlined in the program interface in the menu, **Text**.

In addition to static elements, texts can also contain dynamic text objects, interactive objects, [Condition elements](#)^[1047] and [Commands](#)^[946]. One goal in developing the WinGuard text format was that event display should only require a minimum of text files. These few files adapt to different contexts via the various elements at runtime. In this manner, only a few text documents have to be maintained for event display.

Dynamic text elements are not replaced by values from the context until display. Via [Variables](#)^[939] you can insert date, time, datapoint name, and a lot of other information into the text. With the help of persons or telephone fields you can insert data from the [Persons file](#)^[526] in the same way. List fields enable you to insert excerpts from archives and logs.

You can execute any number of command via [Buttons](#)^[906]. And interactive dialog elements allow you to create any number of forms. The entry elements that you are familiar with through the Windows interface, such as [Entry fields](#)^[919], [Selection lists](#)^[911], and [Check boxes](#)^[909] are available for this task. In texts for event display, these elements are archived together with the text.

Various [Condition elements](#)^[1047] enable you to have parts of texts displayed or executed depending on certain conditions. The design of these conditional texts does not require knowledge of any specific programming language and can be achieved intuitively using symbols. [Commands](#)^[946] inserted into a text are processed sequentially during execution of a text. Texts with commands are used, for example, to define specific reactions in receiving and handling events or to define automatic/scheduled commands.

8.6.1 Explorer

The **Texts** explorer displays all text files (for example, **.WGT**) and folders that are contained in the subfolder **Texts** of the WinGuard project folder. What is important for display of the folder in the explorer bar is the name that is assigned in the [Settings](#)^[404] under [System](#)^[424] in the section subfolders for **texts**. Files must be in a text format supported by the system in order to be displayed in the explorer bar.

▼ Example: Texts Explorer

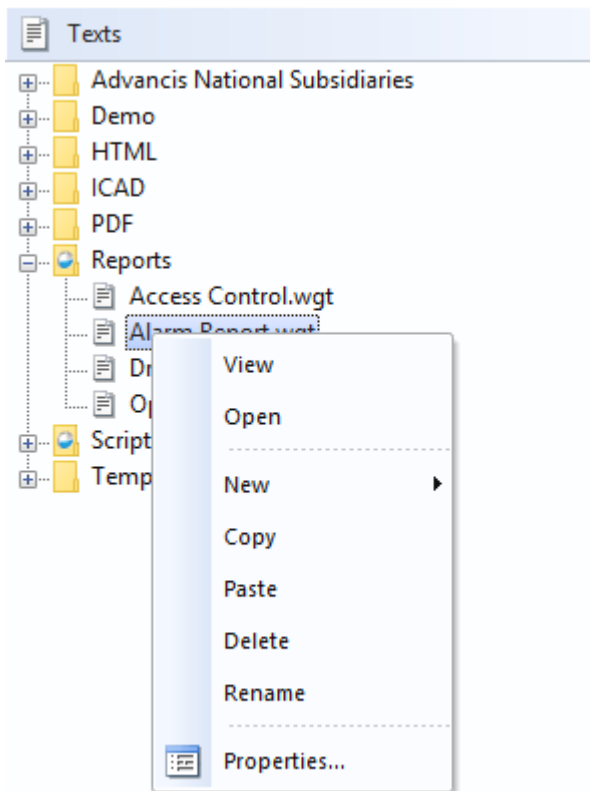


Figure 325: Texts Explorer

By clicking on a file or folder with the right mouse key, you can open a context menu that provides the functions described below. Please note that folders cannot be copied. However, files and folders can be moved via drag&drop. In contrast to graphic files, texts cannot be moved from the explorer into the display window via drag&drop.

▼ Functions: Texts Explorer - (General)

Here is a description of the general functions that are available in the texts explorer. Some of these functions depend on the selected object or user rights.

- **View**
This function corresponds to a double click on the explorer: the text is shown in the display window. By right-clicking in the display window and selecting the function **Edit Text**, you can open the text with the text editor.
- **Open**
This function opens a text editor window and directly loads the selected text.
- **New**
This function opens a selection with which you can add a new text with the name **New Text.wgd** in the selected folder or a new folder with the name **New Folder**. If an element with this name already exists, a consecutive number will be added.


- **Copy**

With this function a copy of the selected files or folders is copied to the clipboard.

- **Past**

With this function the files or folder from the clipboard are inserted in the selected folder.

- If the identical files or the folder already exist (selected before with Copy), they will be created with the same name and an added consecutive number (#).
- If the file or folder are not identical a window is shown where you can choose to replace or create a copy of this files or folder. If you create a copy they will be created with the same name and an added consecutive number (#).

 *Consider valid file types!*

- **Delete**

This function deletes the selected files or the selected folder, including all sub folders and their content after a respective confirmation.

- **Rename**

With this function the name of the selected text or folder can be changed directly in the explorer. This function can also be executed directly on the right side of the explorer by two delayed clicks on the entry.



- **Properties**

This function opens a dialog to setup the properties of a folder or a file. Here you can define the **name** and **description** and a **segment** assignment. Additionally you will find information about type, last changes, etc. (see: [Files](#)³⁴¹).

8.6.2 Menu Item - Text

The usual commands for adding and saving texts are available via the menu item, **Text**.

Additionally, you can also access various tools, aids, and options via this menu item, but generally these are utilized via the toolbar in the text editor window.

▼ Menu Item: Text

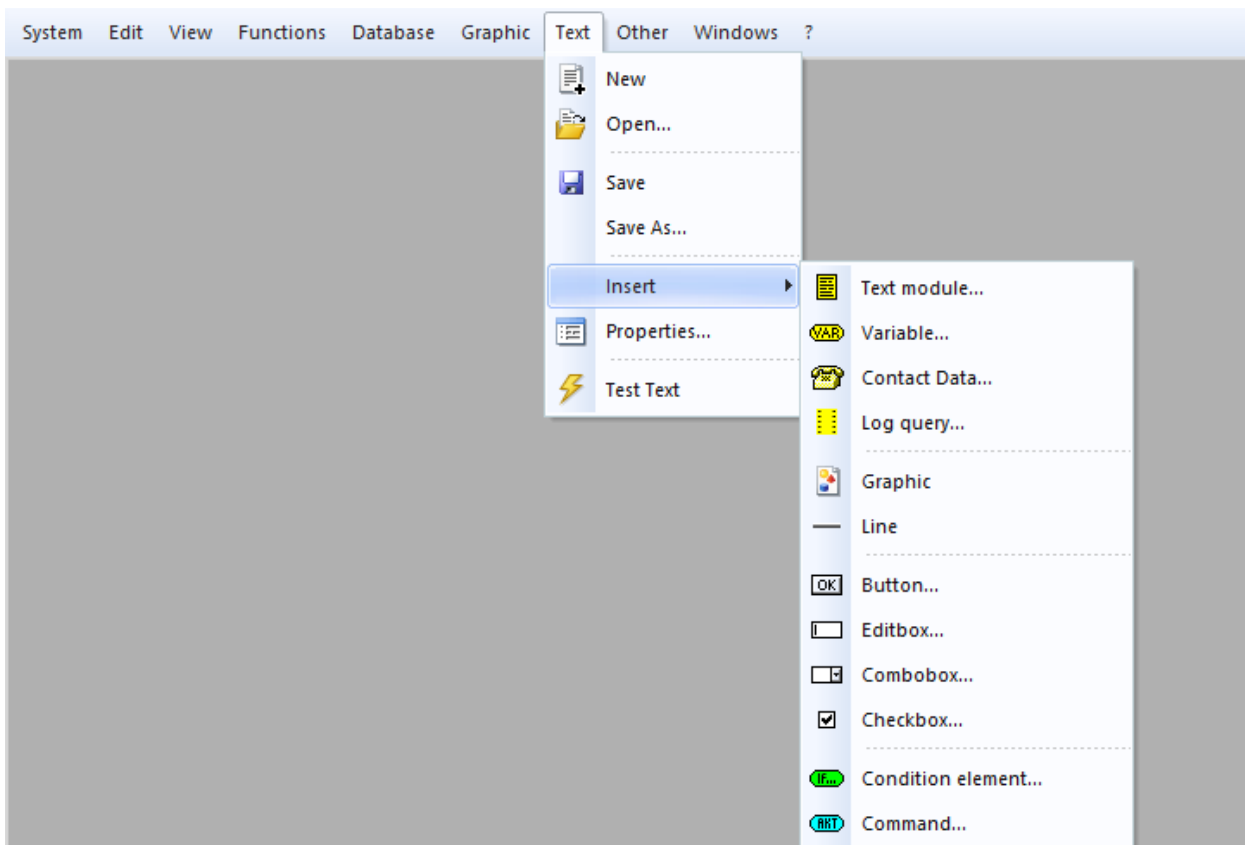


Figure 326: Menu Item - Text

▼ Functions: Text



New

A new text editor window with blank content for the creation of a new text is opened.



Open...

The dialog, **Open Text**, is opened via which a saved text can be opened in the text editor for editing.



Save

The currently-displayed text is saved under its existing name without further confirmation. For new texts, the function **Save As** is used.

- **Save As...**

The dialog, **Save Text As**, is opened via which the current text can be saved under a new name and/or a different folder.

- **Insert**

This function opens a submenu with functions for inserting objects.
(please see: [Submenu Insert](#)⁸⁹¹)

**Properties...**

The dialog, **Properties**, is opened. This dialog is described in detail in the section [Tabs and Text Properties](#) ⁹⁰⁵.

**Test Text**

This function turns the test mode on or off. If the test mode is active, you can check how dynamic objects in the text react.

8.6.2.1 Insert Submenu

▼ Submenu: Text - Insert

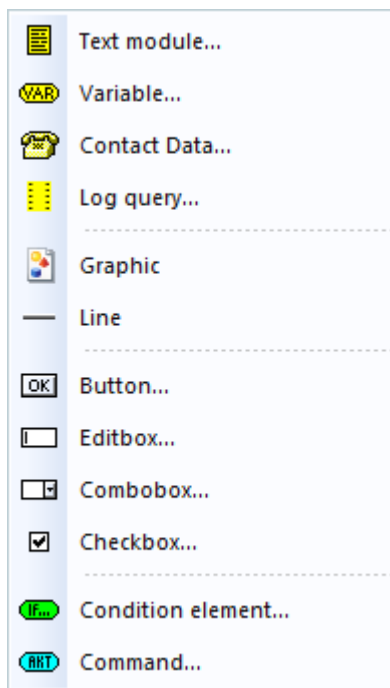


Figure 327: Submenu Text - Insert

▼ Functions: Text - Insert

**Text module**

This function opens the dialog **Select text** and allows insertion of a text in the format (.WGT).
... - select the desired text module.

**Variable...**

The function creates a variable at the cursor position in the text and opens the dialog **Text properties** with the [Variable Tab](#) ⁹²⁸, allowing selection of a variable type and definition of parameters.

... - select the variable and indicate the required parameters.

**Contact data...**

The function creates a contact field at the cursor position in the text and opens the dialog **Text properties** with the [Contact Data Tab](#) ⁹¹⁶, allowing selection of the person and the corresponding information.

... - select the desired contact data.

**Log query...**

The function creates a log query at the cursor position in the text and opens the dialog **Text properties** with the [Log Query Tab](#)⁹²⁶, allowing a selection of the source (e.g. system log, interface log, event log, etc.) and the filter parameters (e.g. for the time period, different properties, etc.).

... - if necessary, select the log type and indicate the filters.

**Graphic**

The function opens the dialog **Select graphic** via which a .WGD graphic can be inserted at the cursor position in the text. The graphic is dynamic, will be displayed with the defined size in the in the continuous text and can contain all elements.

... - select a graphic and define the required parameters.

**Line**

The function creates a line at the cursor position in the text. A line serves as optical structuring of text sections. In case no indication is made for the width, the line will expand over the full text width. By indicating a width, the line width can be defined in detail.

... - define the required parameters.

**Button...**

The function creates a button at the cursor position in the text and opens the dialog **Text properties** with the [Button Tab](#)⁹⁰⁶, allowing the assignment of an action and the definition of parameters for the button.

... - define the required parameters.

**Editbox**

The function creates an editbox at the cursor position in the text and opens the dialog **Text properties** with the [Editbox Tab](#)⁹¹⁹, allowing the definition of parameters such as e.g. Size, Mandatory entry, Context ([Lists](#)⁵⁷⁰), etc.

... - define the required parameters.

**Combobox...**

The function creates a combobox at the cursor position in the text and opens the dialog **Text properties** with the [Combobox Tab](#)⁹¹¹, allowing the definition of parameters such as e.g. Size, Mandatory entry, Context ([Lists](#)⁵⁷⁰), etc.

... - define the required parameters.

**Checkbox...**

The function creates a checkbox at the cursor position in the text and opens the dialog **Text properties** with the [Checkbox Tab](#)⁹⁰⁹, allowing the definition of parameters such as e.g. Size, Mandatory entry, Context ([Lists](#)⁵⁷⁰), etc. As an option, the checkbox can be defined as multiple or single selection.

... - define the required parameters.

**Insert condition element**

This function inserts an **IF-** or **ELSE IF** condition into the action and opens the dialog **Text Properties** with the [Condition Element Tab](#)⁹¹⁵ for editing of the properties.

... - select the condition and define the parameters.



Command...

The function creates an action at the cursor position in the text and opens the dialog **Text properties** with the [Command Tab](#)^[913], allowing the definition of the action with the corresponding parameters.

... - select the action and indicate the required parameters.

8.6.3 Folder Structure

Upon installation of WinGuard, it can be defined in which file the project data shall be stored (see [Directories and data storage](#)^[58]). The selected path can be found in the system settings under **Local Installation|System|General** and can be changed there, if required. In case no path has been defined in the settings, the project data will be located in the program directory.

The project folder, by default, contains the subfolder, **Texts**, whose contents can be viewed with the help of the explorer for **Texts**. If you have executed the [Setup of Project Data](#)^[31] and installed the Demo Project, you will find a logical folder structure there.

If you executed the installation without project data (Startup / Demo Project), the **Texts** folder is empty. You can find numerous templates for various texts in the Startup or Demo Project.

8.6.4 User Entries

Texts are not just limited to display of information. They can also contain elements for information entry or selection of predefined parameters. Through the integration of an appropriate control for the user, workflows for various processing paths in response to an incident can be defined.

Editboxes (entry fields), comboboxes (selection fields), checkboxes, etc. that can be edited within the framework of events can be defined anywhere in the text. For these elements you can also add information for logging. That information is then automatically entered into the system log in processing.

Mandatory Entries

In text, editboxes/comboboxes can be indicated as mandatory entries. These must then be processed in event handling in order to complete an event. Mandatory entries can also be highlighted in color. The background color for the mandatory entry can be defined via the [Document Tab](#)^[917].

Graphic Buttons

Buttons as well as checkboxes allow the indication of a graphic. This can be a WinGuard graphic that is filed in the **Graphics\Buttons** folder. In this case, the display of the button is determined by the objects of the graphic (analogous to user-defined buttons in the graphic).

- Top object: normal
- Next object: pressed / selected
- Next object (optional): while pressing with the mouse

Graphics are shown as centered on the button or in the area of the checkbox element and, for buttons, can be combined with the standard frame for buttons.

Automated Log Entries

Automated log entries can be defined for buttons, comboboxes, checkboxes, and editboxes.

If an entry is made for log text, every time a respective control field is changed or a button is activated, an entry in the system log is made.

You can use the variables **<CONTEXT>** and **<VALUE>**. These are replaced by entries for context as well as value. Especially for the combobox you can modify the log text specifically to the user entry.

8.6.5 Parameters for Texts

There are many areas in WinGuard where you can reference texts. These include dialogs for editing locations or datapoints, and text-related commands such as [Show Text](#)^[1032], [Switch Text](#)^[1043], etc. Commands, in turn, can be defined in several areas, for example under buttons or other graphic objects, in event routing, within texts, or under the [Command Tab](#)^[846] for editing datapoints.

Whenever you can reference a text, you have the option of entering the name and parameters directly. Alternatively, the text can be selected via the dialog, **Select Text**, and the parameters can be defined via the dialog, **Define Parameters for Text**.

▼ Example: Reference to a Text



Figure 328: Reference to a Text

▼ Function: Text Reference

(Text name)

This field contains the file path, text name, and the display parameters. The information can be entered with the help of respective dialogs (that are opened with the buttons that follow), or, alternatively, be entered directly.

(File selection)

The button opens the dialog, **Select Text**, in which file path and text can be selected.

(Text parameters)

The button opens the dialog, **Define Text Parameters**, in which the settings that follow can be made.

In addition to the standard buttons for **close window**, **OK**, and **cancel**, the dialog window, **Define Text Parameters** also contains the option of defining respective zoom settings for the text.

▼ Example: Dialog - Define Text Parameters

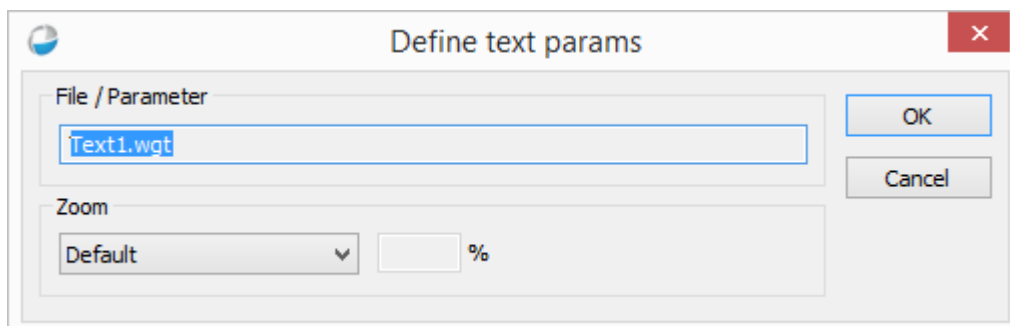


Figure 329: Text Parameters

▼ Functions: General

OK

Changes are accepted and the dialog is closed.

Cancel

Changes are discarded and the dialog is closed without further confirmation.

▼ Data section: Zoom (/zoom=...)

(Selection Zoom Parameters)

Here you can define the text adjustments for the display area.

Default (default) - the text is displayed without any changes.

Fit to page - the text is enlarged/reduced so that the entire text can fit into the display area.

Fit to height - the text is enlarged/reduced so that the entire text, in terms of height, can fit into the display area.

Fit to width - the text is enlarged/reduced so that the entire text, in terms of width, can fit into the display area.

Page visible - the text is enlarged/reduced so that the entire text is visible in the display area.

Height visible - the text is enlarged/reduced so that the entire text, in terms of height, is visible in the display area.

Width visible - the text is enlarged/reduced so that the entire text, in terms of width, is visible in the display area.

Size - the text is shown in the display area depending on the zoom factor defined below.

(Zoom level %)

This parameter can only be defined in the setting, **Size**, and determines the zoom factor for display in % .

100 (default) - the text is displayed without any changes.

... - enter the desired size if applicable.

8.6.6 Workflow

With the term, workflow, we refer to texts that are interactively controlled by the user. The definition of workflows is accomplished via dynamic conditions that review the current text context. Every user entry can lead to a change in context through which other text sections may become visible, etc. As a general rule, a workflow path bifurcation is initiated through a user entry that activates a certain context. This context is then used in subsequent conditions to differentiate various processing paths.

▼ **Example: Dynamic Workflow (Text)**

Measures— □ ×

Assault

Sensor: Assault
Location: Company, Administration, 1st Floor, Lobby
Remark:

Type: Panic
State: Alarm
Date: 14.08.2015
Time: 15:34:00
Priority: 7

Switch to navigation (administration)

Switch to event graphic

Verify alarm and launch corresponding measures

Assault identifiable

Yes No

Remarks

Case 1: Assault identifiable - Yes

Verify alarm and launch corresponding measures

Assault identifiable

Yes No

Avert the assault

Create snapshot

Lock doors

Call reinforcements

Evacuate other levels

Launch countermeasures

Assault averted

Case 2: Assault identifiable - No

Verify alarm and launch corresponding measures

Assault identifiable

Yes No

Check camera feed

Send security staff to the location

Figure 330: Dynamic Workflow (Text)

8.6.7 Test Text

You can test if the interactive elements such as buttons, symbols, variables, etc. are functioning as planned as early on as during the text conceptualization phase. You can also check which elements are visible in display mode.

Via the menu command **Functions|Define Test Context...** you can open the dialog, **Define Test Context**. Here you have the option of determining an incident for a datapoint that is then simulated in the test mode (please see: [Define Test Context](#)^[931]).

Via the menu command **Text|Test Text** you can review how the text acts. As an alternative to this menu command, you can also use the test button in the [top toolbar](#)^[811] of the text editor. You can end the test by reselecting the menu command or pressing the test button again.

During test mode, symbols, variables, or all graphic objects that reference a datapoint are displayed in the text the way they would be during event display (in relation to the event scenario that was defined in the test context).

In test mode, you can also click on buttons or other active elements that have commands assigned to them and thereby activate the respective command.

The following functions are not supported in test view mode:

- Control display device
- Show display
- Switch graphic
- Switch text
- Show text
- Set input
- Execute menu command
- Switch video split



You cannot edit texts if the test mode is active!



In test view mode not all commands are executed / supported!

8.7 Text Editor

The WinGuard text editor provides you with all the functions you need to add new texts or edit existing ones within the realm of projection. In the program interface these function can all be found under the [Menu Item Text](#)^[889]. As soon as you have opened a text in editing mode, you can start working on the text using with the functions in the menu bar / [toolbar](#)^[900] of the editor.

If you right click with the mouse within the text while in editing mode, you have the option of opening the dialog, **Text Properties** in which you can define settings for the text objects. The dialog varies depending upon which text object you have marked/highlighted (please see the respective sections under [Text Properties](#)^[905]).

The local toolbar is located in the top edge of the text editor window. The button contained therein allow you to access the most important functions of the editor. These can also be retrieved via the menu, **Text**. The main area of the window is where you enter the text to be edited.

▼ Example: View of the text editor

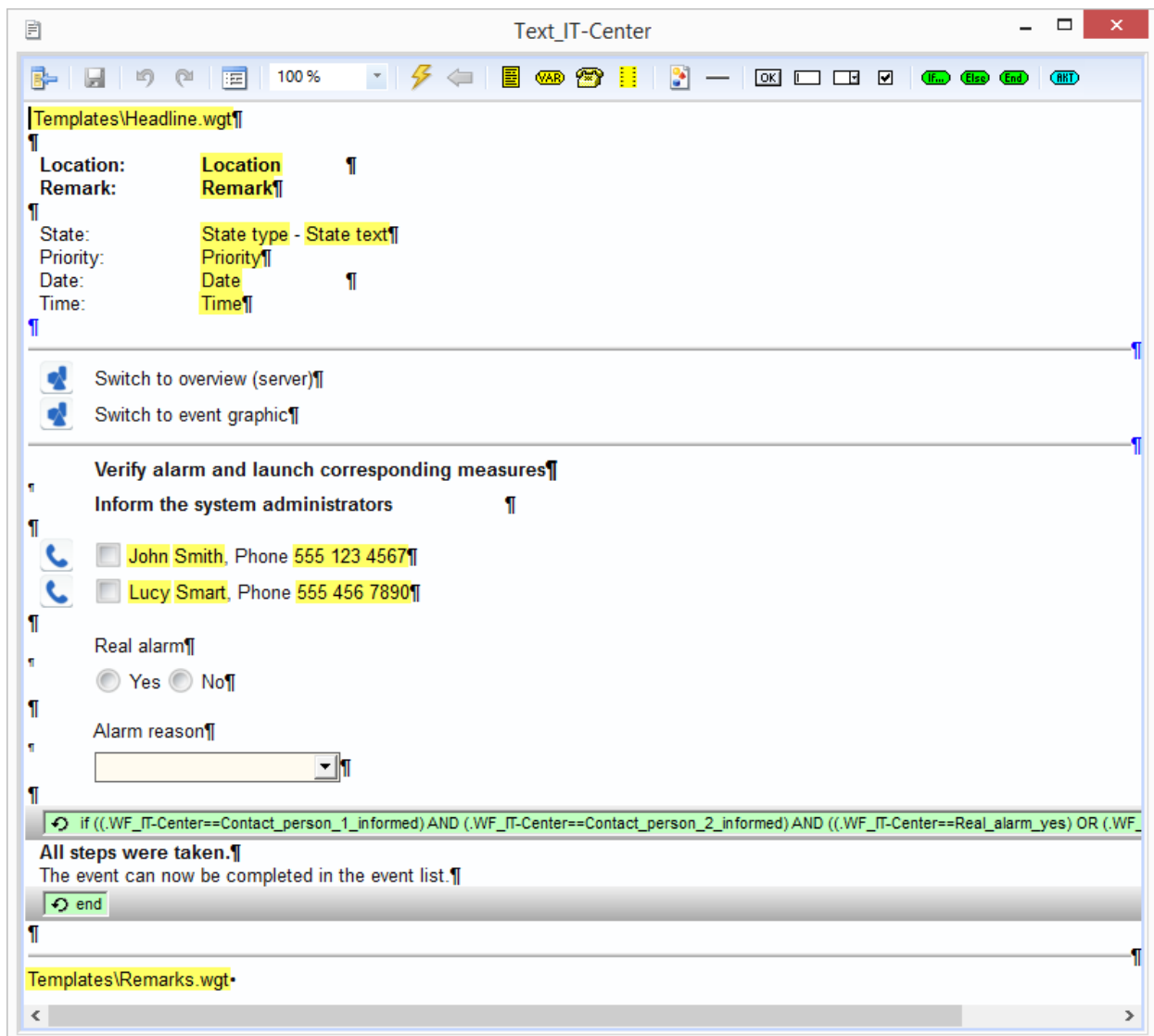


Figure 331: View of the Text Editor



Text elements that appear differently in display than at the time of design are highlighted in the editor!

8.7.1 Working with the Mouse and Keyboard

Here we would like to present you with some basic information regarding working with the text editor. While you will be familiar with many of these concepts, we would like to take this opportunity to summarize a few topics.

General

The current writing position is indicated through a flashing cursor. Text that is entered with the keyboard is inserted at the cursor on a standard basis. You can go into overwrite mode by pressing the **<Insert>** key. Pressing the key again switches the program back to insert mode. You can move the writing position by means of clicking on it with the mouse or the cursor keys.

The end of the text edited by you is marked by the symbol ■. The end of a paragraph is indicated with the symbol ¶, and a forced line break not associated with the end of a paragraph by the symbol «. You can also enter the forced line break into a text while pressing the **<Shift>** + **<Enter>** keys simultaneously. The formatting symbols are not shown in text output.

Inserting Objects via the Toolbar

If you have clicked on a button for insertion of an object in the [toolbar](#)⁹⁰⁰, the object **cannot** be dragged from the toolbar into the text by drag&drop. Rather, you release the mouse key after clicking on the symbol and the object is then (after file selection if applicable) inserted in the text where the cursor was last. Additionally, the dialog, **Text Properties**, with the respective tab for further definition, is directly opened.

Marking Objects

You can mark text sections with the help of the mouse by clicking on the text, and moving the cursor with the mouse while holding down the mouse key. You can mark text via the keyboard by holding down the **<Shift>** key and moving the cursor with the cursor keys simultaneously. The marked section is displayed as inverted.

Drag & Drop from the WinGuard Explorer

Drag & Drop is not supported in the text editor. This means that no texts, persons, graphics, etc. can be dragged from an explorer into a text.

8.7.2 Toolbar

When you have the text editor window up on the screen, you will see a toolbar above the text display. This toolbar provides many additional functions relating to the insertion or editing of text objects.

Example: Top Toolbar



Figure 332: Text Editor - Top Toolbar

Functions: Top Toolbar



Select

The text currently open in the text editor is selected in explorer.

**Save**

The currently-displayed text is saved under its existing name without further confirmation. For new texts, the dialog, **Save Text As** is opened. You can define the name and the folder of the new next there.

**Undo (<Alt>+<Back>)**

The function/action executed last is reversed.

**Redo (<Ctrl>+Y)**

The function/action undone last is repeated.



This function opens the dialog, **Properties**, whose functions are described in detail in the section [Tabs and Text Properties](#) ^[905].

**Zoom**

This function adjusts the display of the text in such a way that the narrower part of the page takes up X% of the editor window. The value **X** can be entered by key stroke or can be selected from the list.

**Test mode on/off**

The test mode is turned on or off. If the test mode is active, you can test how the interactive elements (like buttons and variables) react.

**Back**

If the test mode is active, the command **Switch Text** is triggered, and the previously displayed text can be retrieved.

**Text module**

This function opens the dialog **Select text** and allows insertion of a text in the format (.WGT).
... - select the desired text module.

**Variable...**

The function creates a variable at the cursor position in the text and opens the dialog **Text properties** with the [Variable Tab](#) ^[928], allowing selection of a variable type and definition of parameters.

... - select the variable and indicate the required parameters.

**Contact data...**

The function creates a contact field at the cursor position in the text and opens the dialog **Text properties** with the [Contact Data Tab](#) ^[916], allowing selection of the person and the corresponding information.

... - select the desired contact data.

**Log query...**

The function creates a log query at the cursor position in the text and opens the dialog **Text properties** with the [Log Query Tab](#) ^[926], allowing a selection of the source (e.g. system log, interface log, event log, etc.) and the filter parameters (e.g. for the time period, different properties, etc.).

... - if necessary, select the log type and indicate the filters.

**Graphic**

The function opens the dialog **Select graphic** via which a .WGD graphic can be inserted at the cursor position in the text. The graphic is dynamic, will be displayed with the defined size in the in the continuous text and can contain all elements.

... - select a graphic and define the required parameters.

**Line**

The function creates a line at the cursor position in the text. A line serves as optical structuring of text sections. In case no indication is made for the width, the line will will expand over the full text width. By indicating a width, the line width can be defined in detail.

... - define the required parameters.

**Button...**

The function creates a button at the cursor position in the text and opens the dialog **Text properties** with the [Button Tab](#)⁹⁰⁶, allowing the assignment of an action and the definition of parameters for the button.

... - define the required parameters.

**Editbox**

The function creates an editbox at the cursor position in the text and opens the dialog **Text properties** with the [Editbox Tab](#)⁹¹⁹, allowing the definition of parameters such as e.g. Size, Mandatory entry, Context ([Lists](#)⁵⁷⁰), etc.

... - define the required parameters.

**Combobox...**

The function creates a combobox at the cursor position in the text and opens the dialog **Text properties** with the [Combobox Tab](#)⁹¹¹, allowing the definition of parameters such as e.g. Size, Mandatory entry, Context ([Lists](#)⁵⁷⁰), etc.

... - define the required parameters.

**Checkbox...**

The function creates a checkbox at the cursor position in the text and opens the dialog **Text properties** with the [Checkbox Tab](#)⁹⁰⁹, allowing the definition of parameters such as e.g. Size, Mandatory entry, Context ([Lists](#)⁵⁷⁰), etc. As an option, the checkbox can be defined as multiple or single selection.

... - define the required parameters.

**Insert condition element**

This function inserts an **IF-** or **ELSE IF** condition into the action and opens the dialog Text Properties with the [Condition Element Tab](#)⁹¹⁵ for editing of the properties.

... - select the condition and define the parameters.

**Insert ELSE**

Inserts an **ELSE** element into the text after a command or a text display that depends on an IF condition in order to define an alternative that is executed if the IF condition is not met.

**Insert END**

Inserts an **END** element into the text in order to close an IF loop.

**Command...**

The function creates an action at the cursor position in the text and opens the dialog **Text properties** with the [Command Tab](#)^[913], allowing the definition of the action with the corresponding parameters.

... - select the action and indicate the required parameters.

8.7.3 Context Menus

For text objects, the same context menu with the functions **Zoom** and **Properties** is always available. There is a further context menu embedded in the **Zoom** function that provides the respective zoom functions.

▼ Example: Context Menu for Text Objects

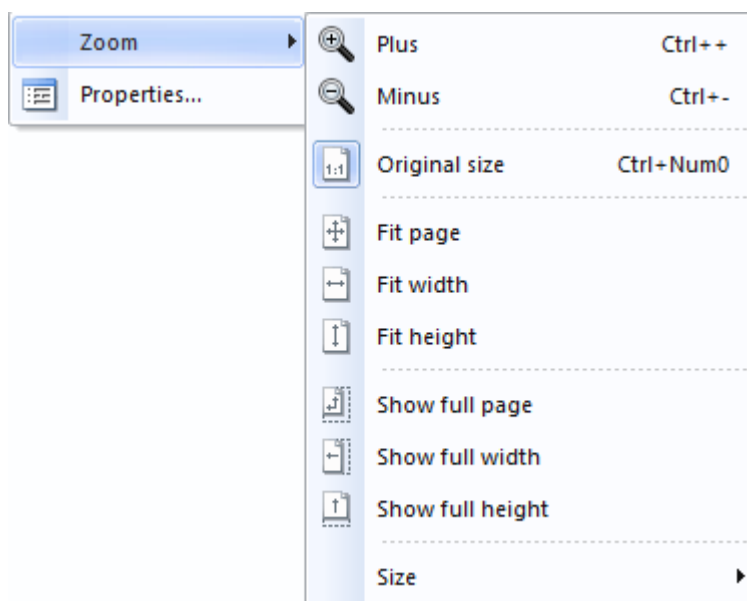


Figure 333: Context Menu for Text Objects

▼ Functions: Context Menu for Text Objects

The following table also shows menu items that are not displayed in the example. The actions refer to the respective selected object(s).

Zoom

This function opens an additional context menu in which you can select from the available zoom functions.



Text Properties

The function opens the dialog **Text Properties**. The function of this dialog are described in detail in the section [Tabs and Text properties](#)^[905].

▼ Functions: Context Menu Zoom



Plus <Ctrl>++

This function enlarges the content of a corresponding view in defined steps.

**Minus <Ctrl>+-**

This function minimizes the content of a corresponding view in defined steps.

**Original size <Ctrl>+Num0**

This function resets the content of a corresponding view to the original size (100%).

**Fit page**

This function adapts the display of graphics or texts in such a way that the total content will be displayed in the corresponding view pane.

**Fit width**

This function adapts the display of graphics or texts in such a way that the content will be displayed with maximum width in the corresponding view pane.

**Fit height**

This function adapts the display of graphics or texts in such a way that the content will be displayed with maximum height in the corresponding view pane.

**Show full page**

This function adapts the display of graphics or texts in such a way that at least the total text content will be displayed in the corresponding view pane.

**Show full width**

This function adapts the display of texts in such a way that at least the total text width will be displayed in the corresponding view pane.

**Show full height**

This function adapts the display of texts in such a way that at least the total text height will be displayed in the corresponding view pane.

Size ▸

This function opens another submenu with the different fixed zoom levels that are available.

8.7.4 Text Properties

In this section the individual elements you can use in texts, as well as their properties, are described. The dialog, **Text Properties**, via which you can define these properties can be retrieved in a number of ways.

- Via the menu item **Text|properties...** (while text is opened).
- Via the context menu by right-clicking on the marked object in the text editor.
- Via the button in the toolbar of the text editor.

The dialogs that are retrieved for adding text objects are identical, whether they are accessed via the menu item **Text|Insert...** or via the functions in the text editor toolbar. The look of the dialog window and the available tabs depend on the respective object type.

▼ Example: Dialog - Text Properties

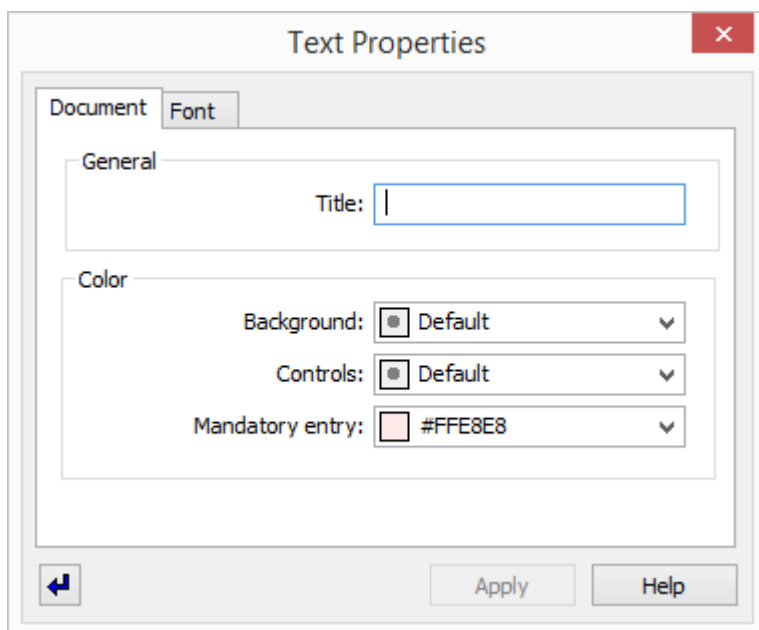


Figure 334: Dialog - Text Properties

Independent of the the object type and the tabs that are displayed, the following functions are always available in the dialog:

▼ Functions: Dialog - Text Properties

Button **Apply**
Upon clicking of the button, all changes will be applied.

Button **Help**
This button opens the online help.

↵ **Apply immediately**
This function defines if changes of the definitions or settings shall be applied immediately or by activating the function **Apply**.
pressed - Changes are taken over immediately.
not pressed (default) - Changes are not taken over immediately.

8.7.4.1 Button Tab

Via this tab you can define buttons, specifically, their properties in text. Buttons can be used to execute available [commands](#)⁹⁴⁶ directly. The left mouse key, however, is only functional in standard mode. As opposed to buttons in graphics, other modes such as **toggle** and the option of linking or animation are **not** available.

▼ Dialog: Text Properties (Button Tab)

The screenshot shows the 'Text Properties' dialog box with the 'Button' tab selected. The 'Size' section has 'Width' set to 70 and 'Height' set to 20. The 'Style' section has 'Standard' selected. The 'Function' section has 'Log entry', 'Command', and 'at WS' dropdown menus, and 'Delay' and 'Id' input fields. The 'Apply' and 'Help' buttons are visible at the bottom.

Figure 335: Dialog - Text Properties (Button Tab)

▼ Data Section: Size

Width:

The width of the field is defined here in pixel.

... - if necessary, indicate the desired width.

Height:

The height of the field is defined here in pixel.
... - if necessary, indicate the desired height.

▼ Data section: Style**(Style)**

Here you can define the style of the button. The following three options are available:

**Standard**

Active (default) - the button is shown in gray, with a centered text if applicable.

**Graphic**

Active - the button is shown via the indicated graphic, with a centered text if applicable.

**Text Only**

Active - the button is only shown through the defined text.

Text:

Here you define the text that is to be shown centered on the button.
... - enter the desired text if applicable.

**Graphic:**

Here you select the graphic that is to be used to show the button - provided the respective option was chosen. The selection consists of all the graphics saved in the **Graphics\Buttons** folder.

... - select the desired graphic if applicable.

▼ Data section: Function**Log entry:**

It is possible to define a text that will, together with time and date, be entered into the system log after quitting/marketing of the field.

... - if necessary, indicate the log entry.



In case of checkboxes, the log entry will only be transferred if a context or entry is set as well!

**Command:**

It is possible to select from the list of commands which action shall be executed in the text. Further information with regard to the definition and to the commands can be found in the section [Command Variables and Key Words](#)⁹³⁹.

Blank (default) - no action is executed.

... - select the desired action.

at WS:

It is possible to select from the list of clients at which client the action shall be executed.

Blank (default) - the action will be executed at the own client.

Server - the action is sent to the active server and executed there.

Hot-Standby - the action is sent to the active Hot Standby Server and executed there.

... - if necessary, select the client to which the action shall be sent and at which it shall be executed.



Please note that context information of an event will not be transferred here!

 Delay ... ms

A delay time (before execution of the action) can be defined here. In this case, the action will be transferred to the processing buffer of the corresponding client and executed after expiration of this time. The waiting actions of a client can be seen and, if necessary, canceled with the help of the [Command Monitor](#)^[233]. A cancellation of these actions is also possible using the action [Remove Command](#)^[1005].

... - geben Sie ggf. die gewünschte Verzögerungszeit an.



Please note that context information of an event will be lost!

 Id:

In case of a delay, an Id can be assigned to the action. The **Id** is a free text via which a delayed action can be identified and thus also be removed or deleted even during the waiting phase ([Remove Command](#)^[1005]).

... - if necessary, indicate an Id.

8.7.4.2 Checkbox Tab

Via this tab you can define checkboxes in text. In event display, the user can activate or deactivate the checkbox with just one click. You also have the option of linking one checkbox with the following checkbox. In this case, the elements are not displayed as checkboxes (multi-selectable), but as radio buttons (individually/single-selectable). If you then click on one non-active element, that element is activated and all others are deactivated.

▼ Dialog: Text Properties (Checkbox Tab)

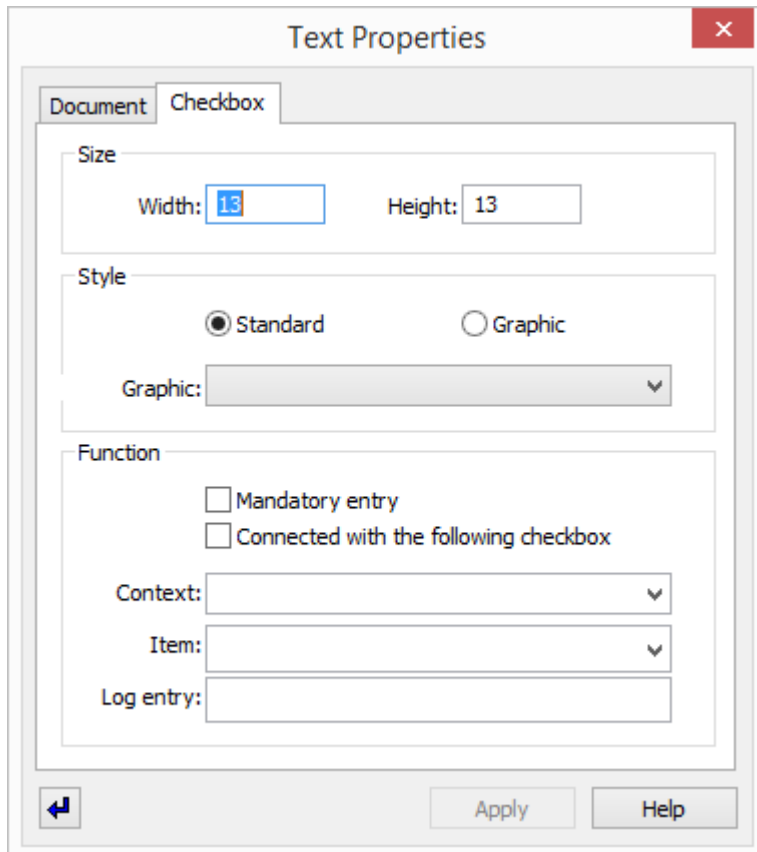


Figure 336: Dialog - Text Properties (Checkbox Tab)

▼ Data section: Size

Width:

The width of the field is defined here in pixel.
... - if necessary, indicate the desired width.

Height:

The height of the field is defined here in pixel.
... - if necessary, indicate the desired height.

▼ Data section: Style

(Style)

Here you can define the style of the checkbox. The selection consists of the following two options:

Standard

Active (default) - the checkbox is displayed as a gray button in the style of a checkbox or radio button.

Graphic

Active - the checkbox is shown via the indicated graphic.

Graphic:

Here you can select the graphic that is to be used to show the checkbox - provided this option was selected. You can select from all the graphics saved in the **Graphics\Buttons** folder.

... - select the desired graphic if applicable.

Data section: Function

Mandatory entry

This option defines if an event may be closed before the field has been edited.

active - the field has to be edited in order to complete the event.

inactive (default) - the field does **not** have to be edited in order to complete the event.

Link with following checkbox

Here you determine if the checkbox should be regarded as an individual, independent element (checkbox) or if it should be linked with the following checkbox (radio button). It is displayed accordingly. It is also possible to link several checkboxes with one another.

Active - the checkbox is considered a linked element (radio button).

Inactive (default) - the checkbox is considered a single/individual element (checkbox).

Context:

It is possible to define a list or a context for the selection element here.

... - if necessary, define a list or indicate the context.

Entry:

Here the entry (value/text) for the context is defined through a corresponding selection (depending on the chosen list) or a manual entry.

... - select an entry or enter the text directly.

Log entry:

It is possible to define a text that will, together with time and date, be entered into the system log after quitting/markings of the field.

... - if necessary, indicate the log entry.



In case of checkboxes, the log entry will only be transferred if a context or entry is set as well!

8.7.4.3 Combobox Tab (Selection Field)

Via this tab you can define comboboxes (selection fields) in text. In event display, the user can select a value from the assigned list by clicking on the selection field. The connection to the list is also defined here. The [lists](#) ⁵⁷⁰ have to be established and saved. Optionally, you can also allow the entry of free text into the selection field. If a log text is defined, it is entered into the system log upon selection. Alternatively, the selected text itself can be used as log text by using the keyword **<VALUE>**.

i The selection or input made will be logged upon completion of the event!

▼ Dialog: Text Properties (Combobox Tab / Selection Field)

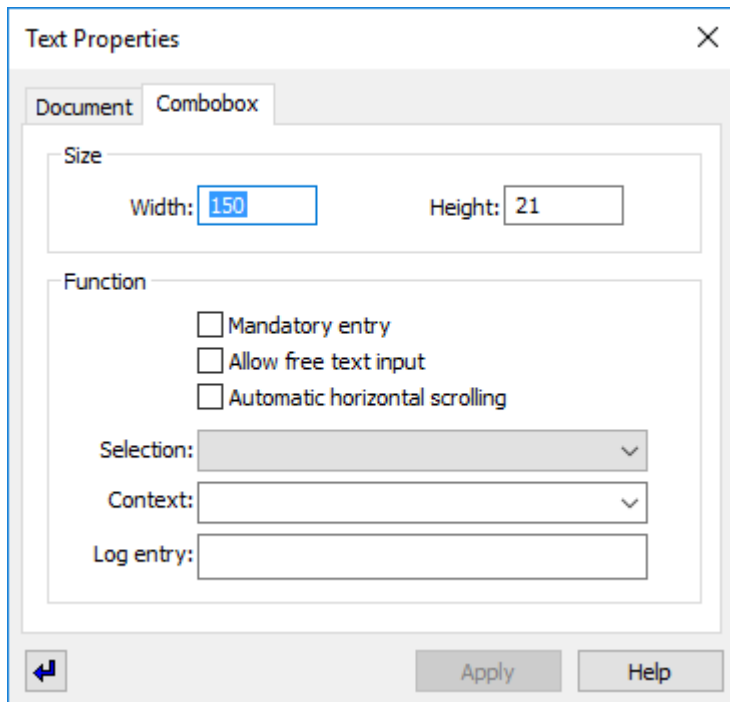


Figure 337: Dialog - Text Properties (Combobox Tab / Selection Field)

▼ Data section: Size

Width:

The width of the field is defined here in pixel.
... - if necessary, indicate the desired width.

Height:

The height of the field is defined here in pixel.
... - if necessary, indicate the desired height.

▼ Data section: Function

Mandatory entry

This option defines if an event may be closed before the field has been edited.

active - the field has to be edited in order to complete the event.

inactive (default) - the field does **not** have to be edited in order to complete the event.

Allow free text input

It is defined here whether it is only possible to select a text from a list or if free text input is also possible.

active - free text input is possible.

inactive (default) - free text input is **not** possible.

 Automatic horizontal scrolling

It is defined here whether a text in an input field is limited by the length of the field or if the text can also be longer than the visible area of the field. If the line contains more characters than what can be displayed with the defined width of the field, it will depend on the cursor position which part of the entered text is displayed.

active - the text can also be longer than the field.

inactive (default) - the text is limited to the length of the field.



If the option is active, only a part of the text might be visible!

 Selection:

Here is defined the content of the combo box. You can select one of the user defined lists or the key **<Persons>** or **<Date>**. If you are select a list, this list is directly set to the context definition too. If you are using the key **<Date>** a calendar, if you select **<Persons>** the list of all defined persons is shown.

... - select a list or a key to define the content of the combo box.

 Context:

It is possible to define a list or a context for the selection element here.

... - if necessary, define a list or indicate the context.



*This setting is overwritten if you change the definition of **Selection!***

 Log entry:

It is possible to define a text that will, together with time and date, be entered into the system log after quitting/marking of the field. In order to enter the log text yourself into the log, the key word **<VALUE>** has to be entered here.

... - if necessary, indicate the log entry.

<VALUE> - the text of the current entry is used.

Keywords

For the definition of **Log Text** the following placeholders are available on an event basis:

- **<WGT:Filename.wgt>**

The value of Param2 will be replaced by the text content of the file.

- e.g. for camera control

8.7.4.4 Command Tab

Here you can select / define most commands available in WinGuard. If a text with such commands is not displayed but executed via the function, **Execute Text**, then the commands defined there are executed accordingly. In this manner, various commands can be compiled in one text (script) and executed together.

Commands are also executed in display if they are within a dynamic condition that is activated by changes in context.

▼ Dialog: Text Properties (Command Tab)

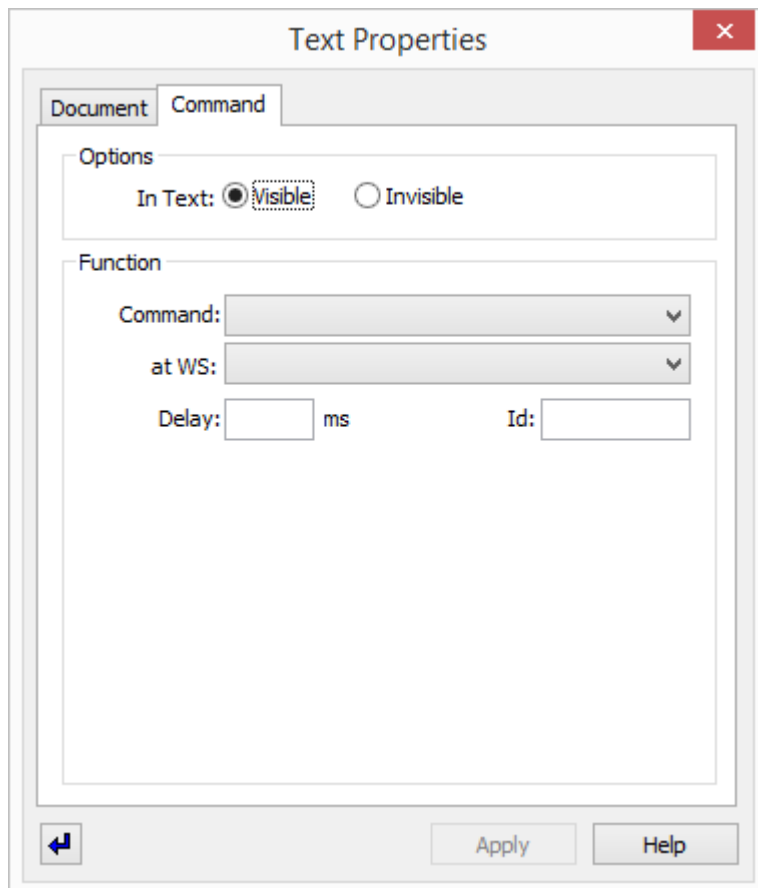


Figure 338: Dialog - Text Properties (Command Tab)

▼ Data section: Options

In text:

Here you determine if the command in the text is visible during display or not.

- Visible**
Active (default) - the command is visibly displayed in the text.
- Invisible**
Active - the command is not displayed in the text.

▼ Data section: Function

▼ Command:

It is possible to select from the list of commands which action shall be executed in the text. Further information with regard to the definition and to the commands can be found in the section [Command Variables and Key Words](#)⁹³⁹.

Blank (default) - no action is executed.

... - select the desired action.

▼ at WS:

It is possible to select from the list of clients at which client the action shall be executed.

Blank (default) - the action will be executed at the own client.

Server - the action is sent to the active server and executed there.

Hot-Standby - the action is sent to the active Hot Standby Server and executed there.

... - if necessary, select the client to which the action shall be sent and at which it shall be executed.



Please note that context information of an event will not be transferred here!

Delay ... ms

A delay time (before execution of the action) can be defined here. In this case, the action will be transferred to the processing buffer of the corresponding client and executed after expiration of this time. The waiting actions of a client can be seen and, if necessary, canceled with the help of the [Command Monitor](#)²³³. A cancellation of these actions is also possible using the action [Remove Command](#)¹⁰⁰⁵.

... - geben Sie ggf. die gewünschte Verzögerungszeit an.



Please note that context information of an event will be lost!

Id:

In case of a delay, an Id can be assigned to the action. The **Id** is a free text via which a delayed action can be identified and thus also be removed or deleted even during the waiting phase ([Remove Command](#)¹⁰⁰⁵).

... - if necessary, indicate an Id.

8.7.4.5 Condition Element Tab

This tab provides elements for the definition of conditions. First you define the type of condition (**if** / **else if**). Subsequently, you select the group with the element whose value should serve as a comparison to the respective event / state information. Once the settings are defined, the buttons **↓ AND** / **↓ OR** from the condition list must be added to the condition.

If an already defined condition is to be edited, it must first be selected and then, using the button **↑** from the condition list, transferred to the editing area above the list, whereby the element is removed from the condition list.

The types **else** / **end** are always part of a condition. This is why for these types, no separate conditions can be defined, meaning that definitions from the condition list are ignored at transfer.

i IF conditions in text must always be completed with an **END**, so that **IF** and **END** encompass the command(s)!

i When adding the first condition, the function of the buttons **AND** / **OR** are identical.

▼ Dialog: Text Properties (Condition element Tab)

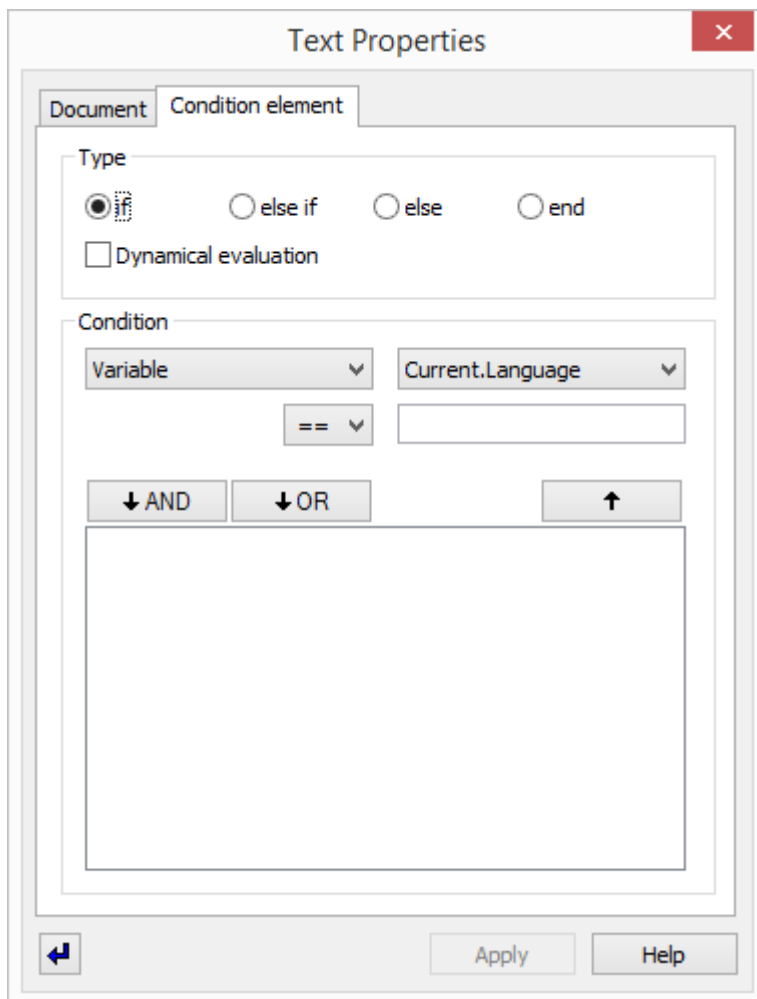


Figure 339: Dialog - Text Properties (Condition element Tab)

You can find additional information regarding conditions and the description of the tab under [IF Conditions](#)¹⁰⁴⁷.

8.7.4.6 Contact Data Tab

With this tab you can define text fields (only output) in text. In event display, the system shows in this fields the appropriate actual information of the person.

▼ Dialog: Text Properties (Contact Data Tab)

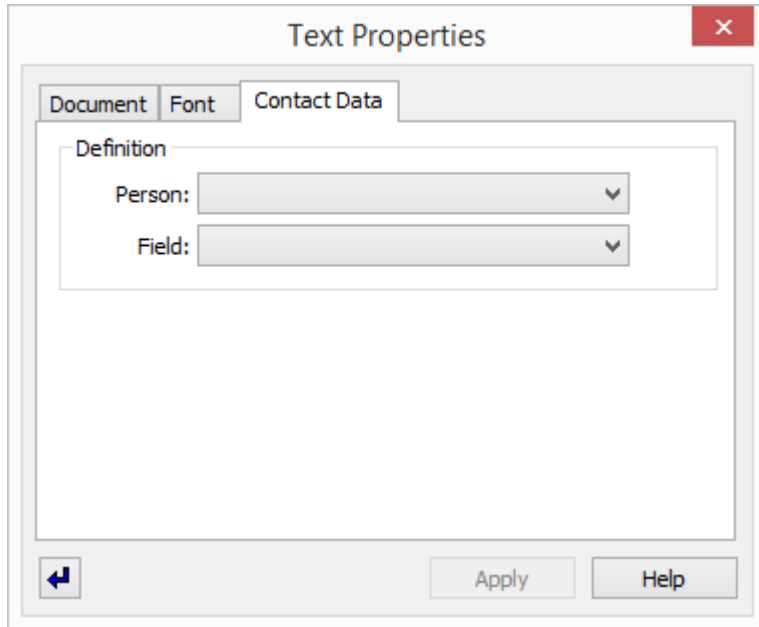


Figure 340: Dialog - Text Properties (Contact Data Tab)

▼ Data section: Definition

▼ Person:

Here you select the person from the contact data.

Blank (default) - the text field is left blank.

... - select the desired person.

▼ Field:

Here you select the data field/information such as company, last name, telephone, etc. for the person selected above.

Blank (default) - the text field is left blank.

... - select the desired information.

8.7.4.7 Document Tab

Via this tab you can enter a title for the text document. This title is then also used, for example, as the title in the layout, provided that no other title was explicitly defined for the layout. If no title is defined for the document, the file name without path and file extension is used as the document title. Additionally, here you can also define the colors for the background, elements, and mandatory entries.

▼ Dialog: Text Properties (Document Tab)

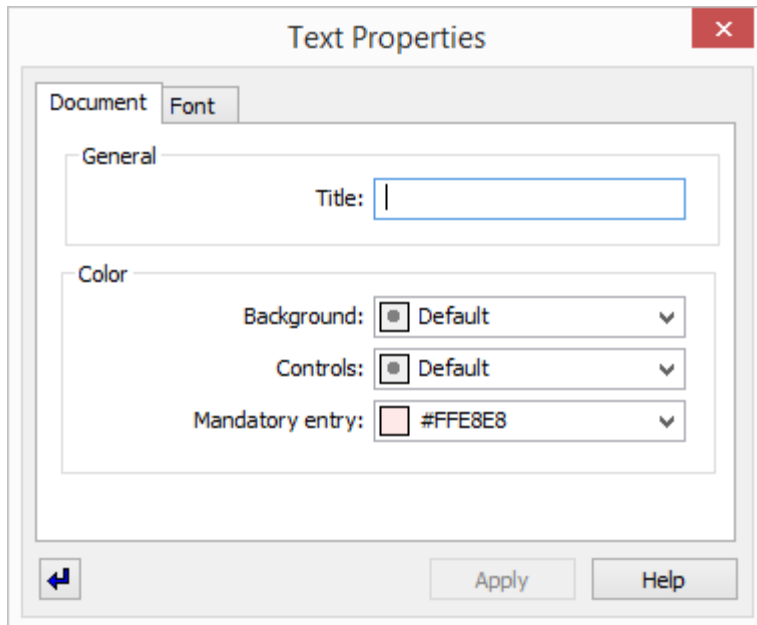


Figure 341: Dialog - Text Properties (Document Tab)

▼ Data section: General

Title:

Here you can define a title for the text document. This title is then also used as the title in the layout, provided that no other title was explicitly defined for the layout. If no title is defined for the document, the file name without path and file extension is used as the document title.

... - enter the title if applicable.

▼ Data section: Function

Here you define the colors for the text background and text elements (please see: [Color Selection](#)⁹³³).

(RGB value: 3 hexadecimal values, each between 00 and ff - e.g. #B2B2B2)

Background:

Here you define the background color for the text.

Default (default) - the predefined background color in the current color scheme is applied.

... - select the desired color or enter it directly, if applicable.

Element:

Here you define the color for elements.

Default (default) - the predefined color for elements in the current color scheme is applied.

... - select the desired color or enter it directly, if applicable.

 Mandatory entry:

Here you define the color for entry elements that are indicated as mandatory entries.

Default (default) - the current color (FFE8E8) defined for mandatory entries applied.

... - select the desired color or enter it directly, if applicable.

8.7.4.8 Editbox Tab

With this tab you can define editboxes (entry fields) in text. In event display, the user can enter a text here. By entering a context, the content of an entry field can be assigned as a value to that context. Additionally, when defining a log text, it is entered into the system log after quitting the field. Alternatively, the entered text itself can be used as log text by using the keyword **<VALUE>**.



Upon completion of the event the entered text is archived with the text.

Dialog: Properties Text (Editbox Tab)

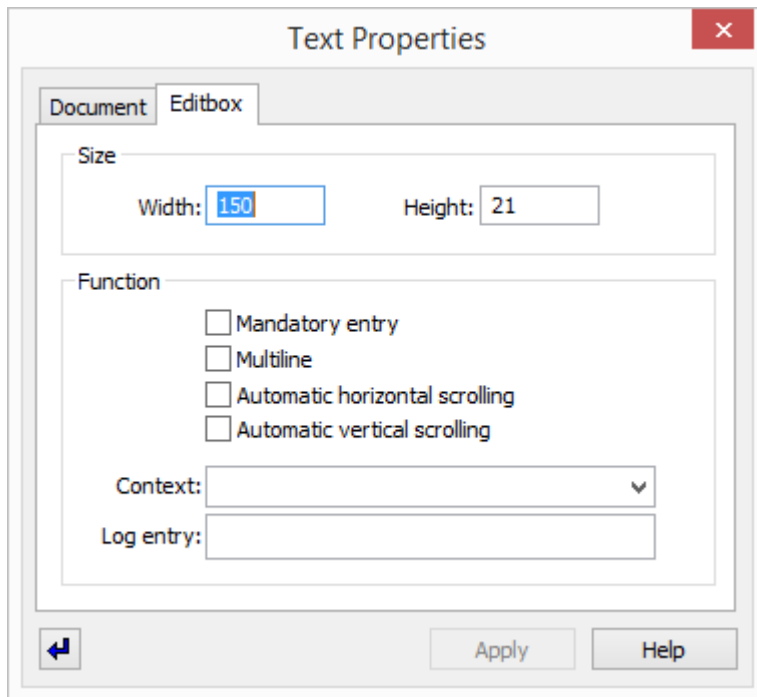


Figure 342: Dialog - Text Properties (Editbox Tab)

Data section: Size

Width:

The width of the field is defined here in pixel.
... - if necessary, indicate the desired width.

Height:

The height of the field is defined here in pixel.
... - if necessary, indicate the desired height.

Data section: Function



Mandatory entry

This option defines if an event may be closed before the field has been edited.

active - the field has to be edited in order to complete the event.

inactive (default) - the field does **not** have to be edited in order to complete the event.

Multiline

It is defined here whether the editbox contains only one line or if a multiline text can be entered.

active - multiline text can be entered.


inactive (default) - only one text line can be entered.

 Automatic horizontal scrolling

It is defined here whether a text in an input field is limited by the length of the field or if the text can also be longer than the visible area of the field. If the line contains more characters than what can be displayed with the defined width of the field, it will depend on the cursor position which part of the entered text is displayed.

active - the text can also be longer than the field.

inactive (default) - the text is limited to the length of the field.


 *If the option is active, only a part of the text might be visible!*

 Automatic vertical scrolling

It is defined here whether the number of text lines in an input field will be limited by the height of the field or not, provided that the option **Contains several lines** is active.

active - the text may contain more lines than defined by the height of the field.

inactive (default) - the lines are limited by the height of the field.

 *If the option is active, only a part of the text might be visible!*

 Context:

It is possible to define a list or a context for the selection element here.

... - if necessary, define a list or indicate the context.

 Log entry:

It is possible to define a text that will, together with time and date, be entered into the system log after quitting/marking of the field. In order to enter the log text yourself into the log, the key word **<VALUE>** has to be entered here.

... - if necessary, indicate the log entry.

<VALUE> - the text of the current entry is used.

Keywords

For the definition of **Log Text** the following placeholders are available on an event basis:

- **<WGT:Filename.wgt>**

The value of Param2 will be replaced by the text content of the file.

- e.g. for camera control

8.7.4.9 Font Tab

Via this tab you can define the font for the selected text. Simply select any text area with the mouse and open the dialog for the properties definition via the context menu.

▼ Dialog: Text Properties (Font Tab)

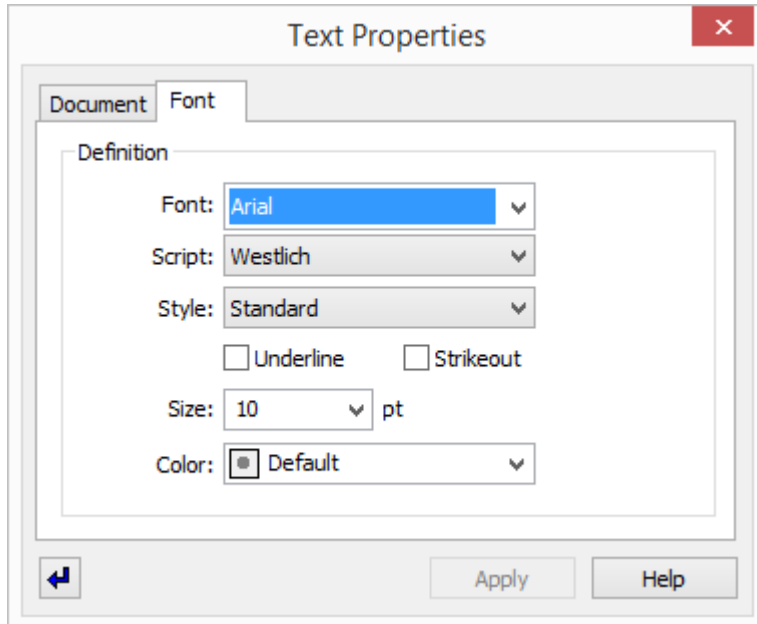


Figure 343: Dialog - Text Properties (Font Tab)

▼ Data section: Font

▼ Font

The font for the object is defined via this selection. The fonts available in Windows® are selectable.

Arial (default) - the font Arial will be used.

... - select the desired font.

i Please note that the selected font is also available on all your clients!

▼ Script

The script characteristics for the font can be defined, such as e.g. Western letters, Central European, etc.

... - if required, select the desired script.

i The scripts available here depend on the selected font!

▼ Style

The font style such as e.g. regular, italic, bold, etc. can be defined here.

... - if required, select the desired style.

i The styles available here depend on the selected font!

Underlined

This option activates or deactivates the underlining of texts.

active - the text will be displayed underlined.

inactive (default) - the text will be displayed **not** underlined.

 Strikeout

This option activates or deactivates the striking-through of texts.

active - the text will be displayed strikeout.

inactive (default) - the text will be displayed **not** strikeout.

 Size: ... pt

The size of the text in pt (1/72 inch) is defined here.

... - select the desired size or enter it directly.



The font size can often also be adapted graphically using the mouse (e.g. by enlarging the text object)!

 Color:

Here you define the color of the font.

Default (default) - the color predefined in the current color scheme is applied.

... - select a desired color or enter it directly, if applicable.

(RGB value: 3 hexadecimal values, each between 00 and ff - e.g. #B2B2B2)

8.7.4.10 Graphic Tab

Via this tab the size and content of a graphic area in the text can be defined. All supported graphic formats can be selected as a graphic.

▼ Dialog: Text Properties (Graphic Tab)

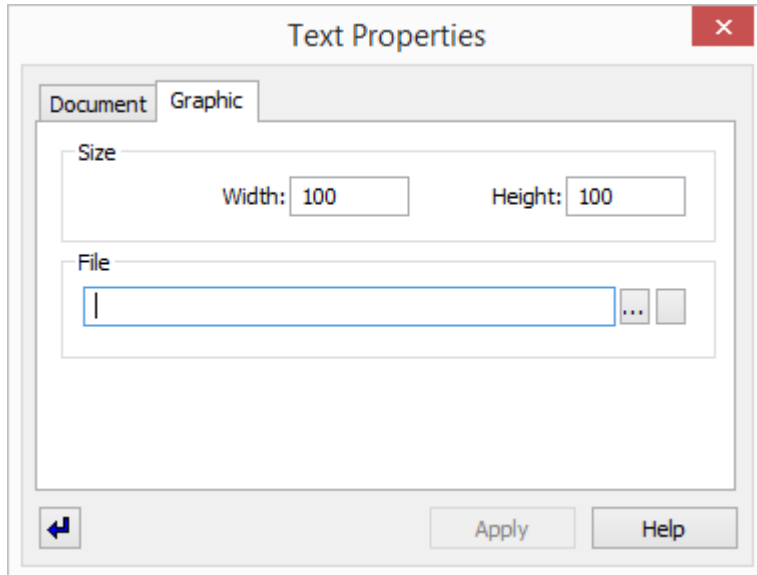


Figure 344: Dialog - Text Properties (Graphic Tab)

▼ Data section: Size

Width:

The width of the field is defined here in pixel.
... - if necessary, indicate the desired width.

Height:

The height of the field is defined here in pixel.
... - if necessary, indicate the desired height.

▼ Function: File

(Graphic name)

This field contains the file path, the graphic name and the display parameters. The data can be entered with the help of corresponding dialogs (that can be opened with the following buttons) or alternatively also directly.

Blank (default) - no function.

... - select the graphic and parameter or enter the data directly.



Path and file name have to be entered in relation to the graphic subdirectory!



(File selection)

The button opens the dialog **Select graphic** from which the file path and graphic can be selected.

... - select the graphic.

**(Graphic parameter)**

The button opens the dialog **Parameter for graphic ...** in which the corresponding settings can be made.

... - if necessary, define the parameters.

8.7.4.11 Linie Tab

With this tab you can define the line size (width, height).

▼ Dialog: Text Properties (Line Tab)

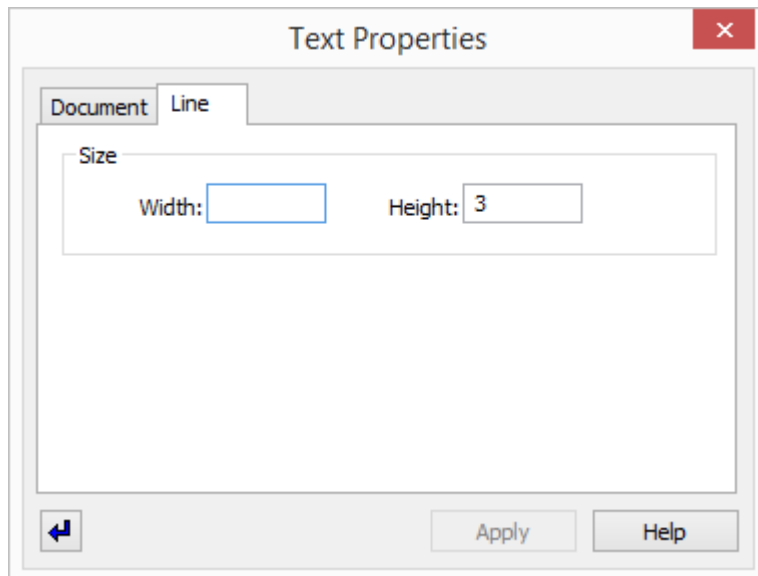


Figure 345: Dialog - Text Properties (Line Tab)

▼ Datenbereich: Größe

Width:

The width of the line is defined here in pixel.

Blank (default) - the line has the same width like the page.

... - if necessary, indicate the desired width.

Height:

The height of the field is defined here in pixel.

3 (default) - if necessary, indicate the desired height.

8.7.4.12 Log Query Tab

This tab is used to define log queries in texts. First, you select a data source. You can limit the data selection by defining filters.

▼ Dialog: Text Properties (Log Query Tab)

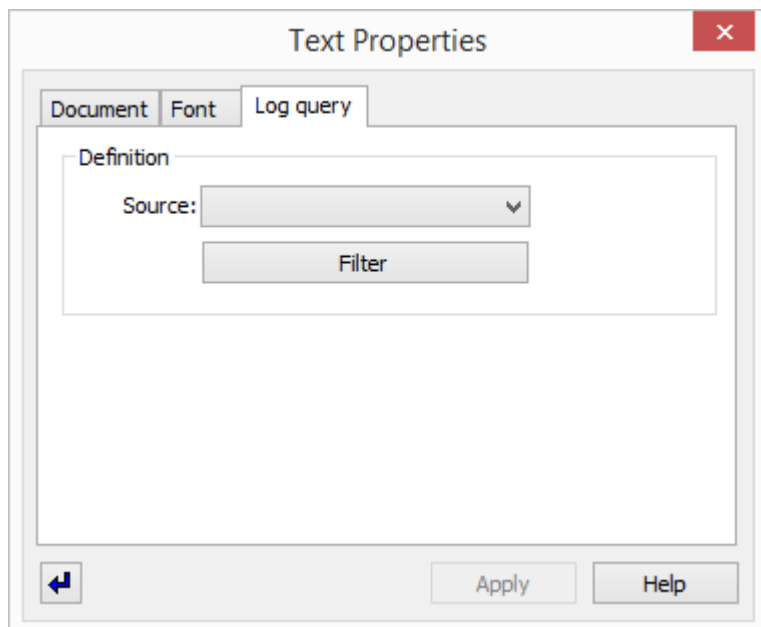


Figure 346: Dialog - Text Properties (Log Query Tab)

▼ Data section: Definition

▼ Source:

Here you define the source for the log query.

System Log - data from the system log are used.

Interface Log - data from the interface logs is used.

Event Archive - data from the event archive is used.

Button Filter

With this button the respective filter dialog for the selected source is opened (please see: [Logs and Archives](#)^[316]).

... - select the desired settings in the dialog.

8.7.4.13 Text Tab

Via this tab you can select a text module that is to be integrated. Additionally, you can also define a local context for the text module. This context then prefixes all context variables contained in the file. In this manner it is possible to integrate the text module multiple times into a text, while filling the entry/selection fields with differing content.

▼ Dialog: Text Properties (Text Tab)

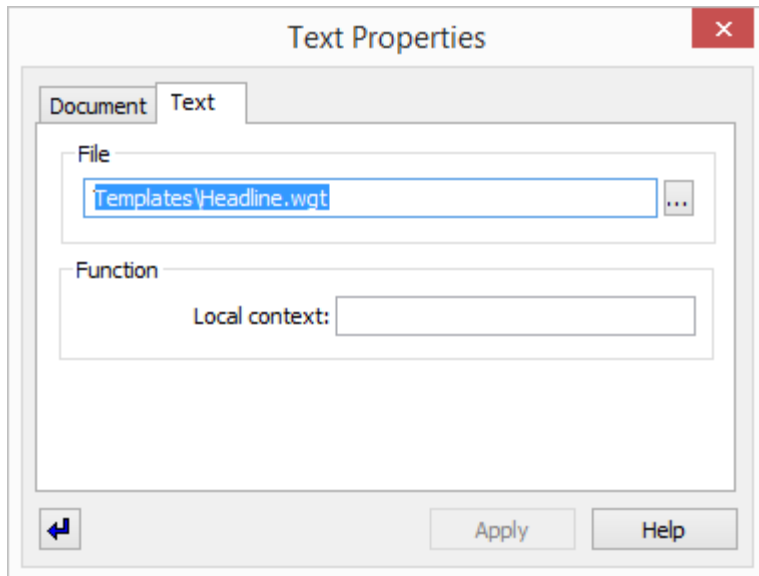


Figure 347: Dialog - Text Properties (Text Tab)

▼ Data section: File

(Text name)

This field contains the file path and the text name for the text module that is to be integrated in display. The file can be selected via the dialog, **Select Text**, or, alternatively, it can be entered directly.



(File Selection)

The button opens the dialog, **Select Text**, in which file path and file can be selected.

▼ Data section: Function

Local Context:

Here you define the local context for this file. This context then prefixes all the context variables contained in the file.

Blank (default) - no local context variable is defined.

... - enter the name of the context variable, if applicable.

8.7.4.14 Variable Tab

Via this tab you can define the properties /parameters of variables. In text, variables serve as placeholders for information that, depending on the type of variable, is then filled with values in the context of datapoints, events, interfaces, etc.

▼ Dialog: Text Properties (Variable Tab)

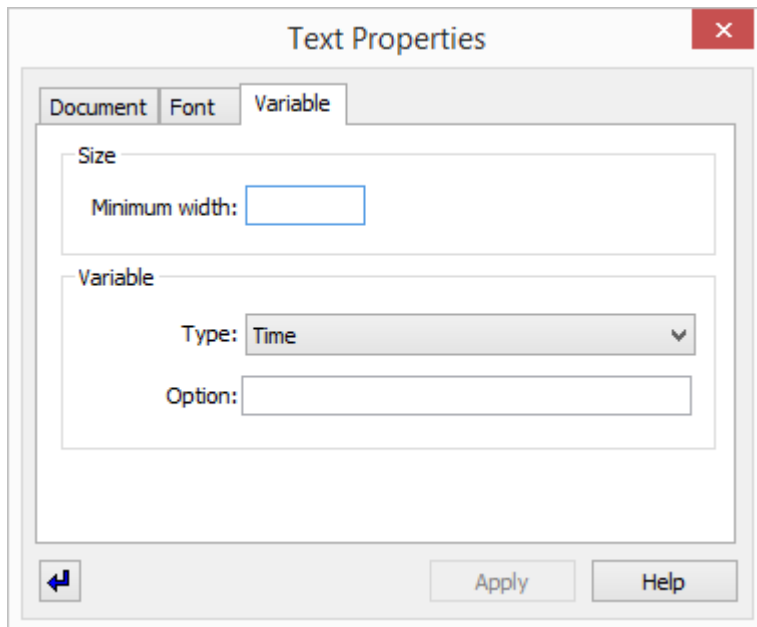


Figure 348: Dialog - Text Properties (Variable Tab)

▼ Data section: Size

Minimum width:

Here you can define the minimum width of the field in pixel. If the content is longer than the minimum width defined here, the width is dynamically adapted automatically so that the entire content is visible. If the content is shorter, the field is displayed with the minimum width defined here.

Blank (default) - no minimum width is displayed.

... - enter the desired minimum width if applicable.

▼ Data section: Variable

Type:

This selection list defines the type of the variables.

... - select the type of the variables.

Option:

In this field, optional parameters can be defined for different variable types.

Example: Only the first element of the location structure (etc.) can be selected for the variable **Location** by indication of the parameter **1**.

... - if necessary, indicate an option for the variable.




The variable types available and the available options are described in the section [Variables](#) ⁹³⁹!

8.7.5 Definition von Workflows

Workflows are controlled by the definition of context variables and reviewing or checking those to determine the display of respective text areas. Both global and local context variables can be defined. Global context variables are valid in all texts of an event, local ones only in one text module. This allows you to use the same text module multiple times with differing definitions within a workflow.

What we refer to as context or context variables, are principally freely definable variables that are assigned texts / values that are then reviewed/checked in other areas via conditions. However, you can also select a list as context and the respective list entry then defines the text/value of the variable.

While variables and values can be entered freely anywhere, it is recommended that you establish [lists](#)  that can be used for the definition of context and values. This prevents typos during entry.

During text editing, user entries are saved under this context name with the value. Context types that begin with '@' are for internal purposes (for example, for workflow control) and are not released/printed out.



Variables and entry values are compared by capitalization (writing in upper or lower case)!

8.7.5.1 Local Context

For local context, the local text variable begins with a period (.), for example, **.breathing**. Such a context is resolved when loading a text (especially when inserting a text module). When inserting a text module, the local context that is to be applied is indicated. If you indicate **patient1** when inserting a text module for example, which uses the local context **.breathing** in conditions, variables, etc., all these entries are resolved into **patient1.breathing**. All entries are saved under this variable name, which allows you to use the same text module also for **patient2**. If no local context is indicated when inserting a text module, the example above is resolved to **breathing**.

When indicating a local context for an inserted text module, such a local context indication is also possible. If the example above had been indicated with the local context **.patient1** and this text, in turn, loaded with the local context **room1**, it would all be resolved to **room1.patient1.breathing**.



*To determine the possible entries for a context, only the part of the context name following the last period is used. This is then the so-called type of context. You could use this functionality, for example, to establish a list type, **OK**, and use its values for both **.breathing.ok** and **.heartbeat.ok**!*



Because using local context makes sense in most cases (since these are resolved automatically), a period (.) is always inserted in front of the context name in selection of a context type.

8.7.5.2 Dynamic Conditions

Through selection of the respective option, you can designate a condition for dynamical evaluation. This setting is available for all types of conditions (IF, ELSE, ...), but is only meaningful for conditions that begin with **IF** and carries through the entire condition until **END**. Such a condition is not just executed once during first application of the text, but every time when something has changed in the context of text display (for example, by a user entry). You can also use datapoint states as dynamic conditions.

Text elements contained in a dynamic condition remain in the text and are displayed depending on the condition. A dynamic condition can change any number of times, the text elements contained therein are repeatedly displayed or hidden.



The reevaluation of conditions is triggered by changes in user entries!

8.7.5.3 Dynamic Commands

If a dynamic condition contains a command as text element, it is always executed when the condition changes its state and the command contained therein becomes visible. In this manner you can integrate automatic commands into the workflow.

8.8 Set Testing Context

Using the menu command **Functions|Set Test Context...** you can open the dialog, **Set Test Context**. Here you have the option of entering a datapoint, a location, an event type, and a state text. This information is then used in the test mode (⚡) of the graphic and text editors for display simulation.

▼ Dialog: Set Test Context

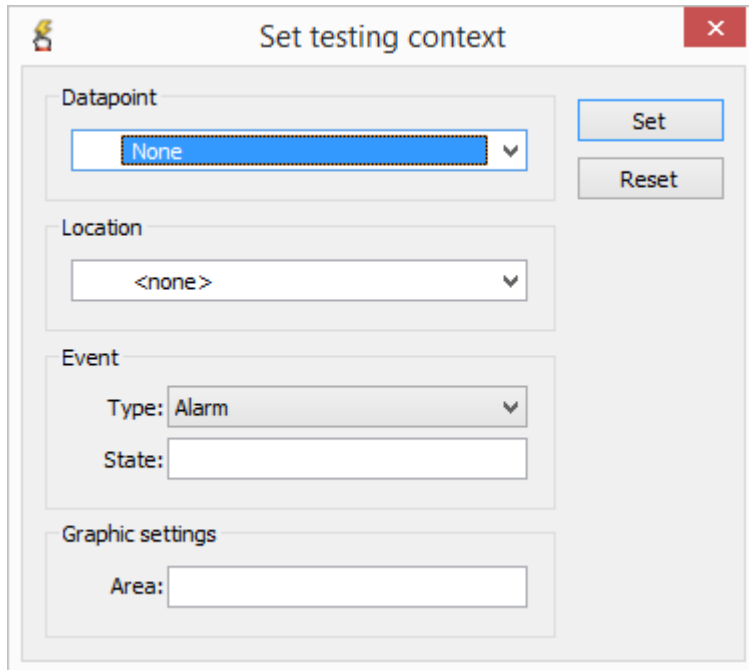


Figure 349: Dialog - Set Test Context

▼ Functions: Dialog

Button **Set**

This function activates the test context so that the graphic and text editors can use these settings in test mode.

Button **Reset**

This function deactivates the test context.

▼ Data section: Datapoint

▼ (Name)

Here you can select the datapoint or one of the sensors assigned to it from the list of defined datapoints in the system.

None (default) - if no datapoint is chosen, the datapoint selected in the explorer is used, if applicable.

... - select the desired datapoint for testing, if applicable.

▼ **Data section: Location**

(Location)

Here you can select a location form the list of all locations defined in the system.

<None> (default) - the location of the selected datapoint is used, if applicable.

... - select the desired location for testing if applicable.

▼ **Data section: Event**

Type:

Here you select the event type. You can select from all states available in the system.

Alarm (default) - alarm is predefined for testing.

... - select the desired type if applicable.

State:

Here you can define a state text.

Blank (default) - the state type itself is used as state text.

... - enter the desired state text if applicable.

▼ **Data section: Graphic Settings**

Area:

Here you can define an area of a graphic for display. This is only functional for testing graphics in the graphic editor, and the area must be defined in the graphic.

Blank (default) - no area is defined.

... - enter the desired area for testing, if applicable.

8.9 Color Selection

Several tools are available to define the color of objects in graphics and texts. When defining a color in graphics for the fill or pen, etc. you can select a color from the respective selection list or enter a color value directly. From there, you can also open the dialog for color selection for expanded color definition options. Alternatively, on the [right side of the graphics editor toolbar](#)⁸¹⁸, there is a function for direct color definition.

8.9.1 List for Color Selection

In the list for color selection, the currently selected color and its RGB value are shown in the selection row itself. In the list below, the pre-defined colors are available for selection. In the bottom row are two display fields in which the current color and the new color are displayed side by side. At the bottom right, you will find the functions for the pipette and for the retrieval of the **Color Selection** dialog.

▼ List: Color Selection

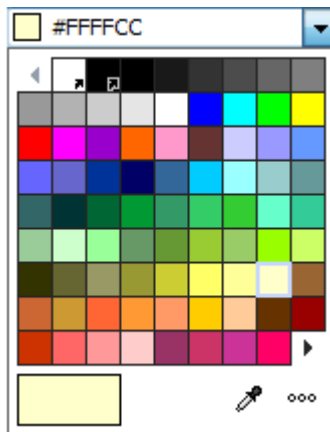


Figure 350: List - Color Selection

▼ Functions: List - Color Selection

▼ (Color selection)

The color selection is accepted without further confirmation and the dialog is closed. If changes in definition, for example, a palette, have not yet been saved, a respective confirmation window appears.

... - select the desired color, if applicable, or enter it directly.

(RGB value: 3 hexadecimal values, each between 00 and ff - e.g. #B2B2B2)

□ (Color current / new)

Here the current and the new color are displayed side by side.

🥄 (Pipette)

After this function has been activated (note change in mouse pointer) you can accept the color of a colored object by clicking on it.

⋮ (Dialog Color Selection)

This function opens the dialog, [Color Selection](#)⁹³³, which provides several mechanisms for selecting and defining colors.

8.9.2 Dialog for Color Selection

In the dialog, **Color Selection**, various tabs with different options/parameters for color definition are available. The tab, **Palette**, provides defined palettes with predefined colors for selection. The **Standard** tab offers direct selection of standard colors. In the tab, **User defined**, you can define your own additional colors. In the **Scheme** tab, you can select from defined color schemes.

▼ Dialog: Color Selection - Palette Tab

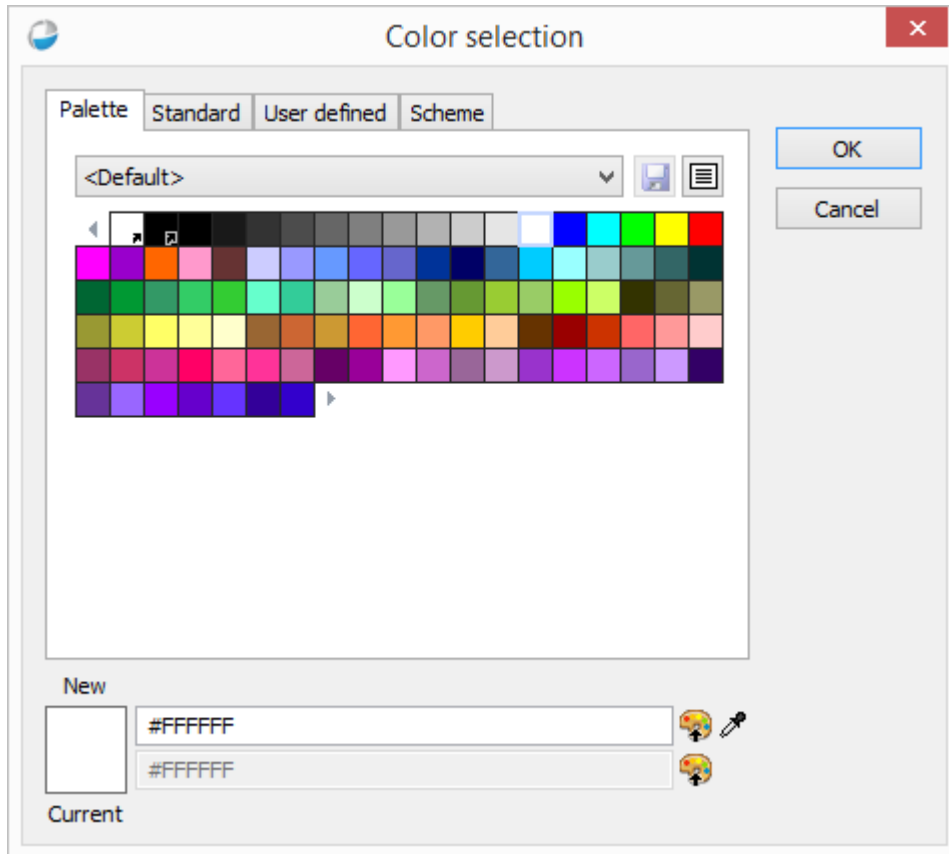


Figure 351: Color selection - Palette tab

▼ Functions: Dialog

Button **OK**

The color selection is accepted without further confirmation and the dialog is closed. If changes in definition, for example of the palette, have not yet been saved, a corresponding confirmation appears.

Button **Cancel**

With this button the dialog is closed without further confirmation and without the selection/change being accepted.

Input **New / Current**

Here the current color and the new color are displayed one above the other for comparison.

**(Color new / current)**

Here the new color and current color are displayed one above the other in RGB values for comparison. The new color can also be defined here directly.

... - select the desired color, if applicable, or enter it directly.

(RGB value: 3 hexadecimal values, each between 00 and ff - e.g. #B2B2B2)

**(Select color in palette)**

By executing this function, the respective color value in the palette is selected.

**(Pipette)**

After this function has been activated (note change in mouse pointer), you can adopt the color of a colored object by clicking on it.

▼ Function: Color Selection - Palette Tab**(Selection of Palette)**

Here you can load one of the defined palettes for color selection.

... - select the desired color palette if applicable.

**(Save Palette)**

With this button the selected palette is saved.

**(Open Context Menu)**

With this function the context menu for the color palette is opened. The following functions are available:

New... - a dialog to enter the name of the new palette is opened.

Save - the current palette is saved.

Save as ... - the current palette is saved under a new name.

Delete - the current palette is deleted following respective confirmation.

Revert to standard palette - the current palette is replaced by the standard color palette.

**(Display area of the palette)**

In this area, the colors of the selected palette are displayed and can also be chosen directly.

▼ **Dialog: Color Selection - Standard Tab**

Here you can directly select the standard colors.

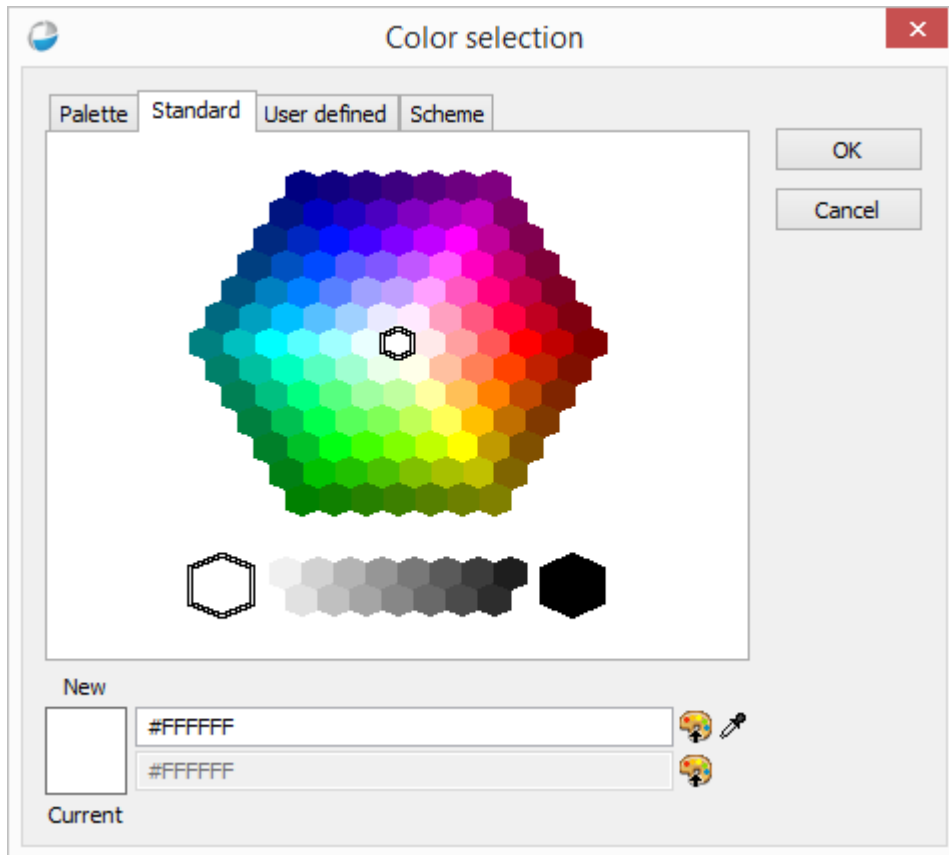


Figure 352: Color Selection - Standard tab

▼ **Dialog: Color Selection - User defined Tab**

Here you can select and define the colors via various mechanisms.

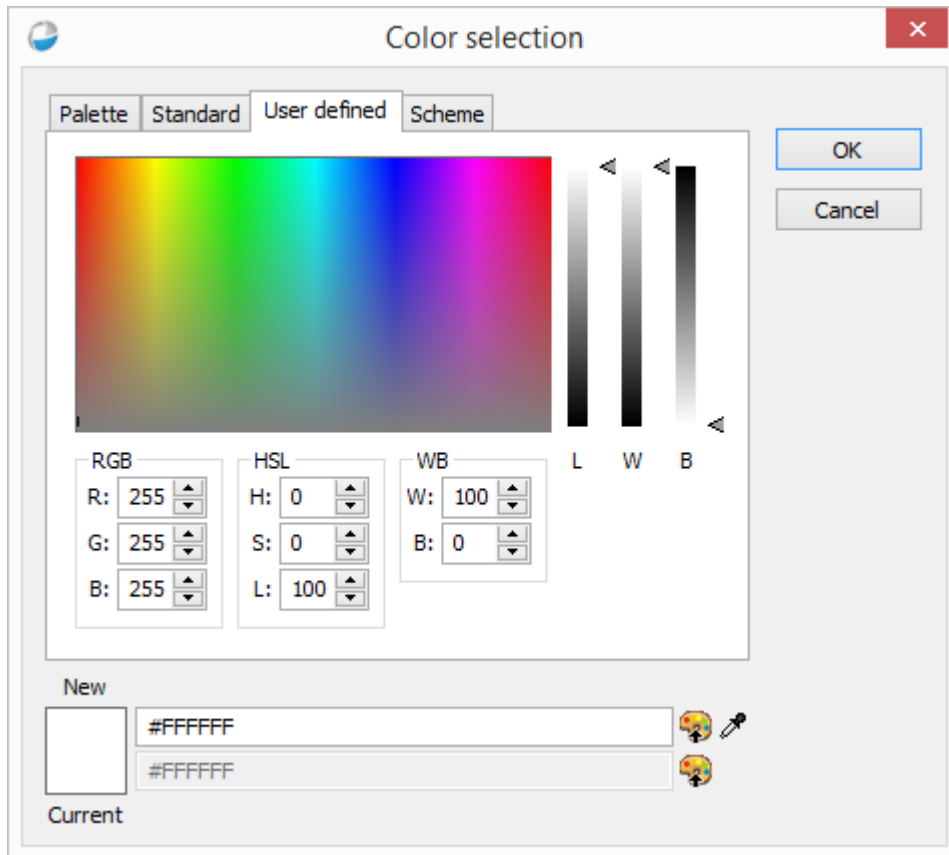


Figure 353: Color Selection - User defined tab

▼ Dialog: Color Selection - Scheme Tab

Here you can select the colors via color schemes.

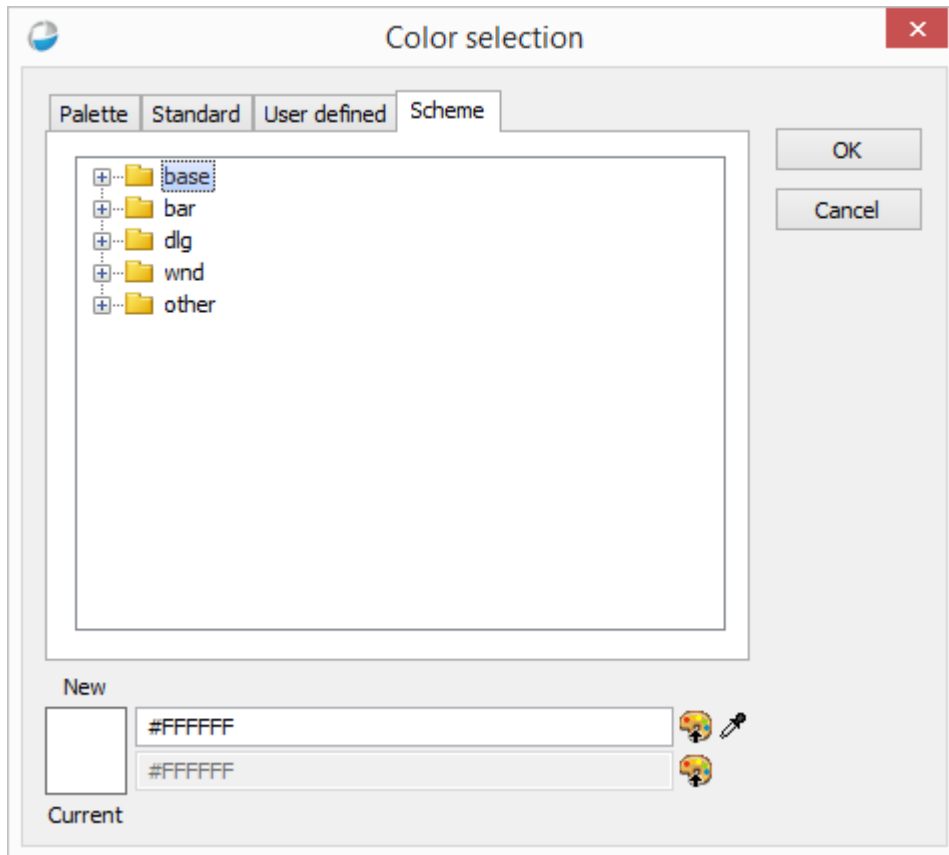


Figure 354: Color Selection - Scheme tab

8.10 Variables and Key Words

In this section, you will find the available commands, variables, and conditions that are used by the program in texts, graphics, toolbars, scheduled commands, etc.

Basically, commands are individual functions that allow you to execute all kinds of different processes. Thus, via a command, you can activate certain elements of the user interface, control installations with datapoints, execute menu commands, etc. Additionally, commands may be event-dependent, time-specific, or integrated automatically in the system so that, depending on events, datapoints, and schedules, etc., a broad range of commands are available to respond to any type of task.

Variables primarily serve to display event information in graphics and texts. The information is displayed in the form of respective text fields.

8.10.1 Variables

Variables can be inserted into texts and graphics. For information on inserting, please see the Text section [-Variable Tab](#)^[928] and the Graphic section [Variable Tab](#)^[885]. Depending on variable type, the variable fields are filled accordingly with values within the context of events (state type, interface, time, etc.).



Some variables can only display the current situation and are not suited for display in archived events. In the following table, this is indicated for the respective variables!

▼ Available Variables

The following list contains the available variables:

- Variables without option

➤ Variables with option

- **Address**

Display of the address of the initiating datapoint or sensor.

- **Address2**

Display of Address2 of the initiating datapoint or sensor.

➤ **Create Time**

Display of the time stamp the graphic was created.

Option = Blank (default): Creation time of the graphic is used.

Option = 1 ... n: here you enter the name (must be a number) of a frame. In this way, the variable refers to the creation time of the graphic loaded into the frame.



This option is functional only if the name of the frame is a number!



This variable is only available in graphics!

- **Current.Language**


Display of the abbreviation of the currently used language of the user.



Always current relation - not suitable for log!

- **Current.Notes**


Display of the current reference text of the datapoint that is assigned to that datapoint via the [main control panel](#)²¹⁹.

 *This variable is only functional for event display in a text!*

 *Always current relation - not suitable for log!*

- **Current.User.First name**

Display of the first name of the person assigned to the user.

 *Always current relation - not suitable for log!*

- **Current.User.Last name**

Display of the last name of the person assigned to the logged-in user.

 *Always current relation - not suitable for log!*


- **Current.User.Login**

Display of the login name of the currently logged-in user.

 *Always current relation - not suitable for log!*

- **Current.User.Name**

Display of the complete name (first and last name) of the person assigned to the logged-in user.

 *Always current relation - not suitable for log!*


- **Current.User.User Id**

Display of the ID of the currently logged-in user.

 *Always current relation - not suitable for log!*

- **Current.Workstation**

Display of the number of the current workstation.

 *Always current relation - not suitable for log!*

➤ **Datapoint**

Display of the datapoint name.

Option = 0 (default): the complete name is displayed.

Option = 1 : only the first number group contained in the name is displayed. (Example: MG 001 => 001, MG 01.85-7 => 01, 03 XY 123 => 03)






- **Datapoint Category**

Display of a datapoint category.

- **Date**

Display of the date of event reception.

 *For a display without event context, the date the document was retrieved is used!*

- **Description**
Display of the description assigned to the datapoint.
 *Sensors do not have their own descriptions!*
- **Event.Accepted.User.User Id**
Display of the ID of the user who accepted the event.
- **Event.Completed.User.User Id**
Display of the ID of the user who completed the event.
- **Event.Id**
Display of the internal, distinct ID of the event.
- **Event.Incident**
Display of the incident that initiated the event.
- **Event.Value.End**
Displays the measured value that was active at the **end** of the event (only for category: value).
 *The end measured value can be displayed for data points in category value.*
- **Event.Value.Start**
Displays the measured value that was active at the **start** of the event (only for category: value).
 *The end measured value can be displayed for data points in category value.*
- **Event.WS**
Display of the workstation number on which the event was accepted.
- **Interface**
Display of the ID of the interface assigned to the datapoint.
- **Interface Name**
Display of the name of the interface assigned to the datapoint.
- **Last modify time**
Display of the time stamp of the last change made to the graphic.
Option = Blank (default): time of change to the graphic is used.
Option = 1 ... n: here you enter the name (must be a number) of a frame. In this way, the variable refers to the time of change of the graphic loaded into the frame.
 *This option is functional only if the name of a frame is a number!*
 *This variable is only available in graphics!*

➤ **Location**


Display of the location assigned to the respective datapoint.

Option = 0 (default): all elements of the location are displayed, separated by a comma.

Option = 1 ... n: only the location element that is located on the respective position in the level hierarchy is displayed.

• **Location Text**

Display of the text module that is assigned to the location.

 *This variable is only available in texts!*

• **Node**

Display of the node of the initiating datapoint or sensor.

• **Number of Sensors**

Display of the number of sensors of the datapoint (sensor group).

• **Parent (current)**

Display of the superordinated datapoint in the explorer hierarchy.

 *Always current relation - not suitable for log!*

• **Priority**

Display of the priority of the event.

➤ **Query**

Here information from a database is displayed that can be accessed only with specialized interfaces.

Option: define a respective query here (please see interface Help Section).

• **Sensor Number**


Display of the number of the sensor that initiated the event.

• **Sensor Type**

Display of the sensor type of the initiating sensor.

• **State Text**

Display of the text assigned to the state of a datapoint.

 *For datapoints of the type, **Value**, the current value may also be displayed if the variable is supplied as follows:*

*Define a link to the datapoint (type: **Value**) and select as **animation** the option **Value (fill)**.*

• **State Type**

Display of the state of the datapoint, for example, Idle/Silence, Alarm, Fault, etc.

Tag

Display of the tag names assigned to the datapoint.

➤ **Textmacro**

Display of the text macro assigned to the datapoint.

Option = 0 (default): the content of the variables remains empty.

Option = 1 ... 5: the content of the respective text macro is displayed.



In graphics, only the text itself (as defined) is shown.

In texts, the texts itself, or, if a text module has been entered, the content of the text module is inserted.

• **Time**

Display of the time of event reception.



For a display without event context, the date the document was retrieved is used!

8.10.2 Key Words

In addition to the [variables](#)⁹³⁹ in texts and graphics, you can also use keywords for the definition of functions in different places to integrate various information. However, most of this information is only available in relation to a context, for example, an event.

Keyword	Function	Description
<BLOCKNAME>	CAD graphic property for sensor type	Using the CAD block name as sensor type name.
<CONTEXT>	Text field (protocol text)	Using context value as protocol text.
<DATAPOINT>	Start application	Datapoint name (event context).
<DATA>	Start application	Sets the data path of the program (here WinGuard) for the files to be executed. for example, <DATA>\xyz.exe
<DATE>	Set input, Add log entry	Date-normal (pls. see Settings for format). - for example, DD.MM.YYYY
<DATESHORT>	Set input, Add log entry	Date-short (pls. see settings for format). -for example, DD.MM.YY
<DATEVERBOSE>	Set input, Add log entry	Date-extensive (pls. see Settings for format). - for example, DDD.DD.MMM.YYYY
<GRAFIK#> <GRAPHIC#>	Send email Print document Send fax Print graphic Switch graphic	Datapoint-graphic 1-5 (event context).
<input:xxx>	Add log entry	Is replaced by the value of the indicated context (xxx).

Keyword	Function	Description
<ORTSTEXT> <LOCATIONTEXT>	Start application Control display device Print document Send email Send fax Send to pager Send SMS Play sound Send voice message Execute text Print text Show text Switch text	Text module assigned to the respective location (event context).
<ORTSGRAFIK> <LOCATIONGRAPHIC>	Datapoint definition	Can be used to define graphic 1..5.
<PROG>	Start application	Name of the application that starts the program (here WinGuard).
<REPORT>	Send email Print document	Placeholder for a report (event context).
<SENSOR>	Start application	Sensor number (event context).
<STATETEXT>	Generate event Simulate event	Supplies the state text (event context).
<SYS>	Event routing	Used user id
<SYSLOG>	currently not in use	Use of the default system printer.
<TEXT> <T>	Start application Control display device Print document Send email Send fax Send to pager Send SMS Play sound Send voice message Execute text Print text Show text Switch text	Datapoint text (event context).
<TEXTMAKRO#> <TEXTMACRO#> <TM#>	Start application Control display device Print document Send email Send fax Send to pager Send SMS Play sound Send voice message Execute text Print text Show text Switch text	Datapoint text macros 1-5 (event context), Virtual SST text macros 6-x (event context).

Keyword	Function	Description
<TIME>	Set input, Add log entry	Time-normal (pls. see Settings for format). - for example, HH:mm:ss
<TIMESHORT>	Set input Add log entry	Time-short (pls. see Settings for format). - for example, HH:mm
<VALUE>	Text field (log text)	Entry/Selection text as log text.
<WGT:Filename.wgt>	Control datapoint	The value of Param2 is replaced with the text content of the file. - for example, for controlling cameras.

8.11 Commands

WinGuard offers a broad range of commands that can be executed interactively or automatically. The individual dialogs for the definition of commands provide both general and function-specific elements.

- **Graphics**

In graphics, you can add a command ([Command Tab](#)⁸⁴⁶) to the individual graphic objects in graphics by accessing the dialog **Graphic Properties**. Generally, this command can be executed by clicking on the graphic object.

If a sequence of several commands is to be executed at once or commands are linked to conditions, it is recommended that you create a corresponding text (.WGT) and execute it via the command [Execute Text](#)⁹⁸⁸.

- **Texts**

In texts that are used for display, commands can be executed via buttons or dynamically via respectively defined contents (workflows). But texts may also be developed as command texts (scripts) with any number of commands and conditional elements. Such texts can then be executed via the command [Execute Text](#)⁹⁸⁸.

- **Datapoints**

In the [Commands Tab](#)⁷³¹, commands can also be assigned to datapoints. These commands are executed within the context of incidents or events. It is therefore necessary to include conditions in these commands to ensure they are executed at the right time.



Datapoint commands must always include conditions regarding "execution time" or "change in state"!

- **Scheduled Commands**

You can integrate commands that are to be carried out at certain times in the system via the function module **Scheduled Commands**. The dialog used to define these commands can be accessed via the menu item **Functions | Scheduled Commands**.



This module is only available with the appropriate license!

- **Event Routing**

Within the framework of events, the script for **event routing** is always executed first. This mainly serves to route incoming events to individual workstations. Please see [Choose workstation](#)⁹⁶⁵ and [Notify workstation](#)⁹⁹⁶ for additional information. However, here you can also define additional commands such as automatic printing, e-mailing, SMS, etc. You can get to the definition of the script via the menu item **System | Scripts | Event Routing**.



The script for event routing is only executed at the workstation on which the respective interface is active!

Exception: For event simulation and user alarm the event routing script is executed on the workstation where the event is created.



This script must not contain the condition "Execution time"!



Not all commands are available in all areas, since some commands do not apply or are not functional in certain contexts!

▼ Example: Define Commands

Function

Command:

at WS:

Delay: ms Id:

Figure 355: Command

▼ Data section: Function (General)

▼ Command:

It is possible to select from the list of commands which action shall be executed in the text. Further information with regard to the definition and to the commands can be found in the section [Command Variables and Key Words](#)^[939].

Blank (default) - no action is executed.

... - select the desired action.

▼ at WS:

It is possible to select from the list of clients at which client the action shall be executed.

Blank (default) - the action will be executed at the own client.

Server - the action is sent to the active server and executed there.

Hot-Standby - the action is sent to the active Hot Standby Server and executed there.

... - if necessary, select the client to which the action shall be sent and at which it shall be executed.



Please note that context information of an event will not be transferred here!

Delay ... ms

A delay time (before execution of the action) can be defined here. In this case, the action will be transferred to the processing buffer of the corresponding client and executed after expiration of this time. The waiting actions of a client can be seen and, if necessary, canceled with the help of the [Command Monitor](#)^[233]. A cancellation of these actions is also possible using the action [Remove Command](#)^[1005].

... - geben Sie ggf. die gewünschte Verzögerungszeit an.



Please note that context information of an event will be lost!

Id:

In case of a delay, an Id can be assigned to the action. The **Id** is a free text via which a delayed action can be identified and thus also be removed or deleted even during the waiting phase ([Remove Command](#)¹⁰⁰⁵).

... - if necessary, indicate an Id.



Commands with event context lose this context if they are executed at a later time or on a different workstation!

8.11.1 Overview
























































For some commands, there are limitations with regard to their function, depending on under which system states these are executed. In particular, this relates to the operation of WinGuard as a service (without user interface) and the operation as application, but without login. Furthermore, there are some actions that only make sense or will be used in the context of events.







In general, all commands that relate to the program interface and user settings such as e.g. **Display graphic, Switch pane, Change language** are not available or do not have any impact if WinGuard is operated as a service (service operation mode).

In the UI operation mode (User Interface) without a logged in user, similar restrictions with regard to the functionality as in the service operation mode apply. Mainly, those commands that relate to the program interface of WinGuard such as e.g. **Display graphic, Switch pane, Change language** are not available or do not have any impact here too. The other functions are available as usual.






Command overview:

Command	Local	License	Only event Reception/ Context	Not in service mode	Without user login
Add attachment					
Add log entry					
Apply event handling					
Assign animation scheme					
Assign cameras					
Assign tags					
Change function profile				X	X
Change language				X	
Change user profile				X	X
Change workstation profile				X	
Choose sound					
Choose workstation					
Complete event					
Connect audio					
Control datapoint					

Command	Local	License	Only event Reception/ Context	Not in service mode	Without user login
Control display device					
Control timer					
Create bookmark					
Create incident					
Create report					
CSV Export					
CSV Import					
Don't save event					
Execute menu command					
Execute text					
Generate event					
Hide event					
Ignore event					
Login user					
Modify event					
Notify workstation					
Play sound					
Print documents					
Print graphic					
Print text					
Remove commands					
Select datapoints					
Send email					
Send fax					
Send SMS					
Send to pager					
Send voice message					
Set input					
Set symbol filter					
Show control panel					
Show display					
Show text					
Show VideoManager					

Command	Local	License	Only event Reception/ Context	Not in service mode	Without user login
Simulate event					
Start application					
Switch graphic				X	X
Switch pane				X	X
Switch text				X	X
Switch video split				X	X

Legend:

-  Usually, these commands only have local or workstation-related consequences, provided that they are not explicitly executed on other workstations.
-  These commands require additional license modules or might not be available in all system variants.
-  These commands require corresponding interface modules.
-  These commands only function upon event reception or in the script Event reception.
-  These commands only function for events or in the context of events.
- X** These commands are **not** functional in the respective operation mode (as a service / without user login).

Commands without corresponding symbols are in general available or have cross-workstation consequences.

8.11.2 Add Attachment

With this command you can add an attachment to an event, provided that the event is currently displayed and the license includes the use of attachments.



This command is only functional for event messages respectively with event context!

▼ Command: Add attachment

Function

Command:

at WS:

Delay: ms Id:

Type:

Name:

Figure 356: Command - Add attachment

▼ Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)^[946].

Type:

Here you can select the type of attachment that should be added to the event. You may also add graphics to reports (PDF).

Blank (default) - no function.

Graphic - the subsequently indicated graphic is added as an attachment to the event or report.

Report - the subsequently indicated report is added as an attachment to the event.

Name:

Here you define the name of the report that should be added as an attachment to the event.

Blank (default) - no function.

... - enter the name of the report if applicable.

The following parameters are only available for the type **Graphic**:



Integrate into report

This option determines if the graphic is integrated into the report (PDF).

Active - the graphic is integrated into the report.

Inactive (default) - the graphic is **not** integrated into the report.

**(Graphic name)**

This field contains the file path, the graphic name and the display parameters. The data can be entered with the help of corresponding dialogs (that can be opened with the following buttons) or alternatively also directly.

Blank (default) - no function.

... - select the graphic and parameter or enter the data directly.



Path and file name have to be entered in relation to the graphic subdirectory!

**(File selection)**

The button opens the dialog **Select graphic** from which the file path and graphic can be selected.

... - select the graphic.

**(Graphic parameter)**

The button opens the dialog **Parameter for graphic ...** in which the corresponding settings can be made.

... - if necessary, define the parameters.

8.11.3 Add Log Entry

With this command, a new entry can be added to the system log. The log column "**Category**" is filled with the value "**Other**".

▼ Command: Add log entry

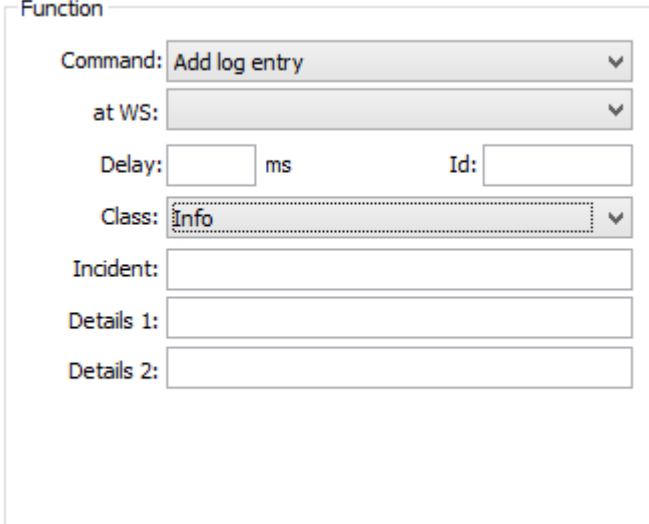


Figure 357: Command - Add log entry

▼ Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)^[946].

▼ Class:

Here you can define the class for the log entry. This value can later be used for filtering, for example. You can select from the following classes: **Info**, **Warning**, **Error**, **Success**, and **Failure**.

...- select the class.

i *If this command is assigned to a button, only the class Info is available!*

Incident:

Here you can define the text for the column "**Incident**" in the system protocol.

Blank (default) - no function (the respective column entry remains empty).

... - enter the incident text.

Details 1 ... 2:

Here you can define the entry for the "**Details**" column in the system log. If the **Details 2** field is also filled, the two entries are separated by a comma.

... - enter additional details regarding the incident if applicable.

▼ Key Words

When defining an **incident** with **Details 1+2**, the following placeholders are available, depending on event:

- **<DATE>**
Is, depending on the application, replaced by the current or event date in the normal date format (see settings: e.g. DD.MM.YYYY).
- **<DATESHORT>**
Is, depending on the application, replaced by the current resp. event date in the short date format (see settings: e.g. DD.MM.YY).
- **<DATEVERBOSE>**
Is, depending on the application, replaced by the current resp. event date in the extended data format (see settings: e.g. DDD.DD.MMM.YYYY).
- **<INPUT:xxx.>**
Will be replaced by the value of the indicated context (**xxx**).
- **<TIME>**
Will be replaced depending on the application by the current resp. event time in the normal time format (see settings: e.g. HH:mm:ss).
- **<TIMESHORT>**
Will be replaced depending on the application by the current resp. event time in the short time format (see settings: e.g. HH:mm).

8.11.4 Apply Event Handling

With this command definitions from the event handling can be activated.

▼ Action: Apply event handling

The screenshot shows a configuration window titled 'Function'. It contains the following fields:

- Command: Apply event handling (dropdown menu)
- at WS: (dropdown menu)
- Delay: (input field) ms (input field)
- Id: (input field)
- Type: All (dropdown menu)

Figure 358: Aktion - Apply event handling

▼ Section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)⁹⁴⁶.

▼ Typ:

The type for execution of event handling is defined here.

All (default) - All event handling actions are considered.

Hide event - only hide actions relating to the event.

Group event - only group actions relating to the event.

8.11.5 Assign Animation Scheme

In this section you can define an animation scheme for the symbols related to an event that will be displayed upon reception of an event. This animation scheme has priority over the respective definitions of symbols or graphics. Animation schemes can be used, for instance, to differentiate the animation of objects depending on certain conditions.



This command is only functional for event messages upon event reception and should thus, if possible, be integrated into the event distribution! For this reason, the execution on another client is not functional!

▼ Command: Assign animation scheme

Function

Command: Assign animation scheme ▼

at WS: ▼

Delay: ms Id:

Scheme: ▼

Figure 359: Command - Assign animation scheme

▼ Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)^[946].



Scheme:

Here you can determine an animation scheme for the respective symbols in the graphics.

Blank (default) - no function.

... - select the desired animation scheme.

8.11.6 Assign Cameras

This command is used in two different ways in the system. On the one hand the command is used to assign cameras to video banks, on the other hand you can assign cameras for temporary video archive access depending in event view. Both possibilities can be used at the same time.

Usage with video banks

Here you can determine the cameras that should be activated simultaneously on various monitors when an incident occurs (so-called **video banks**). The images are generally displayed in the VideoManager or VideoDisplay.

For this command to be active, you must first define the monitors that are to be part of the video banks. This can be done in the system [settings](#)^[404], under [video](#)^[500], item: **Monitors for event display**.



This command is only functional for event messages upon event reception and should thus, if possible, be integrated into the event distribution! For this reason, the execution on another client is not functional!

Usage with video archive access

Here you can determine the cameras that should be temporary used for video archive access while displaying an event. The command is basically dependent from the video system settings. This can be done with the max. time definition in the system [settings](#)^[404], under [video](#)^[500], item: **Allow archive access for event context**.



This command is only functional for event messages respectively with event context!

Command: Assign cameras

Function

Command: Assign cameras

at WS:

Delay: ms Id:

Cameras:

Figure 360: Command - Assign cameras

Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)^[946].

**Cameras:**

Display field for the selected camera.

**(Change position)**

If there are several entries in the display field, the highlighted entry in the list can be moved up or down.

... - determine the desired positions if applicable.

**(Add datapoint)**

Opens the dialog **Selection**, which lists all defined datapoints of the type **Camera**. These can be adopted into the display field.

... - add the desired camera.

**(Remove datapoint)**

Deletes the camera highlighted in the list.

... - delete the undesired cameras if applicable.

8.11.7 Assign Tags

With this function, you can assign tags directly to events, e.g. in the event routing. In this case the principle **only one tag per hierarchy** is used. That means, if tags with the same hierarchy are already assigned by location or datapoint to the event, this tags are ignored/removed by assigning a new one.

▼ Commands: Assign tags

The screenshot shows a configuration window titled 'Function'. It contains the following elements:

- Command:** A dropdown menu with 'Assign tags' selected.
- at WS:** A dropdown menu.
- Delay:** An input field followed by the text 'ms'.
- Id:** An input field.
- Tags:** A dropdown menu with 'None' selected.

Figure 361: Command - Assign tags

▼ Datenbereich: Funktion

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)⁹⁴⁶.

▼ Tags:

You can select the tags (also several tags) for the event here. The single names of the tags will be displayed separated by commas.

Blank (default) - if required, select the tags for the event.

i To select several tags please press the Ctrl-key during the selection. The Return-key finishes the selection!

8.11.8 Change Function Profile

With this action, additional function profiles can be activated or deactivated for the registered user. Depending on the activated or deactivated function profile, the user rights can be changed dynamically during operation.



This command is executed only on the workstation, if its not assigned to an other workstation.



This command is not functional in service mode!



This command is not functional without an user login!

▼ Command: Change function profile

Function

Log entry:

Command:

at WS:

Delay: ms Id:

Profile:

Mode: Toggle Activate Deactivate

Figure 362: Action - Change function profile

▼ Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#) ⁹⁴⁶.

▼ Profile:

A function profile can be selected from the defined profiles.

Blank (default) - no function

... - select the function profile.



Only profiles supported by the active user will be functional!



Mode

Here it is defined whether the profile shall be activated, deactivated or switched depending on the currently selected mode.

Toggle (default) - Switch (if active to inactive or vice versa)

Activate - the function profile is activated.

Deactivate - the function profile is deactivated.

8.11.9 Change Language

With this function, the language of the user interface elements can be dynamically changed. This means that all system texts, provided they are not user defined, immediately appear in the new language.



This command is executed only on the workstation, if its not assigned to an other workstation.



This command is not functional in service mode!



If a language is not available, English is used as default!



The language used by any interfaces that may be active is not affected. However, if the interface is restarted, the interface also uses the new language.

▼ Command: Change language

Function

Command: ▼

at WS: ▼

Delay: ms Id:

Language: ▼

Figure 363: Command - Change language

▼ Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)⁹⁴⁶.



Language:

Here you can define the language that is to be used. The selection list contains all languages available in the system.

Blank (default) - no function.

... - select the language.

8.11.10 Change User Profile

With this command, the user profile of a an active user can be changed. Depending on the selected profile, settings such as event display, rights, toolbar functions, etc. may change accordingly. If a profile not supported by the logged-in user is selected, the command remains ineffective (please see: [Profiles](#)

546).



This command is executed only on the workstation, if its not assigned to an other workstation.



This command is not functional in service mode!



This command is not functional without an user login!

▼ Command: Change user profile

Function

Command:	<input type="text" value="Change user profile"/>	▼
at WS:	<input type="text"/>	▼
Delay:	<input type="text"/>	ms
Id:	<input type="text"/>	
Profile:	<input type="text"/>	▼

Figure 364: Command - Change user profile

▼ Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#) ⁹⁴⁶.



Profile:

Here you can select a user profile from the defined profiles in the system.

Blank (default) - no function.

... - select the user profile.



Only profiles supported by the active user are functional!

8.11.11 Change Workstation Profile

With this command, the workstation profile of a workstation can be changed. Depending on the selected profile, settings such as event display, use of screens, etc. may change accordingly. If a workstation profile not supported by the workstation is selected, the command remains ineffective (please see: [Profiles](#)⁵⁴⁶).



This command is executed only on the workstation, if its not assigned to an other workstation.



This command is not functional in service mode!

▼ Command: Change workstation profile

Function

Command:

at WS:

Delay: ms Id:

Profile:

Figure 365: Command - Change workstation profile

▼ Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)⁹⁴⁶.

▼ Profile:

Here you can select a workstation profile from the list of defined profiles.

Blank (default) - no function.

... - select the workstation profile.



Only the profiles supported by the workstation are functional there!

8.11.12 Choose Sound

With this function you can determine that upon event reception, the sound file defined here is played as notification. As opposed to the command [Play sound](#)⁹⁹⁷, no additional interface is required here.



This command is only functional for event messages upon event reception and should thus, if possible, be integrated into the event distribution! For this reason, the execution on another client is not functional!

▼ Command: Choose sound

Function

Command:

at WS:

Delay: ms Id:

Sound:

Figure 366: Command - Choose sound

▼ Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)⁹⁴⁶.



Sound:

Here you can define the path and name of the sound file. You can select the file using the dialog or enter it directly.

Alternatively, you can enter a value as follows between 1 and 10: **<1> ... <10>**. With this entry, the respective sound file that is defined in the [system settings](#)⁴²⁴ under **free sound** is emitted.

Blank (default) - no function.

<...> - enter the number between 1...10 for the free sound if applicable.

... - select the sound file or enter it directly if applicable.



Path and file name must be entered relative to the sound subfolder!



(File selection)

This button opens the dialog **Select sound** in which you can select the path and the sound file.

... - select the sound file if applicable.

8.11.13 Choose Workstation

With this command, the current event is assigned to a workstation. This means that it appears in the event list. Additionally there is an announced acoustically sound at the determined workstation, and associated graphics and texts are displayed there. If the workstation is additionally notified with the command [Notify Workstation](#)⁹⁹⁶, the event is still shown if the event is fetched from an other workstation.

However, event display also depends on other settings that were defined in the system settings (for example, event filters, etc.). If the event should not assigned to a workstation, the workstation number **0** is used and the event may be visible in the local event lists of all workstation. In this case, there is no notification on any workstation. To notify the workstations the command [Notify Workstation](#)⁹⁹⁶ must be used for the appropriated workstations.



This command is only functional for event messages upon event reception and should thus, if possible, be integrated into the event distribution! For this reason, the execution on another client is not functional!

▼ Command: Choose workstation

Function

Command:

at WS:

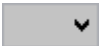
Delay: ms Id:

Workstation:

Figure 367: Command - Choose workstation

▼ Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)⁹⁴⁶.



Workstation:

Here the workstation that is to be alerted is selected. All workstations defined in the system are available for selection.

<No workstation> (default) - no workstation is selected (WS = 0).

... - select the workstation that is to be alerted.

8.11.14 Complete Event

With this command, an event is completed automatically and saved in the archive. No event display occurs in the system. The end time of the event in the archive does not have a normal entry but is indicated by "-----". The command itself does not offer any additional parameters for definition.



Some interfaces send a message/acknowledgment to the subsystem upon completion!

▼ Command: Complete event

Function

Command:	Complete event	▼
at WS:		▼
Delay:	<input type="text"/>	ms
Id:	<input type="text"/>	

Figure 368: Command - Complete event

▼ Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)⁹⁴⁶.

8.11.15 Connect Audio

With this command, audio input can be connected to audio output. This function may be used, for instance, to play announcements automatically.



The action is only functional in case of corresponding interfaces resp. datapoints!

Command: Connect audio

Function

Command:

at WS:

Delay: ms Id:

Audio-In: ↑ +
↓ ×

Audio-Out: ...

Parameter: ...

Figure 369: Command - Connect audio

Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#) ⁹⁴⁶.

Audio-In:

Display field for the selected audio inputs. If this field remains empty while in the dialog **Audio Parameter** the field **Id** is filled with the identical value, such as an already active **Connect audio** command, the announcement is ended.



(Change position)

If the display field contains several inputs, the highlighted entry can be moved up or down in the list.

... - determine the desired position if applicable.



(Add datapoint)

Opens the **Selection** dialog which lists all established datapoints of the type **Audio-In**. These can be applied to the display field.

... - add the desired datapoints.



(Remove datapoint)

Deletes the audio input highlighted in the display field.

... - delete the undesired datapoints if applicable.

Audio-Out:

Display field in which the selected audio output datapoint is displayed.



(Datapoint selection)

This function opens the **Selection** dialog that lists all datapoints of the type **Audio-Out**. Additionally, you can apply the value **<Selection>**. This allows you to access selected outputs. Selection is carried out, for example, via the command **Select datapoint** or by clicking on a graphic object with that of the animation **selection**.

... - define the datapoint for output.



(Parameter)

Display field in which the selected parameters are shown.



Parameter:...

This function opens the **Audio Parameter** dialog.

... - define the necessary parameters if applicable.

▼ **Dialog: Audio Parameter**

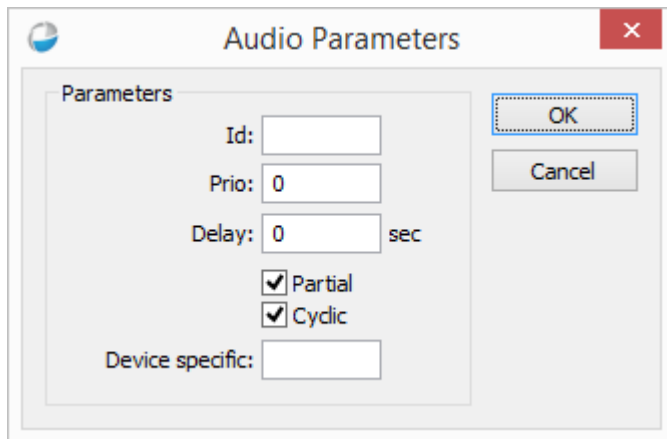


Figure 370: Dialog - Audio Parameters

▼ **Data section: Parameters**



Id:

Here you can define an Id for the command. This Id is then displayed in the audio control panel in the **Name** column. If the **Audio-In** field is empty and an Id identical to an already active **Connect audio** command is present here, the announcement is ended.

... - define the Id if applicable.



Prio:

Here you can define the priority of the announcement. This way an announcement with a higher priority has precedence over an already running announcement.


... - define the priority if applicable.

Only functional if supported by the interface!

Delay: ... sec

With this definition, you can send a time delay to the installation to postpone the start of the announcement accordingly.

... - define the time delay if applicable.


 *Only functional if supported by the interface!*

Partial

Here you can determine that an announcement should not be discarded if another announcement with the same priority is already active, but connected to available outputs.

Active (default) - connection to available outputs if applicable.

Inactive - the connection may be discarded.


 *Only functional if supported by the interface!*

Cyclic

The interface receives the command to play the announcement in a continuous loop.

Active (default) - the announcement is replayed (loop).


Inactive - the announcement occurs once.

 *Only functional if supported by the interface!*

System-specific:

Here you can define additional specific parameters for the commands to the interface. For example, with ELAs of the type Praesideo you can determine the number of repetitions of an announcement.

... - define the necessary parameters if applicable.

 *Only functional if supported by the interface!*

8.11.16 Control Datapoint

Depending on the interface and datapoint category, various control commands may be available for datapoints. This function allows you to generate such commands and send them to linked installations.



The action is only functional in case of corresponding interfaces resp. datapoints!



These commands are executed regardless of user rights!

▼ Command: Control datapoint

Function

Command:

at WS:

Delay: ms Id:

Datapoint:

Command:

Param 1: Param 2:

Figure 371: Command - Control datapoint

▼ Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)⁹⁴⁶.

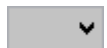


Datapoint:

Here you can select a controllable datapoint or datapoint group from all defined datapoints in the system.

Blank (default) - no function.

... - select the desired (controllable) datapoints.



Command:

Here you can select one of the available commands for this datapoint (depending on interface and datapoint category).

Blank (default) - no function.

... - select the desired command.



Param 1 + 2:

These two parameters are optional and may be used to further specify the command.

Blank (default) - no function.

... - enter the necessary parameters if applicable.

Examples for parameters:

- Analogous starting points, for example at the modbus or OPC client interfaces, may have the control commands **set** or **offset**. Via Param 1 you can define the value of the starting point or the difference by which the value is changed.
- If a camera should be activated on a monitor, the respective monitor number is defined in Param 1.
- Many video systems support the activation of archived images. In this case, the **activation** command as Param 2 can contain the value **E -<number of seconds>**. Here, the letter E (= event) refers to the event time the command relates to and a (negative) number determines a difference in time (in seconds) for the starting point of the archived image.



You can find additional information about the parameters that are supported in the documentation of the respective interface!

▼ Key Words

For the definition of **Param2** the following placeholders are available on an event basis:

- **<WGT:Filename.wgt>**
The value of Param2 will be replaced by the text content of the file.
- e.g. for camera control

8.11.17 Control Datapoint - Camera

In addition to the section [Control datapoint](#)^[970], the special parameters for control of camera datapoints are described here.



Consider the help of the appropriated interface to check the supported parameter!

Parameter 1:

Upon command **Control datapoint** of a camera datapoint, **Parameter 1** receives the number of the monitor (address of monitor datapoint) on which the camera shall be displayed. In case of a digital video interface, this relates to a WinGuard monitor number. In case of an analog video interface, the number relates to the address of a monitor datapoint of the same interface with an empty node. As an alternative, in both cases, a complete address can be entered in the format **<SST>-<NODE>-<ADDRESS>** for which the contents in angle brackets have to be replaced by numbers (Example: **3-0-22**).

Parameter 2:



If no parameters are indicated, the monitor mode will remain unchanged!



If more parameters are defined the parameters must be delimited by a blank!

Example: E-10 /autoplay=1 /loop=1

- **(Blank)**
The camera is set to the current time and the current mode (archive or live) of the monitor.
- **Numeric (+-n)**
The camera is switched into archive mode. The time is set to the current time plus the indicated number (in seconds) and playback is set to pause.
- **Starts with E or e**
The camera is switched into archive mode. The time is set to the time of event triggering and playback is set to pause.
If there is a number (optionally with sign) in front of the **E** or **e**, the entered number (in seconds) will be added to or deducted from the time of event triggering and used as start time for playback.
Example: E-10 or E10 sets the camera to the time 10 seconds before start of event. E+10 sets it to 10 seconds after.
- **/live=<0/1>**
With this option it is possible to switch the camera into live mode.
/live= - or **/live=1** - the camera is switched into live mode.
/live=0 - the command will be ignored.
- **/archive=<0/1>**
With this option, the camera can be switched into archive mode.
/archive= - or **/live=1** - the camera is switched into archive mode.
/archive=0 - the command will be ignored

- **/autoplay=<0/1>**

With this option, an automatic playback of camera archive image stream can be started.

/autoplay= - or **/autoplay=1** - the camera stream is started as of the defined time.

/autoplay=0 - playback of the archive stream will not be started automatically.



If this option has been defined, the camera will be switched automatically to archive mode!

- **/loop=<0/1>**

With this option, a repeated, automatic playback of camera archive streams can be started.

/loop= - or **/loop=1** - the archive stream will be replayed again upon reaching the defined end time.

/loop=0 - there will be no automatic repetition of the archive stream.



If this option has been defined, the camera will be switched automatically to archive mode!

- **/marker=<timespec>,<timespec>**

With this option, a time period can be defined. The two time points will be set as checkmark on the timescale for playback.

/marker=Time1,Time2 - the checkmarks are set to the corresponding time points.

Example: **/marker=E-10,E+20** - the checkmarks are set to a time period of 10 seconds before up to 20 seconds after the time of event.



If this option has been defined, the loop setting will be automatically activated!

- **/time=<timespec>**

With this option, a time for playback can be set.

/time=Time - the start checkmark will be set to the corresponding time point.



If this option has been defined, the camera will be switched automatically to archive mode!

- **/deviceparams=<..>**

With this option, a text can be sent to the interface upon display.

/deviceparams=... - define the text to be transferred.

Formats for time indications <timespec>:

- **[+-]?[0-9]+ (full number, if required with signs)**

The current time plus/minus the given number (in seconds) will be used.

Example: **-60** corresponds to the current time of the command minus 60 seconds.

- **[eE][+-]?[0-9]+ (E or e and full number, if required with signs)**

The event time plus/minus the given number (in seconds) will be used.

Example: **E-60** corresponds to the event time 60 seconds.



If no sign is entered, a - (Minus) will be used!

- **[eE] (Only E or e)**
The current event time will be used.



The event time upon use of E or e is only available for commands in the event context - otherwise the current time will be used!

8.11.18 Control Display Device

With this command, you can assign a text for output in the display of an end device via respective datapoints, provided that the interface and the datapoint category support this functionality. You can find additional information on this topic in the respective interface descriptions.



The action is only functional in case of corresponding interfaces resp. datapoints!

Command: Control display device

Function

Command:

at WS:

Delay: ms Id:

Display:

Text:

Options:

Figure 372: Command - Control display device

Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)⁹⁴⁶.

Display:

Here you define the datapoint that is associated with the display.

Blank (default) - no function.

... - select the respective datapoint.

Text:

Here you can define the text for the display. You can either enter the text to be displayed directly, or enter the name of a WGT text module whose content then is used for display.

Blank (default) - the display text remains empty.

... - enter the desired text or enter the name of a text module.

Options:

Depending on the interface, here you may be able to add other parameters such as number of rows for the text, etc.

Blank (default) - no function.

... - enter the desired/required parameters if applicable.

▼ Key Words

For text definition, the following placeholders are available on an event basis:

- **<ORTSTEXT>, <LOCATIONTEXT>**
Will be replaced event-related by the text resp. the text module that has been assigned to the corresponding location.
- **<TEXT>, <T>**
Will be replaced event-related by the text defined for the datapoint.
- **<TEXTMAKRO#>, <TEXTMACRO#>, <TM#>**
Will be replaced event-related by the content/file content of the corresponding text macro.

8.11.19 Control Timer

With this command the control timer definitions for event handling can be activated. Typically this action is executed via the **Event Routing**, **Event Accept** or **Event Complete** scripts. Additionally the function can be executed via the datapoint action.



The availability of the function depends on the license module **Scheduler!**



This function is only function with event context. So the parameter **at WS:** and **Delay:** must never be used!



To use this function, the setting **Use timer** (Settings - Global - [Other](#)⁵¹⁷) in section **Timer** must be activated!

Command: Control time

Function

Command: Control timer

at WS:

Delay: ms Id:

Operation: Start Stop

Timer: Timer 1

Name:

Duration: (hh:) mm:ss

Hint: (hh:) mm:ss (remaining)

Warning: (hh:) mm:ss (remaining)

Start time: Current Time Event Time

Figure 373: Action - Control timer

Section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)⁹⁴⁶.



Operation:

The operation is selected via the radio button. For **Stop**, only the following timer can be indicated, the other characteristics are only available upon **Start**.

Start (default) - the timer is started.

Stop - the timer ends.



Timer:

The available timer definitions can be selected here. For **Stop**, it is also possible to enter a free text. If a blank text is entered, all timers will be stopped.

Blank (default) - all timers are stopped.

... - if required, select a timer or indicate one directly.



The following characteristics are only available for the operation **Start!**

Name

It is possible to define an optional/changed name for the time instance.

Blank (default) - the name from the timer definition is used.

... - if required, enter a name for the timer.

Duration: ... (hh):mm:ss

It is possible to define an optional/changed duration of the time instance here.

Blank (default) - the duration from the timer definition is used.

... - if required, indicate a deviating duration for the timer in **(hhh:)mm:ss**.

Hint: ... (hh):mm:ss (remaining)

An optional/changed time period for the note can be defined here.

Blank (default) - the time period from the timer definition is used.

... - if required, indicate a deviating time period for the timer in **(hhh:)mm:ss**.

Warning: ... (hh):mm:ss (remaining)

An optional/changed time period for the warning can be defined here.

Blank (default) - the time period from the timer definition is used.

... - if required, indicate a deviating time period for the timer in **(hhh:)mm:ss**.

**Start time:**

It is possible to define the start time for the instance here. The duration and the time periods for note and warning relate to the start time selected here.

Current time (default) - the current time is used.

Event time - the time of event reception is used.

8.11.20 Create Bookmark

Using this command, bookmarks can be created. The parameters to be defined here correspond to those of the dialog [Create bookmark](#)³⁰³. However, in addition, a time indication is required here.



The action is only functional in case of corresponding interfaces resp. datapoints!



If you are creating clips automatically, a large amount of data can be produced in the media database. The functionality of the system can be affected!

Command: Create bookmark

The screenshot shows the 'Text Properties' dialog box with the 'Command' tab selected. The 'Function' section is expanded, displaying the following settings: 'Command' is set to 'Create bookmark'; 'at WS' is a dropdown menu; 'Delay' is a text input followed by 'ms'; 'Id' is a text input; 'Camera' is a dropdown menu with a blue selection bar; 'Time' has radio buttons for 'Current time' and 'Event time', with 'Event time' selected; 'Offset' and 'Duration' are text inputs followed by '(min:sec)'; 'Info' is a text input with up/down arrows; 'Options' includes a checked checkbox for 'Link to event' and an unchecked checkbox for 'Store sequence as clip'. At the bottom, there are 'Apply' and 'Help' buttons.

Figure 374: Command - Create bookmark

Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)⁹⁴⁶.



Camera

The camera datapoint is selected here. In context of an event the option **Assigned cameras** can be used. In this case the cameras which are assigned to the event datapoint (tab **Assignments**) are used.

Blank (default) - select the camera.

Time

The start time of the bookmark is defined here. It can be selected between the current time and event time. However, the event time is only available within the scope of an event.



- Current time

active - the current time will be used.



- Event time

active (default) - the event time will be used.

Offset

It is possible to define an offset for the time in the format (+/-mm:ss). The start time of the bookmark is calculated from the selected time and the negative or positive offset that is indicated here. If no sign is indicated (+ or -), this will be considered as (+).

... - if required, indicate an offset.

Duration (min:sec)

If a duration is indicated in the format (mm:ss), a bookmark with a corresponding creation time is created. This definition is required if you want to create Clips.

... - if required, indicate the duration.

Info

It is possible to enter an info text for the bookmark here. Max. 255 characters.

Blank (default) - if required, indicate the desired information.

Options



- Linked to event

This option defines whether the bookmark will be linked to an event. If this option is activated, the current event will be set in case the command will be executed in the context of an event. Otherwise the settings will not have any impact.

inactive - the bookmark is **not** linked to any event.

active (default) - the bookmark will be linked to the current event.



- Store sequence as clip

This option defines whether, directly after creation of the bookmark, also the related camera stream sequence will be saved as clip. This option can only be selected if a duration has been indicated.

inactive (default) - the clip will **not** be saved as sequence.

active - the clip will be saved as sequence.



This function is not supported by all interfaces!



If you are using this option, a large amount of data can be produced in the media database. The functionality of the system can be affected!

8.11.21 Create Incident

With this function a new incident can be created. This is only possible, however, if a respective interface to the incident control system is available. Otherwise, the command is ineffective.



The action is only functional in case of corresponding interfaces resp. datapoints!



The action is only functional in case of corresponding interfaces resp. datapoints!

▼ Command: Create incident

Function

Command:

at WS:

Delay: ms Id:

Show panel

Figure 375: Command - Create incident

▼ Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)⁹⁴⁶.



Show panel

With this option, you can determine if the panel of the respective interface should be displayed when creating the incident.

Active (default) - the panel is displayed at the executing workstation.

Inactive - the panel is not displayed.

8.11.22 Create Report

Reports are texts that are available in WinGuard text format (.WGT) and saved in the **Texts\Reports** folder. Generally, reports contain excerpts from logs or archives. A [report](#)³³⁰ can be displayed, printed, or saved accordingly in a window.



This command is executed only on the workstation, if its not assigned to an other workstation.



This command is not functional in service mode!



This command is not functional without an user login!

Command: Create report

Function

Command:

at WS:

Delay: ms Id:

Report:

Show Save Print

Printer:

Figure 376: Command - Create report

Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)⁹⁴⁶.

Report:

Here you can select the report from the reports already defined in the system.

Blank (default) - no function.

... - select the desired report.



Show

Active - the report is displayed in the work area of the program interface.

Inactive (default) - no function.



Save

Active - the report is saved as a text in .WGT format in the project subfolder **log**. Files are named in the following format:

<Report form name>_<Date>_<Time>.wgt.

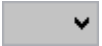
Inactive (default) - no function.



Print

Active - the report is printed on the selected printer, provided that printer is available at the respective workstation.

Inactive (default) - no function.



Printer:

Selection of one of the printers set up in the operating system.

8.11.23 CSV Export

With this command, log or archive data can be saved in external files. Parameters / filters can be entered directly or taken from user-defined export templates.



This command is executed only on the workstation, if its not assigned to an other workstation.

▼ Command: CSV Export

The screenshot shows a configuration window titled 'Function'. It contains the following fields:

- Command:** A dropdown menu with 'CSV Export' selected.
- at WS:** A dropdown menu.
- Delay:** A text input field followed by 'ms'.
- Id:** A text input field.
- Export:** A list box containing 'Datapoints' with a blue selection highlight. To the right of the list box is a small button with three dots '...'. Below the list box is a larger empty rectangular area.

Figure 377: Command - CSV Export

▼ Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)^[946].



Export:

Here the selected data type, with defined filter parameters if applicable, is shown. Selection is done using the dialog **CSV Export**, which can be accessed via the added button. You can find a description of the dialog and available parameters in the section [Database Functions](#)^[341] under [CSV Export](#)^[371].



(CSV Export Parameter)

Via this function you can access the **CSV Export** dialog.

8.11.24 CSV Import

With this command, some of the database definitions can be imported from external files. Parameters / filters can be entered directly or taken from user-defined import templates.



This command is executed only on the workstation, if its not assigned to an other workstation.

▼ Command: CSV Import

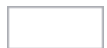
The screenshot shows a 'Function' dialog box with the following fields:

- Command:** A dropdown menu with 'CSV Import' selected.
- at WS:** A dropdown menu.
- Delay:** A text input field followed by 'ms'.
- Id:** A text input field.
- Import:** A list box containing 'Datapoints' with a blue selection highlight. To the right of the list box is a small grey button with three dots.

Figure 378: Command - CSV Import

▼ Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)^[946].



Import:

Here the selected data type, with defined filter parameters if applicable, is shown. Selection is done using the dialog **CSV Import**, which can be accessed via the added button. You can find a description of the dialog and available parameters in the section [Database Functions](#)^[341] under [CSV Import](#)^[386].



(CSV Import Parameter)

Via this function you can access the **CSV Import** dialog.

8.11.25 Don't Save Event

With this command, event handling occurs in such a way that upon completion of an event, the event is not saved in the archive but discarded. No additional definition parameters are available for this command.



This command is only functional for event messages upon event reception and should thus, if possible, be integrated into the event distribution! For this reason, the execution on another client is not functional!

▼ Command: Don't save event

Function

Command:	<input type="text" value="Don't save event"/>	▼
at WS:	<input type="text"/>	▼
Delay:	<input type="text"/>	ms
Id:	<input type="text"/>	

Figure 379: Command - Don't save event

▼ Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)⁹⁴⁶.

8.11.26 Execute Menu Command

With this function, you can execute any menu command with the exception of commands that are used within opened graphic or text editors.



This command is executed only on the workstation, if its not assigned to an other workstation.



This command is not functional in service mode!

▼ Command: Execute menu command

Function

Command:

at WS:

Delay: ms Id:

Category:

Command:

Figure 380: Command - Execute menu command

▼ Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)^[946].

▼ Category:

Here you can select the command category. The following categories are available in the system: **System**, **Edit**, **View**, **Functions**, **Database**, **Graphic**, **Text**, **Other**, **Window**, **Help**, **VideoManager**, and **User-defined** (please see: [Standard Menu](#)^[151] [Commands](#)^[661]).

Blank (default) - no function.

... - select the category.

▼ Command:

Here you can select the respective command, depending on category.

Blank (default) - no function.

... - select the desired command.

8.11.27 Execute Text

Texts or WinGuard text modules may not only be used for display, but may also contain commands. When you execute a text module, all commands contained therein are executed one after the other. In this manner, several predefined commands can be executed sequentially. The execution can be controlled via respective [IF conditions](#) ¹⁰⁴⁷.



This command is executed only on the workstation, if its not assigned to an other workstation.



"NEVER" execute the same text or texts from a text that forms a cycle without a time delay!

Command: Execute text

Figure 381: Command - Execute text

Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#) ⁹⁴⁶.



Text:

This field contains the path, the text name (.WGT) and the display parameters. The data can either be entered with the help of corresponding dialogs (that are opened with the following buttons) or directly.

Blank (default) - no function.

... - select the text resp. enter the data directly.



If this action is executed within the scope of an event, it is also possible to enter the variables <TEXT> or <TEXTMACRO1...5> instead of the text name, in order to implicitly use the text modules assigned to the datapoint!

Path and file name have to be indicated related to the text subdirectory!



(File selection)

The button opens the dialog **Select text** from which file path and text can be selected.

... - select the text.

**(Text parameters)**

This button opens the dialog **Define text parameters** in which the corresponding settings can be made.

... - if necessary, define the parameters.

▼ Key Words

When defining text the following placeholders are available on an event basis:

- **<ORTSTEXT>, <LOCATIONTEXT>**
Will be replaced event-related by the text resp. the text module that has been assigned to the corresponding location.
- **<TEXT>, <T>**
Will be replaced event-related by the text defined for the datapoint.
- **<TEXTMAKRO#>, <TEXTMACRO#>, <TM#>**
Will be replaced event-related by the content/file content of the corresponding text macro.

8.11.28 Generate Event

With this command, any event can be generated for any datapoint in the system. This allows you to internally generate events that are then subject to regular event processing and handling. You can use this function only if the license module Operator alarm is included in your system.



The availability of the function depends on the license module **Operator alarm!**.



This function is not executed during event generation (event reception) - in this case you have to define a delay!

Command: Generate event

Function

Command:

at WS:

Delay: ms Id:

Datapoint:

Location:

Event:

State:

Prio:

Show locally Event Routing

Figure 382: Command - Generate event

Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)⁹⁴⁶.



Datapoint:

The datapoint for which the corresponding event message shall be triggered has to be selected here.

Blank (default) - no function.

... - select the desired datapoint.



Location:

A location for event display can be selected here.

Blank (default) - the location of the datapoint (if defined) will be used.

... - select the desired location for the event message.



Event message:

The status type of the event message is defined via this selection. All status types available in the system such as e.g. alarm, fault, etc. can be selected.

Blank (default) - an event message of the status type **Alarm** will be generated.

... - if necessary, select the desired status type.

Status:

A status text for the event message can be defined here. This text will be displayed in the event list in the column Status.

Blank (default) - the status type will also be used as status text. If no status text has been selected, the status text **Bed-Alarm** will be displayed in case of user alarms and **Sim-Alarm** in case of status text simulations.

... - if necessary, define a status text.

Prio:

The priority for the event message has to be defined here.

Blank (default) - the priority of the event message is **0**.

Blank (default) - indicate the desired priority (1 - 999).

(Display option)

By selection of one of the following display options, the event message can be displayed only locally or globally, depending on the event distribution.

**Display locally**

inactive - the local client number will be assigned to the event message so that it can be displayed locally on the client.

**Event distribution**

active (default) - the client number will be assigned to the event message via the event distribution.

▼ Keywords

For the definition of **State** the following placeholders are available based on the event:

- **<STATETEXT>**

Will be replaced event-related by the status text of the datapoint.

8.11.29 Hide Event

With this action, an event is faded out, i.e. the event will not be displayed and it might be that it is only visible in the event list. The status **hidden** will be set for the event in the event list by a corresponding overlay symbol.

Depending on this state, the event can then be processed differently (different filters apply for display, the workflow can be defined differently, etc.). Hidden events are mostly also completed automatically in case they are terminated. However, this can be configured via the settings.

i The action does not require any additional definition parameters!

▼ Action: Hide event

Function

Command: Hide event

at WS:

Delay: ms

Id:

Figure 383: Action - Hide event

▼ Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)⁹⁴⁶.

8.11.30 Ignore Event

With this command you can ignore an incoming event. This means that it is not displayed, there is no notification, and the event is not saved in the archive. Subsequent event-based commands, by the datapoint for instance, are also not executed. The command itself does not provide any further definition parameters. The end time of the event is immediately entered in the system in the format "-----".



This command is only functional for event messages upon event reception and should thus, if possible, be integrated into the event distribution! For this reason, the execution on another client is not functional!

▼ Command: Ignore Event

Function

Command:	Ignore event	▼
at WS:		▼
Delay:	<input type="text"/>	ms
Id:	<input type="text"/>	



Figure 384: Command - Ignore event


▼ Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)⁹⁴⁶.

8.11.31 Login User

With this command, a user can be logged in to a workstation. In this case, manual entry of the password is not required and the user is directly logged in with his/her standard user profile (please see: [Login](#)¹⁴⁸).

  This command is executed only on the workstation, if its not assigned to an other workstation.

 This command is not functional in service mode!

Command: Login user

Function

Command:

at WS:

Delay: ms Id:

Login:


Password:

Figure 385: Command - Login user

Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)⁹⁴⁶.

Login:
Here you enter the user ID or login name.
Blank (default) - enter the user ID or login name.

 The user must already be defined in the system!

Password:
Here you must enter the password for login. Please note that this entry must also be changed if you make a change to the password!
Blank (default) - enter the password.

 The password may also remain empty (in cases where none was defined)!

8.11.32 Modify Event

Using this action, the priority, the state and state text of events can be adapted or changed.

▼ Action: Modify event

Function

Command:

at WS:

Delay: ms Id:

Priority:

State:

Figure 386: Action - Modify event

▼ Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)⁹⁴⁶.

Priority:

The priority of the event can be changed here. The value can be between 0 and 999.

Blank (default) - the priority is not changed.

... - if required, indicate a priority or select it (0...999).

State:

The state of the event can be changed here.

All event types can be selected: **Alarm, Fault, ...**

Blank (default) - the status is not changed.

... - if required, select the desired type.

(State text)

The state text of the event can be changed here.

Blank (default) - the state text is not changed.

... - if required, enter the desired state text.

8.11.33 Notify Workstation

Similar to the command [Choose workstation](#)⁹⁶⁵, here you can define an additional workstation on which an event should be automatically displayed and sound an acoustic signal. Other items such as whether the events are also shown in the local event list, feature an acoustic signal, or if the event display also contains graphics and texts depends on other settings that have been made in the section [Event Routing](#)¹⁰⁷² or in the system settings (for example, event filter, etc.).



This command is only functional for event messages upon event reception and should thus, if possible, be integrated into the event distribution! For this reason, the execution on another client is not functional!

▼ Command: Notify workstation

Function

Command: ▼

at WS: ▼

Delay: ms Id:

Workstation: ▼

Figure 387: Command - Notify workstation

▼ Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)⁹⁴⁶.

▼ Workstation:



Here you can select an additional workstation that should be notified. All workstations defined in the system are available for selection.



<No workstation> (default) - no function.

... - select the workstation that should be notified.

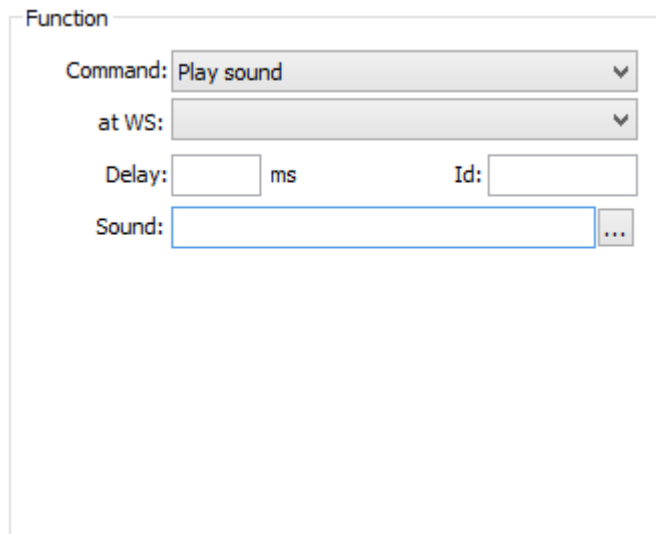
8.11.34 Play Sound

Using this function a sound file (.WAV) can be played via the sound interface. Additionally, you can also play text modules (.WGT) using Text2Speech modules (for example z.B. Windows Lanugage Edition) via the sound interface.

  *This command is not functional in service mode!*

  *The corresponding interface has to be installed and its assignment under [Modules](#)⁵¹⁴ in the system settings has to be already completed!*

▼ Command: Play sound



The screenshot shows a configuration window titled 'Function'. It contains the following fields:

- Command:** A dropdown menu with 'Play sound' selected.
- at WS:** A dropdown menu.
- Delay:** A text input field followed by 'ms'.
- Id:** A text input field.
- Sound:** A text input field with a file selection button (three dots) to its right.

Figure 388: Command - Play sound

▼ Data section: Function


The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)⁹⁴⁶.

Sound:

Here you can define the path and name of the sound or text file. The name of the file can be selected via a dialog, or you can enter it directly. Sound files are in (.WAV) format and are located in the sound folder. Text files are in (.WGT) format and found in the text folder.

Blank (default) - no function.

... - select the sound or text file, or enter it directly.

 *Path and file name must be entered relative to the sound subfolder (without leading backward slash (\))!*



(File selection)

This button opens the dialog **Select Sound** in which the path and file can be selected. The file type (.WAV) is pre-defined as default. By entering *.* , other files (for example, .WGT) may also be selected.

... - select the sound or text file if applicable.

▼ Key Words

For the definition of **sounds** the following placeholders are available on an event basis (Text modules are converted to sound by text2speech):

- **<ORTSTEXT>, <LOCATIONTEXT>**
Will be replaced event-related by the text resp. the text module that has been assigned to the corresponding location.
- **<TEXT>, <T>**
Will be replaced event-related by the text defined for the datapoint.
- **<TEXTMAKRO#>, <TEXTMACRO#>, <TM#>**
Will be replaced event-related by the content/file content of the corresponding text macro.

8.11.35 Print Documents

This function allows you to print several files in one print job. The names, including the path of the text or graphic file (WGT/WGD) can be directly entered, separated by a comma. Here, too, it is possible to use the placeholders (<TEXT>, <GRAPHIC#> or <TEXTMACRO#>) for printing events. Every graphic and/or text is scaled to fit one page.



This command is executed only on the workstation, if its not assigned to an other workstation.



The printer has to be available on the corresponding client!

An event context will not be respected upon execution on another client!

▼ Command: Print documents

Function

Command:

at WS:

Delay: ms Id:

Documents:

Printer:

Figure 389: Command - Print documents

▼ Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)⁹⁴⁶.

Documents:

Here you can enter the documents to be printed separated by a comma. Instead of explicit file names, you may also use placeholders such as <TEXT>, <GRAPHIC1...5>, <TEXTMACRO1...5> or <SYSLOG>. In this case the respective graphics or texts of the datapoint, in whose event context the command is executed, or the system log are used.

Blank (default) - no function.

... - enter the desired documents.



Path and file name should be entered relative to the applicable subfolder!

Printer:

The desired printer is selected from the list of available printers.

Blank (default) - no function.

... - select the desired printer resp. the printer profile.



Please note that the printer of the operating systems might only be available locally - better use the printer profiles!

Key Words

For the definition of **documents** the following placeholders are available on an event basis:

- **<GRAFIK#>, <GRAPHIC#>**
Will be replaced event-related by the graphic entries defined for the datapoint (1-5; Name incl. parameters).
- **<ORTSTEXT>, <LOCATIONTEXT>**
Will be replaced event-related by the text resp. the text module that has been assigned to the corresponding location.
- **<REPORT>**
Will be replaced event-related by a currently generated report (PDF).
- **<TEXT>, <T>**
Will be replaced event-related by the text defined for the datapoint.
- **<TEXTMAKRO#>, <TEXTMACRO#>, <TM#>**
Will be replaced event-related by the content/file content of the corresponding text macro.

8.11.36 Print Graphic

With this function, a graphic file can be printed on the selected printer.



This command is executed only on the workstation, if its not assigned to an other workstation.



The printer has to be available on the corresponding client!

An event context will not be respected upon execution on another client!

▼ Command: Print graphic

Function

Command: Print graphic

at WS:

Delay: ms Id:

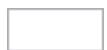
Graphic: [File selection button]

Printer:

Figure 390: Command - Print graphic

▼ Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)⁹⁴⁶.



(Graphic name)

This field contains the file path, the graphic name and the display parameters. The data can be entered with the help of corresponding dialogs (that can be opened with the following buttons) or alternatively also directly.

Blank (default) - no function.

... - select the graphic and parameters or enter the data directly.



If this action is executed within the scope of an event, the variables <GRAPHIC1...5> can be indicated instead of the graphic names in order to implicitly use the graphics assigned to the datapoint!

Path and file name have to be indicated in relation to the graphic subdirectory!



(File selection)

The button opens the dialog **Select graphic** from which the file path and graphic can be selected.

... - select the graphic.

**(Graphic parameter)**

The button opens the dialog **Parameter for graphic ...** in which the corresponding settings can be made.

... - if necessary, define the parameters.

**Printer:**

The desired printer is selected from the list of available printers.

Blank (default) - no function.

... - select the desired printer resp. the printer profile.



Please note that the printer of the operating sysetms might only be available locally - better use the printer profiles!

Key Words

For definition of **graphic** the following placeholders are available on an event basis:

- **<GRAFIK#>, <GRAPHIC#>**

Will be replaced event-related by the graphic entries defined for the datapoint (1-5; Name incl. parameters).

8.11.37 Print Text

With this function you can print a text module on the selected printer.



This command is executed only on the workstation, if its not assigned to an other workstation.

▼ Command: Print text

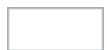
The screenshot shows a 'Function' dialog box with the following fields:

- Command: Print text (dropdown)
- at WS: (dropdown)
- Delay: (input) ms
- Id: (input)
- Text: (input) with a file selection button (three dots) and a copy button (document icon)
- Printer: (dropdown)

Figure 391: Command - Print text

▼ Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)^[946].



Text:

This field contains the path, the text name (.WGT) and the display parameters. The data can either be entered with the help of corresponding dialogs (that are opened with the following buttons) or directly.

Blank (default) - no function.

... - select the text resp. enter the data directly.



If this action is executed within the scope of an event, it is also possible to enter the variables <TEXT> or <TEXTMACRO1...5> instead of the text name, in order to implicitly use the text modules assigned to the datapoint!

Path and file name have to be indicated related to the text subdirectory!



(File selection)

The button opens the dialog **Select text** from which file path and text can be selected.

... - select the text.



(Text parameters)

This button opens the dialog **Define text parameters** in which the corresponding settings can be made.

... - if necessary, define the parameters.

 **Printer:**

The desired printer is selected from the list of available printers.

Blank (default) - no function.

... - select the desired printer resp. the printer profile.



Please note that the printer of the operating systems might only be available locally - better use the printer profiles!

 **Key Words**

For the definition of text the following placeholders are available on an event basis:

- **<ORTSTEXT>, <LOCATIONTEXT>**
Will be replaced event-related by the text resp. the text module that has been assigned to the corresponding location.
- **<TEXT>, <T>**
Will be replaced event-related by the text defined for the datapoint.
- **<TEXTMAKRO#>, <TEXTMACRO#>, <TM#>**
Will be replaced event-related by the content/file content of the corresponding text macro.

8.11.38 Remove Commands

This command allows you to prevent the execution of commands that are time delayed and have an Id. Of course, this is only possible within the time delay. All pending commands with the respective ID are removed from the indicated workstation. If no workstation is indicated, the command is only effective on the workstation on which the command is executed.



This command is executed only on the workstation, if its not assigned to an other workstation.



*The command is only functional with the license module **Operator alarm!***

▼ Command: Remove commands

Function

Command:

at WS:

Delay: ms Id:

Target Id:

Figure 392: Command - Remove commands

▼ Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)⁹⁴⁶.

Target Id:

Here you can define the **Id** whose assigned commands are to be removed from the respective workstation.

Blank (default) - no commands are removed.

***** - all commands on the indicated workstation are removed.

... - enter the desired Id.

8.11.39 Select Datapoints

Here you can select datapoints that you can subsequently control with respective commands. These types of commands are generally available within the framework of audio systems. For example, you can select a datapoint of the type Audio-Out so that you can later control it through the command [Connect audio](#)⁹⁶⁷.



This command is executed only on the workstation, if its not assigned to an other workstation.



This command is not functional in service mode!



This command is not functional without an user login!



This command is only functional for event messages upon event reception and should thus, if possible, be integrated into the event distribution! For this reason, the execution on another client is not functional!

▼ Command: Select datapoints

Function

Command:

at WS:

Delay: ms Id:

Datapoints: +
×

Mode:

Figure 393: Command - Select datapoints

▼ Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)⁹⁴⁶.



Datapoints:

Display field for the selected datapoints. This list can be edited with the two functions to the right of the field.

Blank (default) - no function.



(Add datapoint)

Opens the dialog **Selection** in which all established datapoints are listed and from which they can be applied to the display field.

... - add the desired datapoints.

**(Remove datapoint)**

Deletes the datapoint highlighted in the display field from the list.

... - delete the undesired datapoints if applicable.

**Mode:**

Here you define the mode for the command.

Select (default) - the datapoints contained in the list are selected.

Replace selection - the active selection is deleted and the datapoints contained in the list are selected.

Deselect - a selection of datapoints contained in the list is deleted.

8.11.40 Send Email

This function allows you to send an email via a message interface to a [person](#)⁵²⁶ defined in the WinGuard database. The email may also contain attachments such as graphics or a report (please see: [Event](#)¹⁹⁷ or [Event Report](#)²¹²) that are automatically generated for send-out.



The corresponding interface has to be installed and its assignment under [Modules](#)⁵¹⁴ in the system settings has to be already completed!

▼ Command: Send email

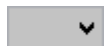
Function

Command:	<input type="text" value="Send email"/>	▼
at WS:	<input type="text"/>	▼
Delay:	<input type="text"/>	ms
Id:	<input type="text"/>	
Person:	<input type="text"/>	▼
Field:	<input type="text"/>	▼
Message:	<input type="text"/>	

Figure 394: Command - send email

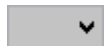
▼ Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)⁹⁴⁶.



Person:

Here you select the person (recipient) from the WinGuard persons database.
Blank (default) - no function.
... - select the respective person (recipient).



Field:

Select the entry **Email** which corresponds to the data field with the email address.
Blank (default) - no function.
Email - select this element.

**Message:**

Here you define the content of the email in the order of: **Subject, Content, Attachment.**

- The **subject** is either a text or the name of a text module (.WGT, .TXT). The text module is evaluated at the time of execution and forms the subject of the email. Alternatively, the variables <TEXT> or <TEXTMACRO1...5> may be used within the context of an event.
- The **content** may also consist of a text or text module (compare with subject).
- For **attachment** you can enter a report or one or more graphics (.WGD), separated by a comma. Alternatively, the variables <TEXT> or <TEXTMACRO1...5> may be used within the context of an event.

The description of possible parameters followed below.

Blank (default) - no function.

... - enter subject, text, and the attachments separated by a comma, if applicable.

Example: This is a test, <TEXT>, <REPORT>, <GRAPHIC1>



*All files and paths must be entered in relative to the respective folder (Texts or Graphics)!
Text modules or graphics are evaluated at the time of execution!*

▼ Key Words

For the definition of **message** the following placeholders are available on an event basis:

- **<GRAFIK#>, <GRAPHIC#>**
Will be replaced event-related by the graphic entries defined for the datapoint (1-5; Name incl. parameters).
- **<ORTSTEXT>, <LOCATIONTEXT>**
Will be replaced event-related by the text resp. the text module that has been assigned to the corresponding location.
- **<REPORT>**
Will be replaced event-related by a currently generated report (PDF).
- **<TEXT>, <T>**
Will be replaced event-related by the text defined for the datapoint.
- **<TEXTMAKRO#>, <TEXTMACRO#>, <TM#>**
Will be replaced event-related by the content/file content of the corresponding text macro.

▼ Parameter

When using the interface **ADPSMS**, it is now possible to enter an additional parameter in the field (Message / Document) in the format **/lng=<XX>**. As a standard, the entered graphics or texts will be resolved and displayed in the current WinGuard language. Using this parameter, the language can be adapted now.

<XX> might be:

- A language abbreviation, e.g. **en, de**, etc.

- A person reference with optional default parameter **person.lng[,<default>]**.
In this case, the language will be taken over from the data set of the person (if available), otherwise the <default> parameter (if available) or the current WinGuard-language will be used.
- A person reference with several parameters **person.lng,<default>,<allow>[,...]**.
The language will be taken from the person and will be accepted provided that it is one of the languages that are listed after the first comma. In case no language has been defined for the person or in case the language is not one of those indicated, the first language after the first comma will be taken.

8.11.41 Send Fax

This function allows you to send a fax via a message interface to a [person](#)⁵²⁶ defined in the WinGuard database.



The corresponding interface has to be installed and its assignment under [Modules](#)⁵¹⁴ in the system settings has to be already completed!

▼ Command: Send fax

Function

Command: ▼

at WS: ▼

Delay: ms Id:

Person: ▼

Field: ▼

Document: ...

Landscape

Figure 395: Command - Send fax

▼ Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)⁹⁴⁶.

▼ Person:

Here you select the person (recipient) from the WinGuard persons database.

Blank (default) - no function.

... - select the respective person (recipient).

▼ Field:

Here you select the entry **Fax** which corresponds to the data field with the fax number.

Blank (default) - no function.

Fax - select this entry.

**Document:**

Here you define the content of the fax. The content is either a text, the name of a text module (.WGT, .TXT), or the name of a graphic file (.WGD).

Alternatively, you can also use the variables <TEXT> or <TEXTMAKRO1...5> within the context of an event.

The description of possible parameters followed below.

Blank (default) - no function.

... - select a file or enter it directly, if applicable.



*All files and paths must be entered relative to the respective folder (Texts or Graphics)!
Text modules and/or graphics are evaluated at the time of execution!*

**(File selection)**

This function opens the dialog **Select Document** which allows you to select the path and file that is to form the content of the fax.

... - select a file.

**Landscape**

With this option, the orientation for the transmission of the document is defined.

Active - the fax is generated and transmitted in landscape orientation.

Inactive (default) - the fax is generated and transmitted in portrait orientation.

Key Words

For the definition of **Document** the following placeholders are available on an event basis:

- **<GRAFIK#>, <GRAPHIC#>**
Will be replaced event-related by the graphic entries defined for the datapoint (1-5; Name incl. parameters).
- **<ORTSTEXT>, <LOCATIONTEXT>**
Will be replaced event-related by the text resp. the text module that has been assigned to the corresponding location.
- **<TEXT>, <T>**
Will be replaced event-related by the text defined for the datapoint.
- **<TEXTMAKRO#>, <TEXTMACRO#>, <TM#>**
Will be replaced event-related by the content/file content of the corresponding text macro.

Parameter

When using the interface **ADPSMS**, it is now possible to enter an additional parameter in the field (Message / Document) in the format **/Ing=<XX>**. As a standard, the entered graphics or texts will be resolved and displayed in the current WinGuard language. Using this parameter, the language can be adapted now.

<XX> might be:

- A language abbreviation, e.g. **en, de**, etc.

- A person reference with optional default parameter **person.lng[,<default>]**.
In this case, the language will be taken over from the data set of the person (if available), otherwise the <default> parameter (if available) or the current WinGuard-language will be used.
- A person reference with several parameters **person.lng,<default>,<allow>[,...]**.
The language will be taken from the person and will be accepted provided that it is one of the languages that are listed after the first comma. In case no language has been defined for the person or in case the language is not one of those indicated, the first language after the first comma will be taken.

8.11.42 Send SMS

This function allows you to send a SMS via a SMS interface to a [person](#)⁵²⁶ defined in the WinGuard database.



The corresponding interface has to be installed and its assignment under [Modules](#)⁵¹⁴ in the system settings has to be already completed!

▼ Command: Send SMS

Function

Command:

at WS:

Delay: ms Id:

Person:

Field:

Message:

Delay: sec Priority:

Figure 396: Command - Send SMS

▼ Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)⁹⁴⁶.

▼ Person:

Here you select the person (recipient) from the WinGuard persons database.

Blank (default) - no function.

... - select the respective person.

▼ Field:

Here you select the entry that contains the data field with the telephone number for the SMS.

Blank (default) - no function.

... - select the respective element.

Message:

Here you define the content of the SMS. The content may either be a text or the name of a text module (.WGT, .TXT).

The description of possible parameters followed below.

Blank (default) - no function.

... - enter the name of a text module or enter the message directly.



All files and paths must be entered relative to the text folder!

Delay: ... sec

Here you can define a delay in seconds. This delay is transmitted to the interface and the SMS is only sent after the time delay has elapsed. If other messages are pending send-out, their order is determined by their respective priorities. For identical priorities, the message is attached at the end.

Blank (default) - the message is sent directly.

... - the message is sent only after the indicated time has elapsed.

Priority:

Here you can determine a priority. This ranking is used in forming the pending order in the interface.

Blank (default) - if the command is within the context of an event, the priority of the event is applied. Otherwise, the priority is 0.

... - enter the priority (0 - 999), if applicable.

▼ Key Words

For the definition **Message** the following placeholders are available on an event basis:

- **<ORTSTEXT>, <LOCATIONTEXT>**
Will be replaced event-related by the text resp. the text module that has been assigned to the corresponding location.
- **<TEXT>, <T>**
Will be replaced event-related by the text defined for the datapoint.
- **<TEXTMAKRO#>, <TEXTMACRO#>, <TM#>**
Will be replaced event-related by the content/file content of the corresponding text macro.

▼ Parameter

When using the interface **ADPSMS**, it is now possible to enter an additional parameter in the field (Message / Document) in the format **/Ing=<XX>**. As a standard, the entered graphics or texts will be resolved and displayed in the current WinGuard language. Using this parameter, the language can be adapted now.

<XX> might be:

- A language abbreviation, e.g. **en, de**, etc.
- A person reference with optional default parameter **person.Ing[,<default>]**.
In this case, the language will be taken over from the data set of the person (if available), otherwise the **<default>** parameter (if available) or the current WinGuard-language will be used.
- A person reference with several parameters **person.Ing,<default>,<allow>[,...]**.
The language will be taken from the person and will be accepted provided that it is one of the languages that are listed after the first comma. In case no language has been defined for the person or in case the language is not one of those indicated, the first language after the first comma will be taken.

▼ Example: SMS text module

The example below shows the definition of a text module (.WGT) for the dynamic generation of a SMS message. The name of the file must be entered relative to the text folder and is entered in the Message field instead of text.

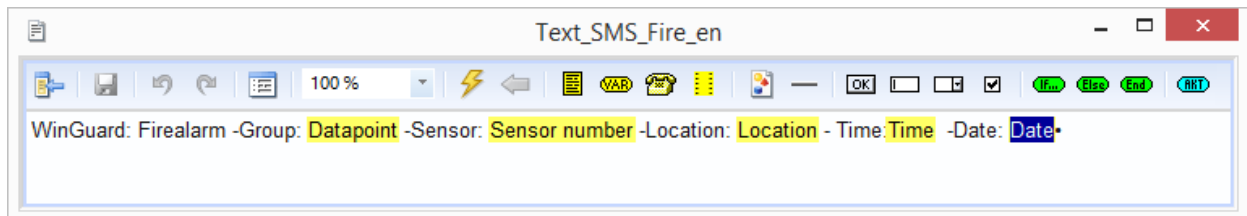


Figure 397: Example SMS Text Module

8.11.43 Send to Pager

Using this function, a message can be sent via an appropriate interface to the pager of a [person](#)⁵²⁶ defined in the WinGuard database.



The corresponding interface has to be installed and its assignment under [Modules](#)⁵¹⁴ in the system settings has to be already completed!

▼ Command: Send to pager

Function

Command:

at WS:

Delay: ms Id:

Person:

Field:

Message:

Options:

Figure 398: Command - Send to pager

▼ Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)⁹⁴⁶.

▼ Person:

Here you select the person (recipient) from the WinGuard persons database.

Blank (default) - no function.

... - select the respective person.

▼ Field:

Here you select the entry that corresponds to the data field with the page number for the message.

Blank (default) - no function.

... - select the respective element.

**Message:**

Here you define the content of the page message. The content is either a text, or the name of a text module (.WGT, .TXT).

Alternatively, you can also use the variables <TEXT> or <TEXTMAKRO1...5> within the context of an event.

The description of possible parameters followed below.

Blank (default) - no function.

... - enter the name of a text module or enter the message directly.



*All files and paths must be entered relative to the text folder!
Text modules are evaluated at the time of execution!*

**Option**

Here you can define the parameters of the ESPA protocol <BEEP CODING>, <CALL TYPE>, <NUMBER OF TRANSMISSION> and <PRIORITY> can be optionally entered here, separated by a comma.

Blank (default) - no function.

... - enter the necessary parameters if applicable.

▼ Key Words

For the definition of **Message** the following placeholders are available on an event basis:

- **<ORTSTEXT>, <LOCATIONTEXT>**
Will be replaced event-related by the text resp. the text module that has been assigned to the corresponding location.
- **<TEXT>, <T>**
Will be replaced event-related by the text defined for the datapoint.
- **<TEXTMAKRO#>, <TEXTMACRO#>, <TM#>**
Will be replaced event-related by the content/file content of the corresponding text macro.

▼ Parameter

When using the interface **ADPSMS**, it is now possible to enter an additional parameter in the field (Message / Document) in the format **/Ing=<XX>**. As a standard, the entered graphics or texts will be resolved and displayed in the current WinGuard language. Using this parameter, the language can be adapted now.

<XX> might be:

- A language abbreviation, e.g. **en, de**, etc.
- A person reference with optional default parameter **person.Ing[,<default>]**.
In this case, the language will be taken over from the data set of the person (if available), otherwise the <default> parameter (if available) or the current WinGuard-language will be used.

- A person reference with several parameters **person.lng,<default>,<allow>[,...]**.
The language will be taken from the person and will be accepted provided that it is one of the languages that are listed after the first comma. In case no language has been defined for the person or in case the language is not one of those indicated, the first language after the first comma will be taken.

8.11.44 Send Voice Message

This function allows you to send voice messages. A message may be entered as a sound file in WAV format, as a text module, or directly as text. An additional, external module (Text2Speech) converts and subsequently sends out the text messages.

The command is deemed completed/ended when the first reachable person in the call sequence has listened to the message in its entirety. If the confirmation option has been selected, a respective key code must be entered following the end of the message. The phone that is contacted must support Dual-tone multifrequency (DTMF). If not, the next person in the call sequence is contacted. If none of the defined persons were reached or the required criteria was not met, this process is repeated until the maximum number of attempts has been attained (please see: Message Interface).



The corresponding message interface has to be installed and its assignment under [Modules](#)⁵¹⁴ in the system settings has to be already completed!



Additionally, a Text2Speech Software must be available!

▼ Command: Send voice message

Function

Command: Send voice message

at WS:

Delay: ms Id:

Call sequence:

Message:

Delay: sec Confirmation required

Figure 399: Command -Send voice message

▼ Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)⁹⁴⁶.



Call sequence:

Display field for the selected call sequence.



(Change position)

If several entries are shown in the display field, the highlighted entry can be moved up or down in the list.

... - determine the desired positions, if applicable.

(Add call destination)

This function opens the dialog **Define Call Destination** in which you can select a person from the WinGuard persons database and a data field with the corresponding telephone number.

... - add the desired call destinations.

(Remove datapoint)

Deletes the highlighted entry in the display field from the list.


... - delete undesired call destinations if applicable.

Message:

Here you define the content of the voice message. The message may be entered as a sound file in WAV format, as a text module, or directly as text.

Blank (default) - no function.

... - enter the name of the file, or the message directly.

 *All files/paths must be entered relative to the text or sound folder!*

Delay: ... sec

Here you can define a time delay in seconds. This delay is transmitted to the interface and the voice message is sent out after the indicated time has elapsed. If there are other messages pending send-out, the message is attached at the end.

Blank (default) - the message is sent directly.

... - the message is sent out only after the time indicated here has elapsed.



Confirmation required

This option determines if after receipt of a message, a confirmation via key code is required. If no confirmation is entered, the next person in the call sequence is called, if applicable.

Active - the command is completed only after the confirmation code of the participant who was called has been registered.

Inactive (default) - the command is completed as soon as the call is received and the message has been played in its entirety.

Key Words

For the definition of **Message** the following placeholders are available on an event basis:

- **<ORTSTEXT>, <LOCATIONTEXT>**
Will be replaced event-related by the text resp. the text module that has been assigned to the corresponding location.
- **<TEXT>, <T>**
Will be replaced event-related by the text defined for the datapoint.
- **<TEXTMAKRO#>, <TEXTMACRO#>, <TM#>**
Will be replaced event-related by the content/file content of the corresponding text macro.



Many of the settings for this command are determined via the dialog for the set-up of the message interface. These include the number of call repetitions, the time span, how often an unsuccessful call is repeated, and whether or not the command is canceled by ending or confirming the initiating event!

8.11.45 Server

Using a system with Hot Standby Servers, it is possible to additionally create a datapoint for each of the three possible servers. These datapoints can then be used for display of the operation mode of the corresponding server. The datapoint of the active server will be placed into the status **Active** and the two other servers will be set to **Silence**. In addition, a corresponding event message is triggered.

With the help of the datapoint command **Activate**, a switch or activation of the corresponding server (Hot Standby switch) can be realized. If the number of the server to be activated will be transferred as parameter 1, the address of the datapoint will be ignored and the parameter will be used for activation. The additional datapoints have to be defined as follows.

Link:

- **Category:**
... - select a suitable datapoint category.
- **Name:**
... - define the name of the datapoint.
- **Interface:**
Internal - select the internal element.
- **Datatype:**
Server - select Server as datatype.
- **Node:**
Blank - this element is left blank.
- **Address:**
... - enter a unique number for this server (1...3).
- **Address 2:**
Blank - this element is left blank.

8.11.46 Set Input

This command allows you to assign or remove values to/from context variables. However, this is only possible with text modules.



This command is executed only on the workstation, if its not assigned to an other workstation.



This command is only functional for event messages upon event reception and should thus, if possible, be integrated into the event distribution! For this reason, the execution on another client is not functional!



This command is not functional in service mode!



This command is not functional without an user login!



Dynamic workflows are typical application scenarios.

▼ Command: Set input

Function

Command:

at WS:

Delay: ms Id:

Context:

Item:

Remove other items in context

Figure 400: Command - Set input

▼ Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)⁹⁴⁶.



Context:

Here you can select or define a list/context to which the subsequently defined item/value should be assigned.

Blank (default) - no function.

... - select a list or enter the context directly, if applicable.

Item:

Here you define the item (value/text) for the context via a respective selection (depending on the selected list) or a manual entry.

Blank (default) - the value is deleted or emptied.

... - select an item or enter the text/value directly.

**Remove other items in context**

This option determines if other items in the context should be deleted at execution.

Active (default) - other context items are deleted.

Inactive - no function.

▼ Key Words

For the definition of **Item** the following placeholders are available on an event basis. The definition is made in the Settings under [Settings](#) ⁴⁰⁴ | [Global](#) ⁴²² | [System](#) ⁴²⁴ Formats.

- **<DATE>**
Is, depending on the application, replaced by the current or event date in the normal date format (see settings: e.g. DD.MM.YYYY).
- **<DATESHORT>**
Is, depending on the application, replaced by the current resp. event date in the short date format (see settings: e.g. DD.MM.YY).
- **<DATEVERBOSE>**
Is, depending on the application, replaced by the current resp. event date in the extended data format (see settings: e.g. DDD.DD.MMM.YYYY).
- **<TIME>**
Will be replaced depending on the application by the current resp. event time in the normal time format (see settings: e.g. HH:mm:ss).
- **<TIMESHORT>**
Will be replaced depending on the application by the current resp. event time in the short time format (see settings: e.g. HH:mm).

8.11.47 Set Symbol Filter

This function allows you to determine the visibility of linked objects in the display of graphics on a respective workstation. Depending on the datapoint category of the linked datapoint, objects can be rendered visible or invisible in the graphics. However, these settings only apply to graphic display in state view, not in event view. Only the data categories indicated in the filter list are affected. All others remain unchanged. With a new login or via the Home function, these settings are reverted (please see: [Menu item Graphic](#)^[759] - [submenu Symbols](#)^[772]).



This command is executed only on the workstation, if its not assigned to an other workstation.



This command is not functional in service mode!



This command is not functional without an user login!

▼ Command: Set symbol filter

Figure 401: Command - Set symbol filter

▼ Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)^[946].

Filter:

List with the selected symbol filters including datapoint category and function.



(Symbol filter change)

This button opens the dialog, **Symbol filter change** in which you can determine the selection of datapoint categories and their options with respect to visibility.

... - select the symbol filters if applicable.

▼ Dialog: Symbol filter change

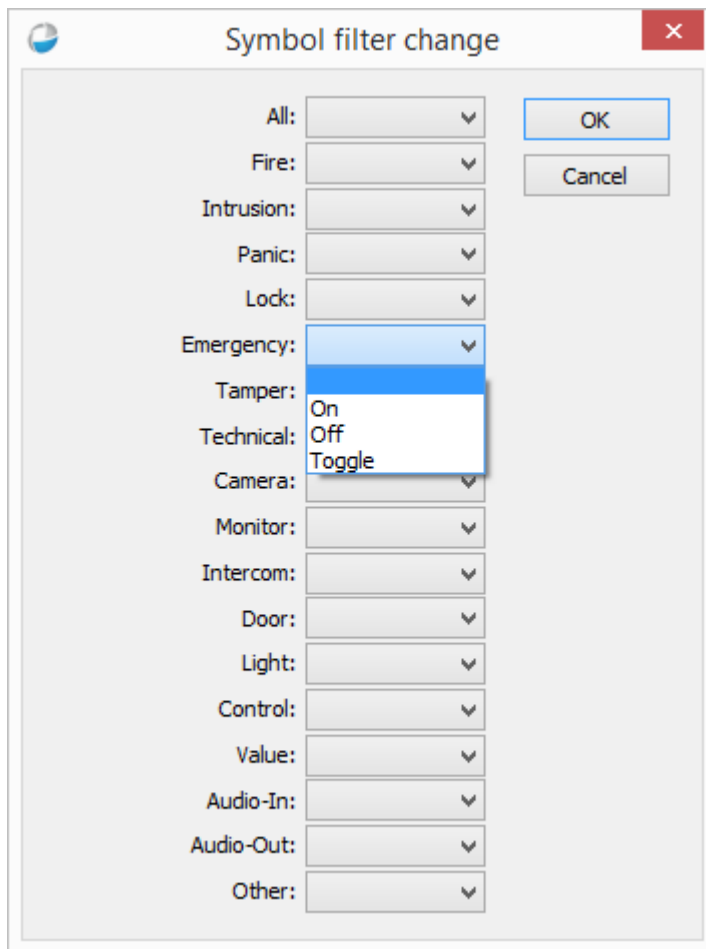


Figure 402: Dialog - Symbol filter change

▼ Data section: Symbol filter

Here you can define the visibility of linked objects in graphics display for the individual data types.

▼ All:

Here you select the visibility for all datapoint categories. Upon selection, all the elements below are defined accordingly.

Blank (default) - the current setting remains unchanged for all.

On - visibility is set on "On" for all.

Off - the visibility is set on "Off" for all.

Toggle - visibility is set on "Toggle" for all. This means that at execution, all currently visible objects are rendered invisible, and all invisible objects are rendered visible.

Fire ... Other:

Here you select the visibility for the individual datapoint categories

Blank (default) - the current setting remains unchanged.

On - the visibility is set on "On".

Off - the visibility is set on "Off".

Toggle - the visibility is set on "Toggle". This means that at execution, all currently visible objects are rendered invisible, and all invisible objects are rendered visible.



The selection for All is set on blank, if applicable!

8.11.48 Show Control Panel

With this command the control panel of an interface can be displayed or closed, provided that the interface in has an available control panel.



This command is executed only on the workstation, if its not assigned to an other workstation.



This command is not functional in service mode!



This command is not functional without an user login!

▼ Command: Show control panel

Function

Command:

at WS:

Delay: ms Id:

Interface:

Mode: Toggle Open Close

Context:

Figure 403: Command - Show control panel

▼ Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)⁹⁴⁶.



Interface:

Here you define the interface to which the command should apply. All interfaces defined in the system are available for selection, regardless of whether or not they feature a specific control panel.

Alternatively, you can select the interface via the menu command **System | Interfaces...** and open the respective control panel (provided that it exists).

... - select the interface.

Mode: (Command)

The mode for the control panel display can be defined via the three following options.



Toggle

Active (default) - If the control panel is opened, it is closed; if it is closed, it is opened.



Open

Active - the control panel is opened.

Close

Active - the control panel is closed.

 Context:

Here you can select a datapoint of the respective interface. However, this is required/functional only if several systems are supported by the interface and are controlled via the control panel, respectively.

... - select an appropriate datapoint if applicable.

8.11.49 Show Display

With this function you can control the display of the program windows. This command allows you to open or close the additional windows Display 2 ... 4. Where the individual windows are opened is defined in the system settings.



This command is executed only on the workstation, if its not assigned to an other workstation.



This command is not functional in service mode!



This command is not functional without an user login!



*This command is functional only if the workstation has a **multi-monitor** license!*

Command: Show display

Function

Command:

at WS:

Delay: ms Id:

Window:

Mode: Toggle Open Close

Figure 404: Command - Show display

Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)⁹⁴⁶.



Window:

Here you select the display/window that should be shown.

Blank (default) - no function.

Display 2 - the 2nd program window is shown/closed.

Display 3 - the 3rd program window is shown/closed.

Display 4 - the 4th program window is shown/closed.

Mode: (Command)

The mode for the display of the respective program window can be defined via the three following options.

- **Toggle**
Active0 (default) - if the window is opened, it is closed; if it is closed, it is opened.
- **Open**
Active - the program window is opened.
- **Close**
Active - the program window is closed.

8.11.50 Show Text

This command allows you to display a text module similarly to a pop up. The window size conforms to the text that is displayed. Upon pressing a key on the keyboard or mouse, it is closed again in an area outside the window. You can use this command to display certain additional information that is not to be shown in the graphic or text itself.



This command is executed only on the workstation, if its not assigned to an other workstation.



This command is not functional in service mode!



This command is not functional without an user login!

▼ Command: Show text

Function

Command: Show text

at WS:

Delay: ms Id:

Text:

Figure 405: Command - Show text

▼ Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)⁹⁴⁶.

Text:

This field contains the path, the text name (.WGT) and the display parameters. The data can either be entered with the help of corresponding dialogs (that are opened with the following buttons) or directly.

Blank (default) - no function.

... - select the text resp. enter the data directly.



If this action is executed within the scope of an event, it is also possible to enter the variables <TEXT> or <TEXTMACRO1...5> instead of the text name, in order to implicitly use the text modules assigned to the datapoint!

Path and file name have to be indicated related to the text subdirectory!

**(File selection)**

The button opens the dialog **Select text** from which file path and text can be selected.

... - select the text.

**(Text parameters)**

This button opens the dialog **Define text parameters** in which the corresponding settings can be made.

... - if necessary, define the parameters.

▼ Keywords

For the definition of Text the following placeholders are available on an event basis:

- **<ORTSTEXT>, <LOCATIONTEXT>**
Will be replaced event-related by the text resp. the text module that has been assigned to the corresponding location.
- **<TEXT>, <T>**
Will be replaced event-related by the text defined for the datapoint.
- **<TEXTMAKRO#>, <TEXTMACRO#>, <TM#>**
Will be replaced event-related by the content/file content of the corresponding text macro.

8.11.51 Show VideoManager

With this action, the VideoManager windows (1...4) can be opened or closed selectively.



This command is executed only on the workstation, if its not assigned to an other workstation.



This command is not functional in service mode!



This command is not functional without an user login!



*This command is functional only if the workstation has a **VideoManager** license!*

▼ Action: Show VideoManager

Function

Log entry:

Command: ▼

at WS: ▼

Delay: ms Id:

Window: ▼

Mode: Toggle Open Close

Figure 406: Action - Show VideoManager

▼ Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#) ⁹⁴⁶.



Window:

The corresponding window (1...4) of the VideoManager can be selected here. The following selection is available: **VideoManager 1, ..., VideoManager 4**
 ... - select the required window.



Mode

Here it is defined whether the window will be activated, deactivated or switched depending on the current mode.

Toggle (default) - Switch (if it is opened it will be closed or vice versa)

Open - the window is opened.

Close - the window is closed.

8.11.52 Simulate Event

With this command you can simulate any event for any datapoint. This allows you to internally trigger events that are then subject to regular event processing. The end time of the event is immediately entered as "-----" in the system.

The command is very similar to the command [Generate event](#)⁹⁹⁰. However, the created event is marked as a simulation, the priority is set at -1, and the state text is pre-defined with **Sim-Alarm**.



For event simulation the event routing script is executed on the workstation where the event is created.



This function is not executed during event generation (event reception) - in this case you have to define a delay!

Command: Simulate event

Function

Command:

at WS:

Delay: ms Id:

Datapoint:

Location:

Event:

State:

Prio:

Show locally Event Routing

Figure 407: Command - Simulate event

Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)⁹⁴⁶.



Datapoint:

The datapoint for which the corresponding event message shall be triggered has to be selected here.

Blank (default) - no function.

... - select the desired datapoint.



Location:

A location for event display can be selected here.

Blank (default) - the location of the datapoint (if defined) will be used.

... - select the desired location for the event message.

Event message:

The status type of the event message is defined via this selection. All status types available in the system such as e.g. alarm, fault, etc. can be selected.

Blank (default) - an event message of the status type **Alarm** will be generated.

... - if necessary, select the desired status type.

 Status:

A status text for the event message can be defined here. This text will be displayed in the event list in the column Status.

Blank (default) - the status type will also be used as status text. If no status text has been selected, the status text **Bed-Alarm** will be displayed in case of user alarms and **Sim-Alarm** in case of status text simulations.

... - if necessary, define a status text.

 Prio:

The priority for the event message has to be defined here.

Blank (default) - the priority of the event message is **0**.

Blank (default) - indicate the desired priority (1 - 999).

(Display option)

By selection of one of the following display options, the event message can be displayed only locally or globally, depending on the event distribution.

 Display locally

inactive - the local client number will be assigned to the event message so that it can be displayed locally on the client.

 Event distribution

active (default) - the client number will be assigned to the event message via the event distribution.

Keywords

For the definition of **State** the following placeholders are available based on the event:

- **<STATETEXT>**

Will be replaced event-related by the status text of the datapoint.

8.11.53 Start Application

Using this action, an application of the file format **.EXE** can be started. The path can also direct to the network, a drive mapping is not required. It is also possible to transfer command line parameters for the application.

Instead of the application itself, the name of a file with registered file extension has to be entered so that the corresponding application is started. In this way, it is possible to e.g. easily display a PDF file via the registered viewer.



This command is executed only on the workstation, if its not assigned to an other workstation.



Usage of some keywords is supported for definition of the application resp. of the parameters!

▼ Command: Start application

Function

Command: ▼

at WS: ▼

Delay: ms Id:

Application: ...

Parameters:

Execute in: ...

Figure 408: Command - Start application

▼ Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)⁹⁴⁶.



Application:

Name and path of the application to be started is defined here.

Blank (default) - no function.

... - select the application or indicate it directly.



(Select application):

This function opens the dialog **Select application**.

... - select the desired application.

**Parameters:**

Parameters for selection of the application can be defined.

Blank (default) - no function.

... - if necessary, indicate the desired parameters.

**Execute in:**

A directory for execution of the program can be defined.

Blank (default) - no function.

... - if necessary, select a directory or indicate it directly.

**(Select folder)**

This function opens the dialog **Select folder**.

... - if necessary, select the desired folder.

▼ Keywords

The following placeholders are available for definition of the **Application** and **Execute in**:

- **.**
Will be replaced by the WinGuard program directory.
- **<DATA>**
Will be replaced by the WinGuard project directory.

For definition of **Parameter**, the following event-related placeholders are available:

- **<DATAPOINT>**
Will be replaced event-related by the name of the datapoint.
- **<SENSOR>**
Will be replaced event-related by the number of the detector.
- **<ORTSTEXT>, <LOCATIONTEXT>**
Will be replaced event-related by the text resp. the text module that has been assigned to the corresponding location.
- **<TEXT>, <T>**
Will be replaced event-related by the text defined for the datapoint.
- **<TEXTMAKRO#>, <TEXTMACRO#>, <TM#>**
Will be replaced event-related by the content/file content of the corresponding text macro.



Single parameters should be entered in "... " to avoid that e.g. a parameter containing a space character will be treated as two single parameters!

8.11.54 Switch Graphic

With this function you can switch/exchange the content of a graphic. While retaining its given event context, the graphic can be loaded with the display parameters defined here.



This command is executed only on the workstation, if its not assigned to an other workstation.



This command is not functional in service mode!



This command is not functional without an user login!



A pane is a field within the user interface (comparable to an embedded window) that can be addressed via an Id and can display contents (please see: [Panels](#)⁶³³)!

▼ Command: Switch graphic

Function

Command: ▼

at WS: ▼

Delay: ms Id:

Pane Id: ▼

Graphic: ...

Figure 409: Command - Switch graphic

▼ Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)⁹⁴⁶.



▼ Pane Id:

The **Id** of the target pane (area) on the content of which this function relates is indicated resp. selected here.

Blank (default) - the command relates to the pane (e.g. graphic or text) from which the function has been selected. In case the function is selected out of a pane or a graphic, it will have no function.

... - if required, select a pane Id or enter it directly so that the command can directly be executed for the corresponding pane (area).



If no pane Id is indicated, the command will only be functional in case it is selected via a button within a graphic or a text!

**(Graphic name)**

This field contains the file path, the graphic name and the display parameters. The data can be entered with the help of corresponding dialogs (that can be opened with the following buttons) or alternatively also directly.

Blank (default) - no function.

... - select the graphic and parameter or enter the data directly.



Path and file name have to be entered in relation to the graphic subdirectory!

**(File selection)**

The button opens the dialog **Select graphic** from which the file path and graphic can be selected.

... - select the graphic.

**(Graphic parameter)**

The button opens the dialog **Parameter for graphic ...** in which the corresponding settings can be made.

... - if necessary, define the parameters.

▼ Keywords

For the definition of **Graphic** the following placeholders are available on an event basis:

- **<GRAFIK#>, <GRAPHIC#>**

Will be replaced event-related by the graphic entries defined for the datapoint (1-5; Name incl. parameters).

8.11.55 Switch Pane

With this command, you can assign content to display areas/panes. This means that content displayed on the user interface can be exchanged or new content can be shown on a tab, etc. This command fundamentally presents the same options as described in the section [Layouts](#)^[604] under [Content](#)^[619].



This command is executed only on the workstation, if its not assigned to an other workstation.



This command is not functional in service mode!



This command is not functional without an user login!



Depending on the selected content, additional definition fields may be shown!

▼ Command: Switch panes

Function

Command: ▼

at WS: ▼

Delay: ms Id:

Target pane: ▼ ...

Content: ▼ ...

Figure 410: Command - Switch pane

▼ Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)^[946].



Target pane:

Here you can select a target pane from the already defined panes or enter one directly.

Blank (default) - no function.

... - select a pane or enter it directly with parameters, if applicable.



(Define target pane options)

This button opens the dialog, **Target pane**, which allows you to define additional options such as section, sub section, etc.

... - select the desired options if applicable.

 **Content:**

This selection defines the type of content for the section.

Blank (default) - no content has been defined - the section remains empty.

Layout - a(nother) layout can be selected.

Application window - a WinGuard window can be selected.

Gadget - a gadget (e.g. a clock) can be selected.

Graphic - a graphic can be assigned.

Text - a text module (.WGT) can be assigned

System protocol - the system protocol is assigned.

Video - this section is used for video display.

History - one or several history diagrams can be defined.

Attachments - this section serves to include event attachments.

Documents - this section serves for document display.


Website - this section serves for display of websites.

 **(Define content options)**

This button opens the dialog, **Content options**, which allows you to define additional options such as title, icon, size, etc.

... - select the desired options if applicable.

(...)

 Further information regarding the individual contents can be found in the section [Layouts](#)^[604] under [Content](#)^[619]!

8.11.56 Switch Text

This function replaces the content in the indicated pane with the text provided here.



This command is executed only on the workstation, if its not assigned to an other workstation.



This command is not functional in service mode!



This command is not functional without an user login!

▼ Command: Switch text

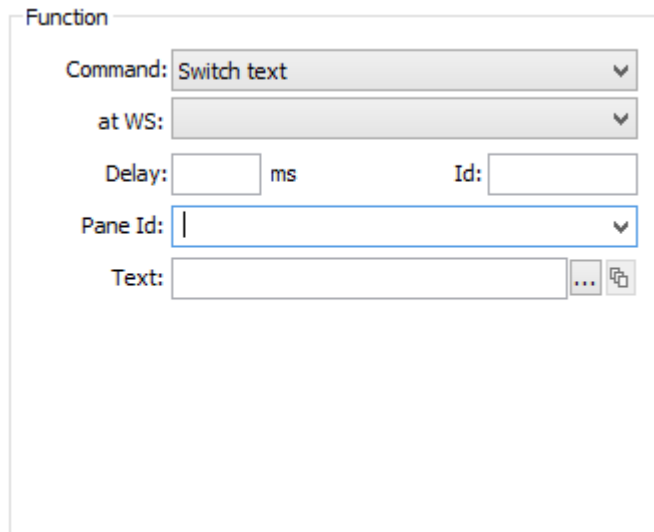


Figure 411: Command - Switch text

▼ Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)⁹⁴⁶.



▼ Pane Id:

The **Id** of the target pane (area) on the content of which this function relates is indicated resp. selected here.

Blank (default) - the command relates to the pane (e.g. graphic or text) from which the function has been selected. In case the function is selected out of a pane or a graphic, it will have no function.

... - if required, select a pane Id or enter it directly so that the command can directly be executed for the corresponding pane (area).



If no pane Id is indicated, the command will only be functional in case it is selected via a button within a graphic or a text!

**Text:**

This field contains the path, the text name (.WGT) and the display parameters. The data can either be entered with the help of corresponding dialogs (that are opened with the following buttons) or directly.

Blank (default) - no function.

... - select the text resp. enter the data directly.



If this action is executed within the scope of an event, it is also possible to enter the variables <TEXT> or <TEXTMACRO1...5> instead of the text name, in order to implicitly use the text modules assigned to the datapoint!

Path and file name have to be indicated related to the text subdirectory!

**(File selection)**

The button opens the dialog **Select text** from which file path and text can be selected.

... - select the text.

**(Text parameters)**

This button opens the dialog **Define text parameters** in which the corresponding settings can be made.

... - if necessary, define the parameters.

▼ Keywords

For the definition of Text the following placeholders are available on an event basis:

- **<ORTSTEXT>, <LOCATIONTEXT>**
Will be replaced event-related by the text resp. the text module that has been assigned to the corresponding location.
- **<TEXT>, <T>**
Will be replaced event-related by the text defined for the datapoint.
- **<TEXTMAKRO#>, <TEXTMACRO#>, <TM#>**
Will be replaced event-related by the content/file content of the corresponding text macro.

8.11.57 Switch Video Split

With this function you can switch a video split in an indicated pane, provided that the pane contains a corresponding video element. This is how you determine the configuration of the video element in the VideoManager, for example. In this manner, a change can be made at any time either manually or automatically.



This command is executed only on the workstation, if its not assigned to an other workstation.



This command is not functional in service mode!



This command is not functional without an user login!



*This command is functional only if the workstation has a **VideoManager** license!*

Command: Switch video split

Function

Command:

at WS:

Delay: ms Id:

Target pane:

Split:

Figure 412: Command - Switch video split

Data section: Function

The information for definition of the elements **Command**, **at WS**, **Delay** and **Id** can be found in the section [Commands](#)⁹⁴⁶.



Target pane:

Here you can select a target pane from the already defined panes in the system, or enter one directly.

- <Display1..4> - Main pane of one of the four WinGuard-windows
- <VideoDisplay1..4> - VideoManager-window 1 up to 4
- <VideoDisplay11..14> - VideoDisplay1-window 1 up to 4
- ...
- <VideoDisplay41..44> - VideoDisplay4-window 1 up to 4
- ... - user defined panes (layouts, graphics, etc.)

Blank (default) - no function.

... - select the target pane or enter it directly.



Split:


Here you can select one of the video splits available in the system.


... - select a video split.

8.12 IF Conditions

In almost all areas of WinGuard in which you can define [Commands](#)⁹⁴⁶, you can make the execution of the respective command dependent on certain conditions (exception: [Command Tab](#)⁸⁴⁶ in the properties of graphic objects).

To define the conditions, the editors/definition fields provide the respective functions in the form of small, green, buttons with the caption: **IF...**, **ELSE**, and **END**. When you click on the function, the dialog, **Condition element**, appears in which you can define the conditions (please see: [Condition Element Tab](#)⁹¹⁵).

 *Conditions cannot be defined by key entry alone - the dialog window must be used to define conditions!*

 *All **IF** conditions must be completed with an **END**! The system will show an error message if the condition structure is incorrect.*

Syntax (IF / ELSE / END)

All **IF** conditions must be completed with an **END** element, so that **IF** and **END** encompass the command(s). Between the **IF** and **END**, the **ELSE** element can be inserted to determine commands in cases where the conditions are not met.

Multiple conditions can also be reviewed sequentially, and lead to various commands whenever they are met, by inserting the element **ELSE IF** (can be applied multiple times).


The following variations are possible:


IF <Text> **END**

IF <Text> **ELSE** <Text> **END**

IF <Text> **ELSE IF** <Text> **ELSE IF** <Text> ... **ELSE** <Text> **END**

IF <Text> **ELSE IF** <Text> **ELSE IF** ... **ELSE** <Text> **ELSE IF** <Text> ... **END**

 *Using **IF** followed by **ELSE IF** corresponds to a case statement (CASE), meaning that the conditions are reviewed sequentially until a pertinent condition is found. All other conditions to the respective **ELSE** or **END** are not reviewed!*

 *Using **ELSE IF** is different than using the combination of **ELSE** followed by **IF**. For all **ELSE IF** elements, no additional **END** has to be defined!*

Linking Conditions (AND / OR)

Every **IF** or **ELSE IF** element can include several linked conditions. By linking with the logical **AND**, the condition is met when the individual, linked conditions all apply simultaneously.

By linking with the logical **OR**, only one condition has to be met, but several may also be met.

Nesting of conditions

Links for conditions can also be nested. In the dialog window "bracket open" is indicated by "/" and "bracket closed" by "\". Rows in between that are on the same bracket level are indicated by "|".

Setting the brackets occurs automatically upon adding a new, single condition. First, select a single condition, an **AND** or an **OR**, among the already added rows. Selecting an **OR** leads to all single conditions that are enclosed in the same bracket being marked together.

Adding a new, single condition always occurs directly below the marking. When adding, the system reviews automatically whether the new link (AND or OR) is different from the links above and below the marked row(s), and sets a new bracket around the newly-added single condition and the marked row(s) if applicable.

8.12.1 Editing

The **Condition Element** tab in the **Text Properties** dialog provides the elements for defining conditions. If you have selected a type in the upper left selection field of the Condition section, then in the selection field to the right the respective elements for the definition of the condition will be available. Depending on the selected element, you can define which data should be used for comparison in the field below. For this data, you can choose from predefined elements or you can enter it freely. The type of comparison can also be defined via the available comparison operator.

You can find additional information about the individual settings in the sections below.

▼ Dialog: Text Properties (Condition Element Tab)

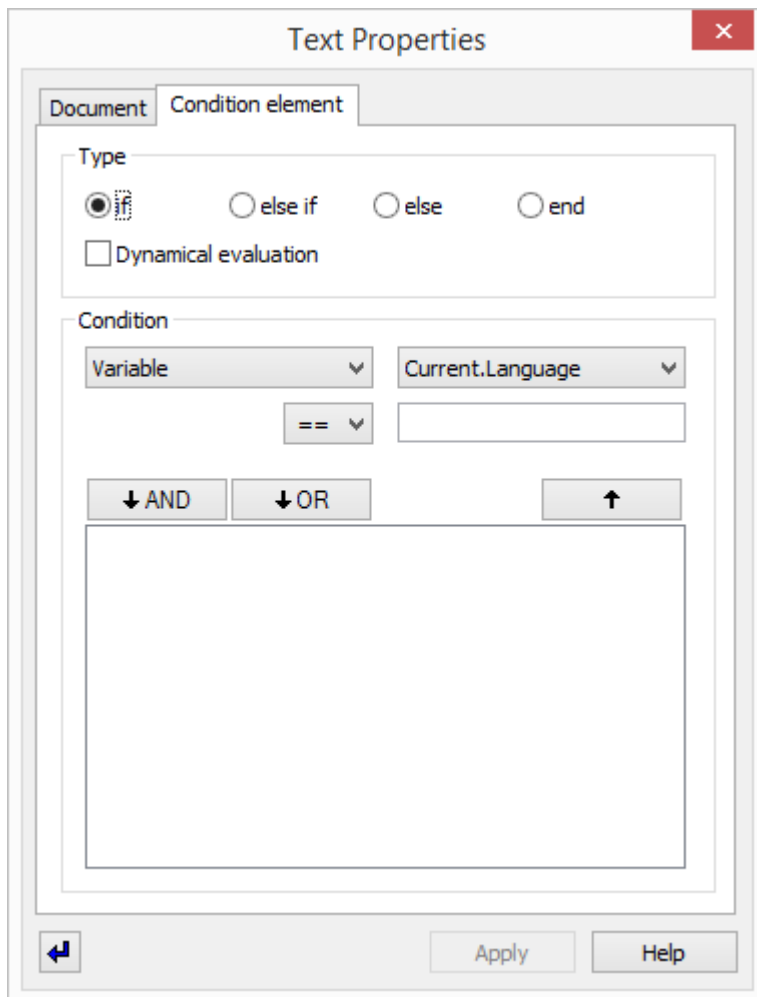


Figure 413: Condition Element Tab

▼ Data section: Type

(Type)


The following four options define the type of condition element. Only the first two options apply to initial conditions. The two latter options always refer to an existing condition.

- if**
Active (default) - this option is a definition (beginning) of a condition that is then defined with the following parameters.
- else if**
Active - with this option the previous condition defined with **if** can be expanded so that multiple cases can be checked sequentially.
- else**
Active - this option defines the beginning of an alternative course of action of a condition.
- end**
Active - this option defines the end of a condition and completes it.
- Dynamical evaluation**

Here you determine if the condition being defined is a dynamical condition, meaning that this condition is checked again after execution of a respective text action (entry, selection, etc.).

Active - the condition is evaluated dynamically.

Inactive (default) - the condition is **not** dynamically evaluated.

 *This option is only functional for context-dependent conditions!*

▼ Data section: Condition

▼ (Group)

Here you determine the group from which the element and its value are defined for the condition.

Variable (default) - the group includes variables such as state type, datapoint, sensor type, location, etc. that can then be compared with the respective event information.

Schedule - this group provides the defined schedules from which a time segment can be selected for comparison.

State type - this group allows the selection of a datapoint whose state can then be compared with the state (value) selected next.

State change - this group allows the selection of states / the comparison of changes in states.

Rule set - this group allows for a selection of a rule set for comparison with the rule sets available in the user profile.

Context - this group allows the review/checking of a context variable.

▼ **(Element)**

This selection defines the element of the group for the comparison. The elements available here depend on the group that was selected previously.

... - select the element here.

▼ **(Comparison Operator)**

Here you define the operator for the comparison of the values.

== (default) - checking for parity, meaning that the condition is met if both conditions are the same.

<> - checking for disparity, meaning that the condition is met when both conditions are **not** the same.

▼ **(Value)**

Here you define the comparison value of the condition.

... - select the respective value for comparison or enter it directly, if applicable.

Button

↓ **AND**

This function transfers the defined condition into the condition list. If other conditions have already been defined there, the last condition and the new one are linked with the logical **AND**.

Button

↓ **OR**

This function transfers the defined condition into the condition list. If other conditions have already been defined there, the last condition and the new one are linked with the logical **OR**.

Button

↑

With this function the selected condition is removed from the condition list and moved into the editing area.

(Condition list)

This list shows the defined conditions and their links. To edit a condition, select it and transfer it to the editing area.

8.12.2 Variable

If the type, *Variable*, is selected for the condition, then the display field to the right shows the corresponding variables and their parameters that are available for the definition of the condition.



Most variables refer to the context of events and can thus only be applied within the framework of events!

▼ Variable

▼ **Current.Workstation**

Comparison between the current workstation and one defined in the system. This means that, here, it is reviewed if the command is to be executed at a specific workstation (WS).

... - select a workstation and, if applicable, the comparison option.



Context-free - can be used anytime!

Current.User.ID

Comparison of the ID of the currently logged in-user with the indicated ID. This means that, here, it is reviewed if a specific user is currently logged in to the WS.

... - enter the ID and, if applicable, select the comparison option.



The actual user in the event routing is always <SYS> and not the normal login user ID!



Context-free - can be used anytime!

Current.User.Login

Comparison of the login name of the currently logged in-user with the login name entered here. This means that, here, it is reviewed if a specific user is currently logged in to the WS.

... - enter the login name and, if applicable, select the comparison option.



Context-free - can be used anytime!

Current.Language

Comparison of the currently-defined language of the logged in-user with the language indicated here. This means that, here, it is reviewed if a user currently uses a specific language.

... - enter the abbreviation of the language (for example, de, en, etc.) and, if applicable, select the comparison option.



Context-free - can be used anytime!

Execution time

Via the comparison of the execution time, datapoint commands (please see: [Commands Tab](#) ⁷³¹) are reviewed to determine at what time or by what incident a command was triggered in order to prevent multiple executions. Incidents are only generated locally and are therefore only available on the respective workstations.

Complete - at completion of an event.

Accept - at acceptance of an event.

Display - at event display.

Display end - at the end of event display.

First display - only at the first display of an event.

Event reception - only at event reception (from the installation).

Event end - only at the end of the event (from the installation).

State change - at a change in state of datapoints (of the installation).

... - additionally, select the comparison option, if applicable.



Do NOT use the condition in event routing!!!



Always use the condition for datapoint commands!



The selection elements, with the exception of state change, are only to be used within the framework of events!



Incidents are only generated locally. This means that their review is only possible on the respective workstations!

Datapoint

Comparison of the name of the triggering datapoint with the name defined here. It can thus be reviewed if the triggering datapoint is a specific one.

... - select a datapoint and, if applicable, the comparison option.

 Datapoint category

Comparison of the category of the triggering datapoint with the one defined here. It can thus be reviewed if the triggering datapoint has a specific category (for example, *fire*, *intrusion*, *attack*, etc.) assigned to it.

... - select a datapoint category and, if applicable, select the comparison option.

 Sensor number

Comparison of the sensor number of the triggering datapoint with the one defined here. It can thus be reviewed if the incident is assigned to a specific sensor.

... - enter the sensor number and, if applicable, select the comparison option.

 Sensor type

Comparison of the type of the triggering datapoint/sensor with the one defined here. It can thus be reviewed if a specific sensor type (for example, motion sensor) is assigned to the triggering datapoint/sensor.

... - enter the datapoint/sensor type and, if applicable, select the comparison option.

i *If for the sensor type the column **Name as** is filled, this value should be applied. Otherwise, the value indicated in the **Name** column should be used.*

 Event display

Via this comparison, it can be reviewed if this event is currently displayed on this workstation or not.

Active - this event is currently displayed at this workstation.

Inactive - this event is **not** currently displayed at this workstation.

 Event.Status

Via this comparison, the current state of the event can be checked.

Selectable are: **Accepted, Completed, Deferred, Ended, Hidden, Locked**

... - select the desired event status.

 Location

Comparison of the location of the triggering datapoint/sensor with the one defined here. It can thus be reviewed if the datapoint/sensor is assigned to a specific location.

The location entry begins with the entry for the first level of the hierarchy. You can optionally add other entries for additional hierarchy levels, separated by comma and space.

... - enter the location / beginning and, if applicable, select the comparison option.

i *The comparison is executed only up to the length of the entered location. For longer location names, if the beginning of the location name corresponds to the one entered, this is also deemed a match!*

 Priority

Comparison of the priority of the event with the one defined here.

... - enter the priority and, if applicable, select the comparison option.

Interface

Comparison of the Id of the triggering interface with the one defined here. It can thus be reviewed by which interface the event / incident was generated.

... - enter the interface Id and, if applicable, select the comparison option.

Tag

Comparison of the tags from datapoints or locations. Multiple tags can be selected. The Name of the selected tags will be displayed separated by commas.

Blank (default) - if required, select the tags.



To select several tags please press the Ctrl-key during the selection. The Return-key finishes the selection!

Text macro

Here you can define a text for comparison to the content of one of the five text macros of the triggering datapoint/sensor.

... - enter the number of the text macro (1..5) and the comparison text, and, if applicable, select the comparison option.



The comparison is for the entire text!

State text

Here you can define a text for comparison with the state text of an event. The state text is shown in the event list in the column **State**, and is generally defined via the INI file of the interface.

... - enter the comparison text and, if applicable, select the comparison option.

State type

Comparison of the state type of the event with the one defined here. It can thus be reviewed if the event is of a specific state type (for example, alarm, fault, etc.).

... - select the state type, and, if applicable, the comparison option.

8.12.3 Schedule

If the type **Schedule** is selected for the condition, then the selection field to the right provides the existing **schedules**⁵⁸⁵ along with defined time sections for the definition of the condition. If the comparison is with a time section in event context, then the incident time (event begin) is used for the comparison. If a text command is executed without event context, then the execution time of the text module is used.

▼ Schedule

(Schedule + time section)

Here it is reviewed if the time (event reception / command start) is in the selected time section of the respective schedule. For this, the schedule and time section must be selected.

... - select the schedule, time section, and, if applicable, the comparison option.



Context-free - can be used anytime!

8.12.4 State Type

If the type, *State Type*, is selected for the condition, then the current states of datapoints / sensors can be reviewed. This review is independent of a context and can thus be used within the framework of events as well as commands.


▼ State Type

▼ (Datapoint + State Type)

Here it is possible to review if the state type of a datapoint corresponds to the state type defined here for comparison. For this, first the datapoint and then the respective state type must be selected.


... - select the datapoint, state type, and, if applicable, the comparison option.

... - select the comparison option if applicable.

 *Context-free - can be used anytime!*

8.12.5 State Change

If the type, *State change*, has been selected for the condition, then commands can be executed exactly when datapoints change into the state defined here, or when they leave a certain state. This variation is particularly advantageous for datapoints that do not initiate an event (for example, no digital or analog outlets), but should execute a command when they experience a change in state.

 **Conditions of the type, state change, are only functional if they are used in the commands of a datapoint and in combination with the IF condition of the type, Variable|Execution time = State change!**

▼ State change

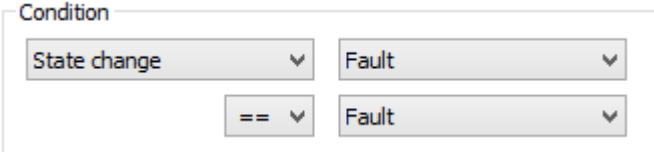
▼ (State types)

Here you can review what kind of change in state type has been defined for the triggering datapoint. For this, the two state types, and, if applicable, the comparison operator must be defined. The definition parameters must be provided for incoming and outgoing state types, respectively (please see example).

... - select the two state types and, if applicable, the comparison option.

▼ Example: State change - incoming

If a command should be initiated as soon as a datapoint changes into a certain state type (here, for example, **fault**), then the same state type has to be defined in the two selection lists (right) and linked with the option == (equal).



Condition

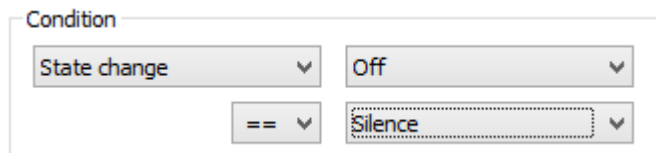
State change Fault

== Fault

Figure 414: State change - incoming

▼ Example: State change - outgoing

If a command should be initiated as soon as a datapoint leaves a certain state type (here, for example, **Off**), then the state type in question must be entered in the upper selection list to the right. Additionally, you can link the state type **Silence** in the lower selection list to the right with the option == (equal). Alternatively, in the second selection list to the right you can also set the same state type (as above), but link it with the option <> (not equal).



The screenshot shows a 'Condition' configuration window with four dropdown menus. The first dropdown is labeled 'State change', the second is 'Off', the third is '==', and the fourth is 'Silence'.

Figure 415: State change - outgoing

8.12.6 Rule Set

If the type, **Rule set**, is selected for the condition, then it is possible to check if the profile of the logged-in user or the profile of the workstation contains the selected rule set. The individual [rights](#)⁵⁶⁴ of the rule set are not important here, meaning that the rule set does not have to contain rules.

▼ Rule set

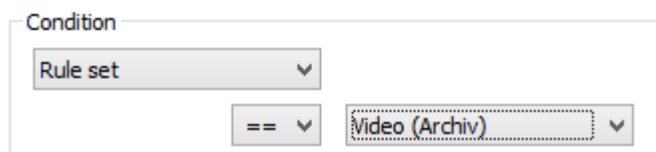
▼ (Rule set)

Here you can check if the selected rule set is contained in the current profile (user + workstation).

... - select the rule set and, if applicable, the comparison option.

i Context-free - can be used anytime!

▼ Example: Rule set



The screenshot shows a 'Condition' configuration window with three dropdown menus. The first dropdown is labeled 'Rule set', the second is '==', and the third is 'Video (Archiv)'.

Figure 416: Rule set

8.12.7 Context

If the type, **Context**, is selected for a condition, then the event text is checked to see if it contains a specific context, or, in other words, if a context variable has a certain value. Setting context variables is also possible during event display and can thus be used in connection with a dynamical evaluation for dynamic [workflows](#)⁸⁹⁵. For the selection of context and value, all lists are available on a standard basis. The name of the list is applied as context, and the selected element as value. Both may also be defined directly.

i Context variables are only functional within the context of events!

Context

▼ (Context + Context Variable)

Here you can define the review of context variables. Define a context and its value for review (please see example).

... - select the context and context variable or enter them directly. If applicable, also select the comparison option.

i *If the condition is to be ended dynamically, then please also activate the option for the **Dynamical evaluation**.*

Example: Context

Type

if else if else end

Dynamical evaluation

Condition

Context .WF_CCTV

==

Real_alarm_yes

Figure 417: Context

8.13 Scheduled Commands

In order to simplify user tasks, certain commands can be defined to be executed automatically once at a certain time, or at regular intervals. Switch operations such as arm/disarm can be pre-programmed, or specific reports can be generated automatically.

You can determine if user confirmation is required prior to execution of any scheduled command. If confirmation is required, users will have the opportunity to execute, delay, or cancel the action via the dialog, [Execution](#)¹⁰⁸². Scheduled commands are thus a universally-useful tool in automating system processes.

After selecting the menu point **Functions|Scheduled Commands . . .** the window **Scheduled commands** is initially opened in [Table view](#)¹⁰⁵⁷. For setting up or editing scheduled commands, you can switch to [Form View](#)¹⁰⁵⁹ from there.

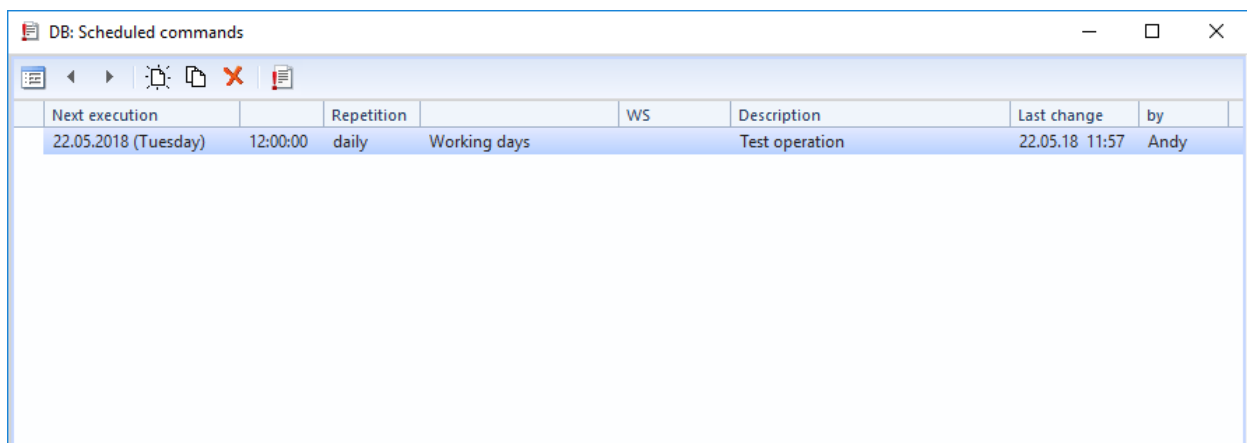


Automatic actions are licensed via the function Scheduler, otherwise they are not available. Automatic actions can then neither be set up nor edited nor executed!

8.13.1 Table View

The table shows all scheduled commands defined in the system. For each record, the table columns contain information regarding the definition and status of the command such as active, next time of execution, repetition, workstation, comment, last change, etc. The first column might contain the symbol (⊘) if the command is currently deactivated. You can switch to the editing form (form view) either by double clicking on a record or by selecting an entry and then clicking on the [form view](#)¹⁰⁵⁹ button. Additional information about the contents of the individual columns is available in the section Form View.

▼ Window: Scheduled Commands - Table View



Next execution	Repetition	WS	Description	Last change	by
22.05.2018 (Tuesday) 12:00:00	daily Working days		Test operation	22.05.18 11:57	Andy

Figure 418: Scheduled Commands - Table View

▼ Functions: Toolbar Table View




Form View

This function switches the window to form view.

◀ ▶ Previous / Next Record

With these functions the previous / next record is selected.

 *Changes are accepted without further confirmation!*



New

With this function a new record is created.



Copy

This function creates a copy of a selected record.



Delete

With this function the selected record is deleted.



Execute

With this function, the respective command can be executed directly.

▼ Columns: Table View

- **(Symbol)**
If a one-time command has already been executed, or a command is currently inactive, the symbol (⊘) is shown.
- **Next Execution**
Date and weekday of the next execution.
- **(Time)**
Time of the next execution.
- **Repetition**
The defined option for the repetition of the command is displayed.
- **(Type of day)**
Displays the days on which cyclically-repeated commands are executed.
- **WS**
Workstation at which the command is executed.
- **Description**
The display of the remark that you entered during the definition of the command.
- **Last Change**
Time at which the command was last modified.
- **Changed by**
User that made the last change.

8.13.2 Form View

The form view shows an editing form that allows you to enter or change information regarding the scheduled commands. In the section "Scheduled Execution" you can define the time and options for carrying out the command. In the selection field located in the upper left, several execution intervals are available. Depending on the interval, you can also enter additional information about the days on which the command should be executed.

The entry field in which you enter the command is similar to the [text editor](#)⁸⁹⁹⁾, but has only limited functions. You can enter conditional elements and commands. Alternatively, or additionally, you can also insert text modules (**WGT**) that you can create using the text editor. Proceeding in this way is recommended if you are defining more complex command sequences.

For scheduled commands, a specific workstation can be determined for execution. It is at this workstation that the confirmation display will appear.

▼ Window: Scheduled Commands - Form View

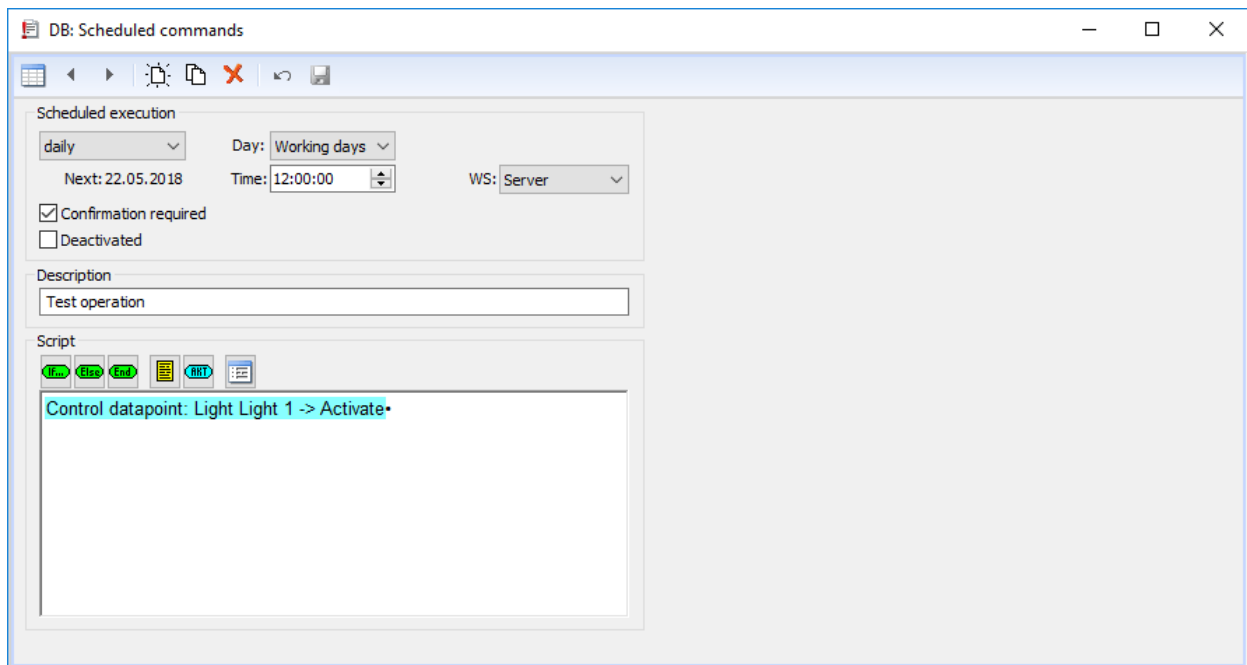


Figure 419: Scheduled Commands - Form View

▼ Functions: Toolbar - Form View



Table View

This function switches the window to table view.



Previous / Next Record

With these functions the previous / next record is selected.



Changes are accepted without further confirmation!



New

With this function a new record is created.



Copy

This function creates a copy of a selected record.



Delete

With this function the selected record is deleted.



Undo

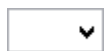
With this function the last change(s) can be undone / reversed.



Save changes

With this function the current record is saved.

▼ Data section: Scheduled execution



(Execution)

Here you determine the execution cycle.

once - the command is only executed once.

daily - the command is executed daily (depending on type of day).

weekly - the command is executed once a week on the selected day.

monthly - the command is executed once a month on the selected day.



Date:

Entry of the execution date of the command (format: dd.mm.yyyy).

... - enter the date.



*This element is only available if the execution is a **one-time** execution!*




Day:

Here you can define additional options for the selected execution.

- once: - no function or invisible
- daily: select the type of day
 - All days** - daily execution without limitations.
 - Working days** - daily execution but only on **working days**.
 - Free days** - daily execution but only on **free days**.
- weekly: execution occurs once a week on the **selected day**.
... - select the weekday (**Sunday** to **Saturday**).
- monthly: execution occurs once a month on the **selected day**.
... - select the desired day (**first to last** day of the month - **1st** to **31st**).
... - additionally, select the type of day in the next field.



Working days and work-free days are defined in the [calendar](#)  583!

(Type of day)


In addition to the day, the type of day is also defined here.

Day - execution occurs on the selected **day** of the month.

Working day - execution occurs on the **Xth working day** of the month.

Free days - execution occurs on the **Xth work-free** day of the month.

Sunday ... Saturday - execution occurs on the **Xth weekday** of the month.

 *This element is only available in a **monthly cycle**!*

Time:

Here you can define the time of execution (format: hh:mm:ss).

... - enter the desired time.

WS:

Here you can determine on which workstation the command is to be executed. If a confirmation is required for this command, the confirmation window will be displayed at the defined workstation (see above for limitations).

... - select the workstation.

Confirmation required

With this option you determine whether the execution of this command on the respective workstation has to be confirmed via the dialog [Execute Scheduled Command](#)¹⁰⁶². The dialog also presents the options of deferring or canceling execution.

active (default) - the command has to be confirmed prior to execution.

inactive - the command is executed directly without confirmation.

Autodelete following execution

This option determines if the the command will be deleted from the table after execution, provided it is a one-time command.

active - the command is deleted after its execution.

inactive (default) - the command is not deleted after its execution.

 *This element is only available for **one-time** commands!*

Deactivated

This function allows you to deactivate the command without deleting the definition.

active - the command is deactivated and the action is no longer executed.

inactive (default) - the command is active and the action can be executed.

Data section: Description

(Description)

Here you can define a description for the command. For example, you can indicate the purpose of the command.

... - enter a text if applicable.

▼ Data section: Script



(Script)

Here you can define the command that has to be executed at the indicated time. In general, all functions of the [text editor are available](#) ⁸⁹⁹.

... - define the command using the following functions.



Insert condition element

This function inserts an **IF**- or **ELSE IF** condition into the action and opens the dialog Text Properties with the [Condition Element Tab](#) ⁹¹⁵ for editing of the properties.

... - select the condition and define the parameters.



Insert Else

This function inserts an **ELSE** element into the action in order to create a corresponding alternative possibility to an **IF condition**.



Insert End

This function inserts an **END** element into the action in order to complete the corresponding **IF condition**.



Text module

This function opens the dialog **Select text** and allows insertion of a text in the format (**.WGT**).

... - select the desired text module.



Command...

The function creates an action at the cursor position in the text and opens the dialog **Text properties** with the [Command Tab](#) ⁹¹³, allowing the definition of the action with the corresponding parameters.

... - select the action and indicate the required parameters.



Text Properties

The function opens the dialog **Text Properties**. The function of this dialog are described in detail in the section [Tabs and Text properties](#) ⁹⁰⁵.

8.13.3 Execution of Scheduled Commands

If the option **Confirmation Required** has been activated for a scheduled command, then that command or action not executed directly. First, the dialog **Execution of Scheduled Commands** is displayed on the defined workstation. The upper section of the dialog (gray area) shows the planned time of execution, the repetition cycle, and, under **Comment**, the text associated with the command to be executed. In the middle of the display field, you will see the command text with all the commands and conditional elements you entered during the definition of the scheduled command.

If you selected the display option **Invisible** when inserting a command, then the action is not displayed here. Only additional text that may have been entered is shown. By clicking on the **Execute** button, the all the actions of the command text are executed and the dialog is closed. The **Defer** function allows you to move the command to a later time.



The command is not executed unless the respective workstation is active at the defined time!



If the respective workstation is running as a service at the defined time, the commands that require confirmation are not executed!



Commands that do not require confirmation are always executed on the defined workstation as long as the workstation is active at the specified time!

Dialog: Execution of Scheduled Commands

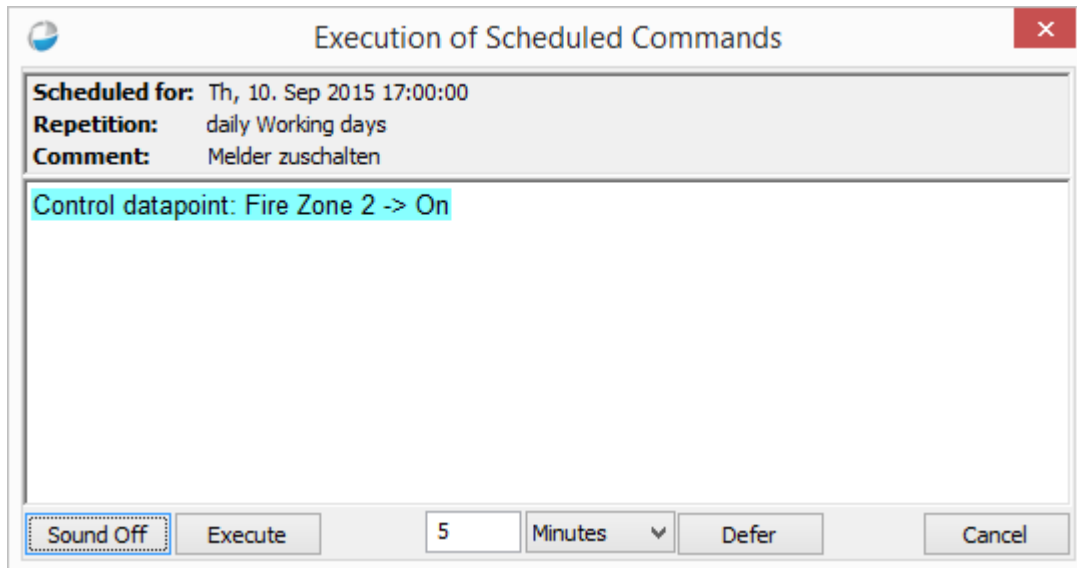


Figure 420: Execution of Scheduled Commands

Data section: Planned execution

Button

Sound off

This function ends the acoustic signaling of events at the workstation.

Button

Execute

With this function, the command text is carried out and the dialog is closed.

Input field

(Duration)

Number of time units (see next field), a command is to be deferred. After this amount of time has elapsed, the dialog with the command is again displayed for resubmission.

... - enter a time for deferral if applicable.

Dropdown menu

(Time unit)

Here you can select the unit of time to define the deferral. Together with the number indicated in the preceding field, this determines the amount of time a command should be deferred.

You can select from: *minutes (default)*, *hours*, or *days*.

... - select the unit of time if applicable.

Button

Defer

With this function, the planned execution of a command is deferred, which leads to a resubmission of the action. The previously defined parameters are applied to the deferral.

 **Cancel**

This function closes the dialog without any command being executed. The same applies if the dialog is closed via the system button in the title bar.

8.14 Event Handling

Using handling definitions, functionality for incoming events can be dynamically activated as well as predefined with regard to time. The definitions follow a uniform principle. Using a filter, an amount of events is selected for which an action shall be applied. In addition, the validity of the total definition can be limited to a time window, if required, as well as activated and deactivated explicitly.

The definitions are managed like other data objects, i.e. there is a list and a form. In case of an incoming event, the active definitions are then applied within the scope of event distribution in the defined order. For each action executed as handling, there is basically also a corresponding script command. Filter and time window can also be displayed in scripts with suitable If-conditions. In principle, handling definitions can be considered as an alternative way to realize script functionality more easily, to display them more clearly and to influence them dynamically without script adaptations. Via rights, it can be defined which actions a user can apply for own handling definitions.

The handling definitions are applied via the command **Apply event handling** per type, i. e. all actions of one type will be executed jointly. Even if **All Types** are executed jointly, the application Type for Type will be executed quasi automatically due to the sorting according to type.



Currently, only Hide event and Group event are supported as handling actions!

8.14.1 Table View

In the table view, all defined event handling data sets are listed. The columns of the table contain the contents of the fields Apply to, Options, Begin, End, etc. for each data set. By double-clicking on one of the entries or by selection of an entry and clicking on the button [Form view](#)¹⁰⁶⁶, the editing window can be opened.

Further information with regard to the single columns can be found in the section [Form view](#)¹⁰⁶⁶.

▼ Window: Event handling - Table view

Apply to	Options	Begin	End	Info	Last change	Changed by
Location=Company, Administration, 1st Floor; State ...	TODO: <Options>	22.03.17 10:15	22.03.17 11:15	Test		

Figure 421: Event handling - Table view

▼ Functions: Toolbar Table view



Form View

This function switches the window to form view.



Previous / Next Record

With these functions the previous / next record is selected.



Changes are accepted without further confirmation!



New

With this function a new record is created.



Copy

This function creates a copy of a selected record.



Delete

With this function the selected record is deleted.

8.14.2 Form View

In the form view, an editing form is displayed in which you can enter or change data for event handling. Definition sections for the Command, Time, events, etc. are available. Here it is also possible to create new event handling definitions or to delete existing ones.

▼ Window: Event handling - Form view

The screenshot shows the 'DB: Event Handling' window in 'Form view'. The window title is 'DB: Event Handling'. The interface includes a toolbar with icons for checkmark, close, undo, and save. The main area is divided into several sections:

- Command:** Type: Group event (dropdown), Disabled checkbox, Info: Test (text field).
- Time frame:** from: 22.03.2017 10:15 (date and time pickers), to: 22.03.2017 11:15 (date and time pickers).
- Event filter:** State: Alarm; Prealarm (dropdown), Location: Company, Administration, 1st Floor (dropdown), Datapoint: All (dropdown), Interface: All (dropdown), Tags: All (dropdown). There is also a large empty text area with '+' and '-' icons.
- Options:** Offset: (hh:) mm:ss (text field), Grouping: Default (dropdown), Condition: None (dropdown).

Figure 422: Event handling - Form view

▼ Functions: Toolbar Form view

The toolbar functions change depending on the current status of the form view. As a consequence, functions such as **OK** or **Cancel**, etc. will only be visible or invisible after changes have been made.



Back (last table view)

This function switches the window back to table view.



OK

This function stores the current settings (such as **Save**) and switches back to **Table view**.



Cancel

With this function, the executed changes will be canceled without any further confirmation and it is switched back to **Table view**.

**New**

This function creates a new event handling definition.

**Copy**

This function creates a copy of the selected event handling definition.

**Delete**

This function deletes the selected event handling definition after confirmation.

**Undo**

This function resets the executed changes so that the information stored before will be displayed again.

**Save**

This function stores the current settings.

▼ Data section: Action**Type**

The action type is defined here. The type of the handling definition determines at the same time also the action to be executed. Depending on the selected type, different options depending on the action can be indicated too. The following can be selected: **Hide event**, **Group event**

... - select the action type.

**Deactivated**

Using this option, it is defined whether the action is active and can be executed.

inactive (default) - the action is active.

active - the action is deactivated.

Info

An optional, free info text can be defined here. The text does not have any influence on the action.

... - if required, enter a text.

▼ Data section: Time window

Upon indication of a time window (Start - End), the application of the definition will be timely restricted. Both the indication **from** as well as **to** are optional. If no time is indicated, the definition will be unlimited.

**from: ... to:**

Using these options, start or end time for the time window are activated.

inactive (default) - the start or end time is deactivated.

active - the start or end time is active.

(Date)

The date for the corresponding start or end time of the time window has to be defined here, provided that this option has been activated.

... - if required, enter the date directly or select it.

 (Time)

The time for the corresponding start or end time of the time window has to be defined here, provided that this option has been activated.

... - if required, enter the time directly or select it.

▼ Data section: Event filter

 Status:

It is possible to filter according to event states (Alarm, Fault, etc.) here. An event corresponds to the filter if it has one of the indicated states.

All (default) - the filter is not active.

... - if required, select one or two event types.

 (Status text)

It is possible to filter according to status texts of events here. An event corresponds to the filter if the text is matching to it.

... - if required, enter a text.

 Location:

It can be filtered according to a location here. An event corresponds to the filter if it has either exactly the searched location or a location subordinated to this location. If "**Current selection**" has been selected, the filter will be re-applied upon each selection change.

All - the filter is not active.

without - only events of datapoints that have not been assigned to any location will be considered.

Current selection (default) - only events of datapoints that are assigned or subordinated to the selected location will be considered.

 Datapoint:

Using this selection, a datapoint category or a datapoint can be defined as a filter. The event corresponds to the filter if it belongs to one of the selected datapoint categories or to one of the defined datapoints (datapoint Id). The datapoints can be defined in the following field.

All (default) - the filter is not active

Selection - the datapoint list will be used as filter.

... - if required, select a datapoint category or a datapoint.



*If a datapoint is defined in the datapoint list, **Selection** will be automatically selected here!*

Upon changing the selection, it might be that the datapoint list will be deleted!

(Datapoint list)

It is possible to define single datapoints as filter here. Provided that the list contains datapoints, the selection under datapoint will be adapted accordingly. The corresponding functions are available for editing right to the list. The event corresponds to the filter if it belongs to one of the selected datapoints (datapoint Id).

... - if required, select the datapoints.

+ ... - if required, add datapoints to the list.

X ... - if required, remove the selected datapoints.

 Interface:

Here, one or several interfaces can be defined as filter. The event corresponds to the filter if it belongs to one of the selected interfaces. The following can be selected: **all defined interfaces** and **without**.

All (default) - the filter is not active.

without - events of datapoints without interface.

... - if required, select one or several interfaces.

 Tags:

It can be filtered according to the tags of an event here. An event possesses the tags of the triggering datapoint that have been effective at the time of event. For the filter, any number of tags can be selected via a tree selection field. An event has tags even if it possesses a tag below in the hierarchy. All defined tags are available for selection.

- If several tags have been selected in the same hierarchy branch, the event only has to have one of these tags (logic or) in order to correspond to the filter.
- If tags have been selected in different hierarchy branches, the event has to possess all of these tags (logic and). This also applies in case of a combination.

Blank (default) - the filter is not active.

... - if required, select the corresponding tags.

i *To be able to select several tags, hold the STRG key pressed during selection. The selection is completed by the entry key (Return)!*

▼ Data section: Options

Here it is possible to define further options for automatic grouping.

i *These entries are only available for the option **Group event!***

 Offset (hh:)mm:ss

Here it is possible to define a max. time interval for automatic grouping of corresponding events.

blank (default) - no checking for time interval.

i *It is recommended to enter a value here, as otherwise no grouping will be executed for days and months!*

Grouping:

Here it can be defined whether the group father shall be set up as container event based on the grouping datapoint selected here (see [Grouping](#)^[749]) or if one of the already available events shall serve as group father. If a grouping datapoint has been defined, events will never be added to a group with another datapoint father.

Default (default) - if required, select a datapoint.



If required, an event might be triggered for the grouping datapoint in order to execute a corresponding event(s) grouping!

 Condition:

Here, it is possible to additionally select a condition in form of a location, location part or datapoint. In this case, the events have to have the particular location part in common in order to correspond to the condition resp. to possess the same datapoint or datapoint characteristics. When checking for the datapoint father, this does not mandatorily have to be the direct father, but both have to have any common datapoint in the hierarchy above.

None (default) - no additional condition is active.

Same location / facility / building / floor / room - if required, select a location option.

Same Datapoint / Datapoint parent - if required, select a datapoint option.

8.15 Event Routing

Event routing is a text module (WGT) with special functions in the system. It serves to globally define specific processes for the reception of events. Especially if WinGuard is used in a multi-client setting, it is very important to define the routing of events to the various workstations (please see: [Choose Workstation](#)¹⁰⁷² and [Notify Workstation](#)¹⁰⁷³).

i *If any of this both commands is defined, the workstation with the active interface is used. In this case the event is shown in the event list of this workstation!*

Event routing is helpful in initiating general [commands](#)⁹⁴⁶ (such as print graphic, send out SMS, etc.) that should be executed automatically upon reception of an event. All commands can be linked with [conditions](#)¹⁰⁴⁷ so that it is possible to define whether or not, or which commands should be executed depending on event type, datapoint category, or interface in question.

Using the menu item **System | Scripts | Event Routing...** you can open the text module for event routing directly with the [text editor](#)⁸⁹⁹. Here, the text editor only has limited functions which allow you to insert or edit texts, commands, and condition. The other available functions of the text editor are not applicable here.

The name of the text module used for event routing is defined in the system settings under **event handling** in the section **scripts**. The settings for individual workstations can vary so that it is possible to use customized routings for each workstation. However, in most cases only one module is applied to all workstations. The file(s) should be saved in the folder defined for **Texts/Commands**. The default name for the event routing text module is **EventRouting.wgt**.

! **During reception of an event, event routing is always executed before any other commands in the system at the workstation the respective interface is active!**

i *Standard path and name: `\Texts\Commands\EventRouting.wgt`*

8.15.1 Choose Workstation

One of the most important functions of event routing in a multi-client system is defining which workstation is responsible for which event. For this purpose, the command [Choose workstation](#)⁹⁶⁵ in event routing is used. You can route events to various workstations by using [IF_Conditions](#)¹⁰⁴⁷ to differentiate, for example, by datapoint category, interface, location, schedule, etc.

Through the command, [Choose workstation](#)⁹⁶⁵, exactly **one** workstation is defined for the display and processing of the event. This function also includes notification of the respective workstation. An additional command, [Notify workstation](#)⁹⁹⁶, is not required.

Actions for defined workstations:

- The event appears in the event list in the filters, **Local** and **All**.
- Upon selection of the event from the event list, the function, **Accept**, is activated.
- Automatic notification ensues, meaning that the event is automatically displayed (graphics, text, log, etc. - depending on the settings, layout, priority, etc.).
- Within the framework of notification, there is also acoustic notification through the playing of the respective sound files.



*Dependent from option **Show event always if notified** (Settings: Global|Eventlist|General) a workstation can be notified with function **Notify workstation** if the filter is set to **Local**!*

If no specific workstation is defined through the command **Define workstation** (Option **<No workstation>**), then the event is visible on all workstations in the filter, **Local** (workstation number = 0). However, no automatic display or notification occurs at the workstations. Workstations on which automatic display/notification should occur, must be additionally defined via the command [Notify workstation](#)⁹⁹⁶.

No notification of workstations occurs in the following cases:

- If the automatic activation was globally, workstation-specifically, or profile-specifically deactivated in the WinGuard settings (under Event handling|General|Automatically display events).
- If an event with equal or higher priority is already displayed.
- If the respective event is not visible in the event list of the applicable workstation because it is not covered by the filters. In particular this means:
 - If the workstation filter in the event list is set on **Local**, events that are assigned to another workstation (not equal to 0) are not automatically activated.
 - If none of the filters of the event list apply, the event is not automatically activated.



*In order for an event to be displayed, the workstation must have a filter that lets the applicable event through. The required settings can be made in the System Settings under **Event List** in the sections **List 1...11**!*

8.15.2 Notify Workstation

In addition to the workstation primarily responsible for events, other workstations can be notified by adding the command [Notify Workstation](#)⁹⁹⁶ in the event routing for the respective workstations. These commands can also be defined using [IF Conditions](#)¹⁰⁴⁷ according to datapoint category, interface, location, schedule, etc.

For the command, [Notify Workstation](#)⁹⁹⁶, a **specific** workstation must be defined. The option **<No workstation>** is not functional here. To display the event, generally the filter, **All**, must be active for the event list.

Additionally, an event can be displayed on workstations with the filter, **Local**, if the option **Always show event when notified** is set on **Yes**. This option can be found in the System Settings under [Event List](#)⁴⁸⁶.

Actions during notification of workstation:

- The event appears in the event list only with the filter, **All**, or also with the filter, **Local**, depending on system settings.
- If the event is selected in the event list, the function **Fetch** is activated.
- Automatic notification ensues, meaning that the event is automatically displayed (graphics, text, log, etc. - depending on settings, layout, and the priority of the event, etc.).
- Within the framework of notification, an acoustic notification occurs as well through the playing of the respective sound file.



In certain cases (please see: [Choose Workstation](#)¹⁰⁷²) no notification of the workstation occurs!

8.15.3 Other Commands

Of course, the other commands of the system are also available in event routing. It should be evaluated, however, if the command should be defined individually for a single datapoint, or globally in event routing.

Whenever commands for specific datapoint groups should be executed depending on, for example, interface, data type, location, text macro, etc., it may make sense to integrate such functions in event routing.

For example, in cases of fire alarms, it may be desired that a text and a graphic be printed out ([Print Documents](#)⁹⁹⁹⁹), or that in certain events a SMS or voice message is sent out ([Send SMS](#)¹⁰¹⁴ or [Send Voice Message](#)¹⁰²⁰). It may also be required that an automatic announcement is made for alarms ([Control Datapoint](#)⁹⁷⁰¹).



The actual user in the event routing is always <SYS> and not the normal login user !

8.16 Event Display

The system provides several mechanisms for the display of events and related information. If no special definitions for displaying events are made, then event display occurs automatically. This means that the event with graphic and text is shown in Display1. If Display2 is open, the graphic is shown in Display2 and the text in Display1.

If you would like to define event display differently from this standard, it has to be done outright. Automatic features such as placing the graphic in Display2 whenever it is open are then no longer available. In this case, event display should be optimized for a specific workstation profile. For example, one of the profiles can then have the display on one monitor, another uses two monitors, etc. For definition, it is easiest to simply enter a content for the respective pane (for example **<Display1>**). This content (as a general rule a layout with event display) is then automatically activated in event display.

If you would like to customize the target area, (for example, event contents should be displayed in a separate tab or window) use the four definable **Activate Pane** commands which are in the system settings, or insert respective commands in the script for the event display.

All areas with event content are framed in the color of the event. Whenever possible, panes are grouped and framed together. If an event content is activated in a pane, the previous content is saved. When an event is closed, all areas that contained event content go back to displaying the previous content.

If, during event display, the user explicitly activates a content that is not related to the event, that content becomes the new base content for the pane and it remains intact when the the event is closed.

The system executes the following steps in event display:

- For every event content defined in the system settings, an **activate pane** command is executed.
- The explicit commands **activate pane** defined in the system settings are executed.
- The script established in the system settings for event display is executed.
- Commands created for the datapoint (execution time: event display) are executed.



Event display is executed on every workstation during the display of an event!



Event display is always applied in one step. This means that first, all commands are pulled together and then executed in one step. Only the last command for a pane is actually used. It is thus not a problem if several commands for the same pane are present on account of the definitions in the command sequence.

8.16.1 Script for Event Display

In the script for event display, the commands for the event display can be defined for various application scenarios, for example by state type, location, interface, etc. through the use of conditions.

Via the menu item **System | Scripts | Event Display...** the text module for event display is directly opened with the [Text Editor](#)^[899]. The text editor enables you to insert / edit texts, commands, and conditions here. However, it does not provide its usual complement of functions as they are not required here.

The name of the text module used for event display is defined in the System Settings under **Event Handling** in the section, **Scripts**. The settings can be defined independently for individual workstations so that it is possible to define a separate event display for every workstation. However, in most cases,

only one module is applied for all workstations. The file(s) should be saved in the folder defined for **Texts\Commands**. The default name for the text module with event routing is **Event Display.wgt**.

The script also allows you to remove existing commands for the current event display in order to enable different actions for certain events or states, even though the fundamental definitions were made globally. The removal of commands can be accomplished via the command, **Remove Commands**, which can be inserted respectively. In order to select individual commands, their ID must be entered. Every command generated from the System Settings is automatically assigned with an ID in the following format:

Command Group	ID Format	Example
Set event content for a pane/area	eventcmd:<Pane/area ID>	eventcmd:<Display1>, eventcmd:A
Four explicit event commands	eventcmd#<n>	eventcmd#1, eventcmd#2



*If you would like to remove commands from scripts, these also must have received an ID beforehand. Using placeholders (such as ? and *) in the ID, you can also remove several commands via **Remove Commands** simultaneously. The command **eventcmd*** removes almost all event commands from the settings.*

9 Webserver and Webclient

The Webserver is an independent application providing an SSL-compatible HttpServer, enabling a secure web access to WinGuard in connection with the interface ASIPServer. The website contained in the delivery scope realizes a Webclient includes some new functions for control operations.



**A security certificate is required for using SSL connections!
This is not part of the Webserver delivery scope!**



The use of the ASIPServer interface and thus of the Webserver and Webclient is depending on the licensing in WinGuard!

9.1 Webserver

The WinGuard-Webserver provides an SSL-compatible HttpServer as an application. The connection between WinGuard and the Webserver is realized via the interface **ASIPServer**. Directly supported is the operation with HTML5 or Javascript based web pages. In addition, the Webserver offers a JSON WebSocket Interface via which, as an option, it is possible to directly implement externally hosted dynamic web applications. In addition, the Webserver also provides a [Webclient](#)¹⁰⁹⁶. How many Webclients can operate simultaneously with a Webserver is dependent on the license.

The required software components have to be provided first for using the Webserver, e.g. by executing the corresponding installation routines or, alternatively, by simple copying of the necessary modules. In addition, for operating the Webserver, the interface **ASIPServer** has to be available in WinGuard.

Requirements:

- WinGuard Interface **ASIPServer**
- WinGuard License module: **ASIP.WEB**
(direct the number of simultaneously connections / Webclients)
- Operating systems: as of **Windows 10** resp. **Server 2012 R2**
- Microsoft® **.Net Framework** as of version 4.5



Only one Webserver can be installed on a computer!

General information:

- As an option, the WebServer can be operated as a service.
- Currently available languages **DE, EN** (included in EXE).
- A shortcut for the WebServer will be added to the Windows start menu upon installation.
- In case of a manual update, the application has to be explicitly terminated before.
- Will be stored in the WinGuard program directory in the subdirectory **webserver**.
- Settings are stored in XML format in the file **WebServer.cfg** in the directory of the **Webserver.exe**.

9.1.1 Installation





The Webserver is part of the WinGuard installation. During setup, the required modules are installed in the subdirectory **Advancis\webservice** of the Windows program directory. The single modules can be started from this directory. The program **WebserverConfig.exe** for configuration and setup of the Webserver is saved in the same directory as the program **Webserver.exe** for the Webserver.


In case the installation is not made via setup resp. a corresponding update, it is also possible to subsequently import resp. copy the programs to a corresponding directory. It is then possible to easily start the programs via double-clicking or a corresponding linkage (admin rights required).


In principle, the Webserver modules can be saved in any directory. An installation of WinGuard on the computer is not necessary for operation the Webserver.

▼ Install Webserver

ToDo: Installation of the Webserver

-  Keep WinGuard installation ready.
-  Execute Webserver installation.
-  Alternatively, the required program modules can also be copied manually.
-  Configure Webserver (settings).

 *Do not forget to activate the interface ASIPServer in WinGuard in order to enable the connection between WinGuard and the Webserver!*

 **During an installation or an update, the WinGuard Webserver must neither be active!
If necessary the Webserver has to be stopped before!**

9.1.1.1 Setup (new)

If the WinGuard Webserver has not yet been installed on your system, a full installation of the program should be executed. However, the Webserver can also be installed directly during the WinGuard installation.

After starting of **AutoRun.exe**, the button **Webserver Installer** has to be clicked. If AutoRun has not been started automatically, open the Windows explorer, switch into the installation directory and start the program **WebserverSetup.exe** directly.

Alternatively, select the menu entry **Execute** in the Windows start menu! In the selection field **Open**, enter the drive letter of your installation directory, followed by the program name, e.g. „**E:\WebserverSetup.exe**“ .

The installation program will be started and all necessary entries will be made in corresponding dialogues. In general, these dialogues offer the possibility to confirm the entries by **OK** resp. **Next** or to stop the installation by **Cancel** resp. **Abort** . Using the **Back** buttons it can be returned to the dialogue.

▼ Dialogue: Setup Language

First of all the dialogue **Setup Language** is displayed. Select the desired language and confirm the entry by **OK** .

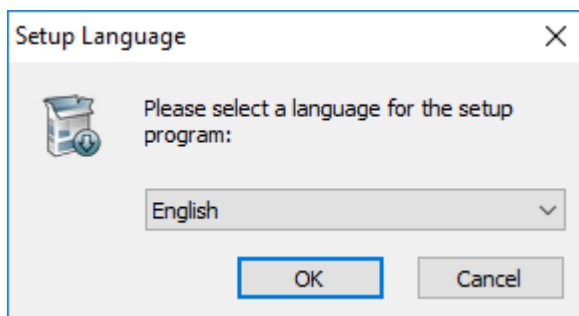


Figure 423: Setup Language

▼ Dialogue: Welcome

The following dialogue **Welcome** asks to continue the installation. Click on the button **Next**.

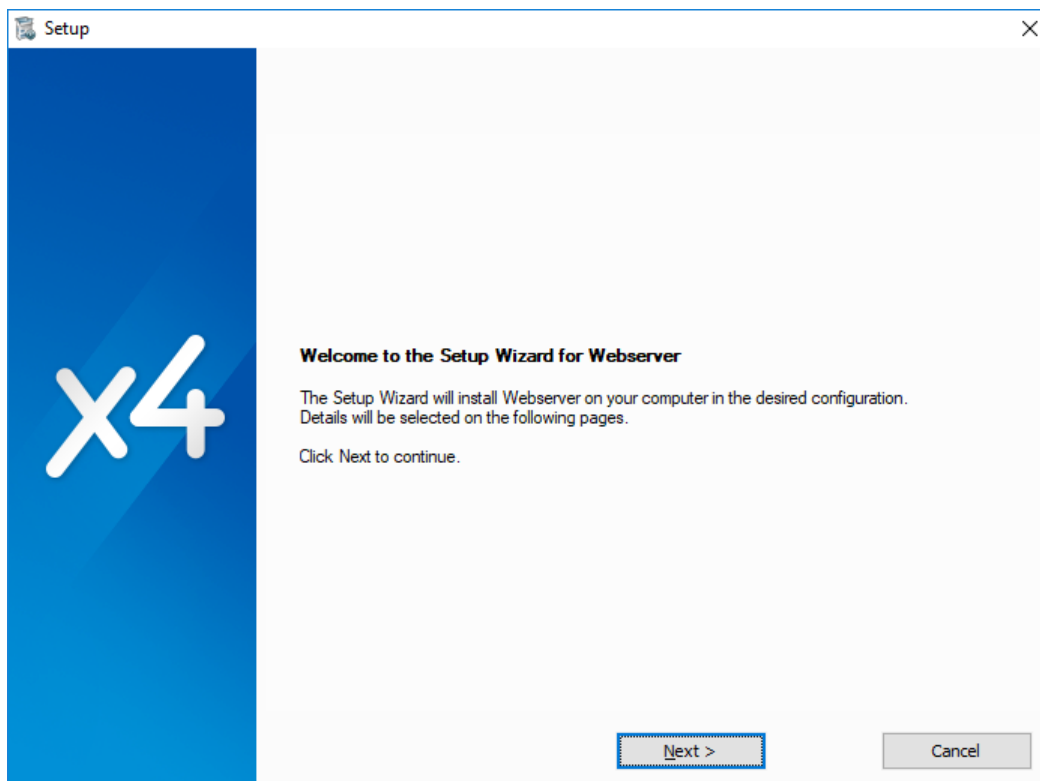




Figure 424: Welcome

▼ Dialogue: Components

The additional components to be installed can be selected in this dialogue. Currently only the website (Webclient) is available.

The selection is made by marking of the corresponding selection fields. The selection of the single components can be accessed via the structure points ( / ) of the hierarchic structure.

After termination of the selection, click **Next** to continue.

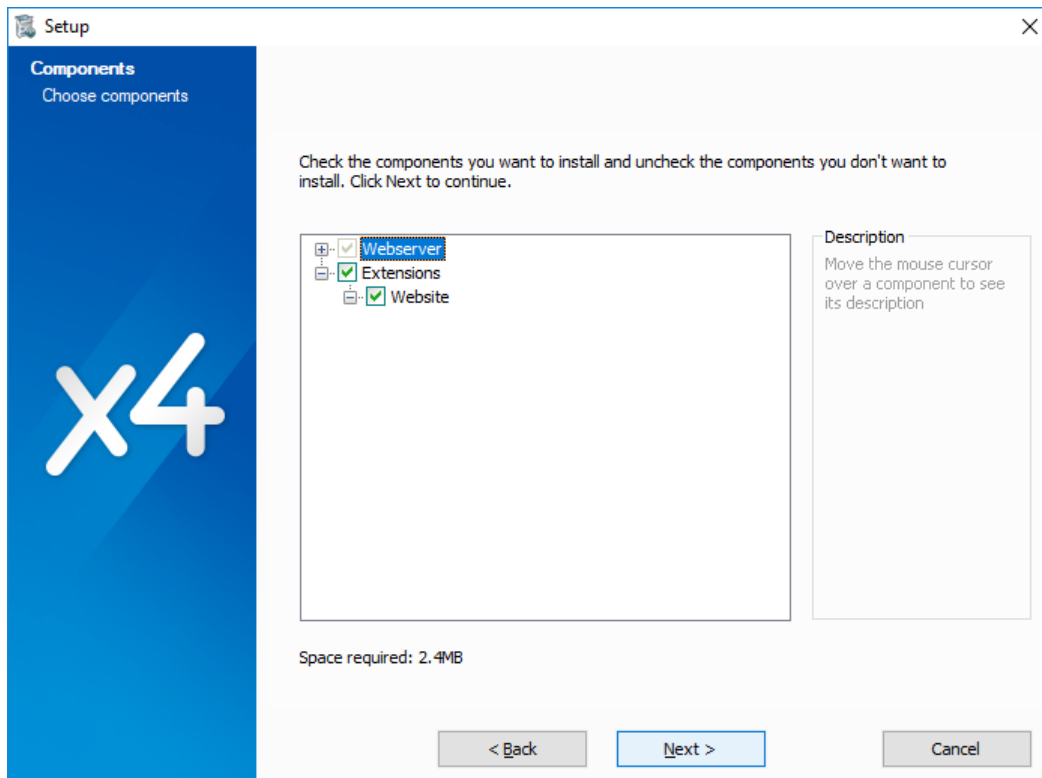



Figure 425: Components

▼ Dialogue: Directories

Finally it is possible to select the directory in which the Webserver shall be installed on your local workstation.

"C:\Program Files (x86)\Advancis\Webserver" is predefined for the installation.

The button **Browse...** opens a dialogue via which an alternative directory can be selected. In addition, it can be defined as an option whether the Webserver shall be installed as a service and if it shall be started directly after the installation has been completed.

 *Check the settings!*

If the settings are ok, click on **Install** to start the installation.

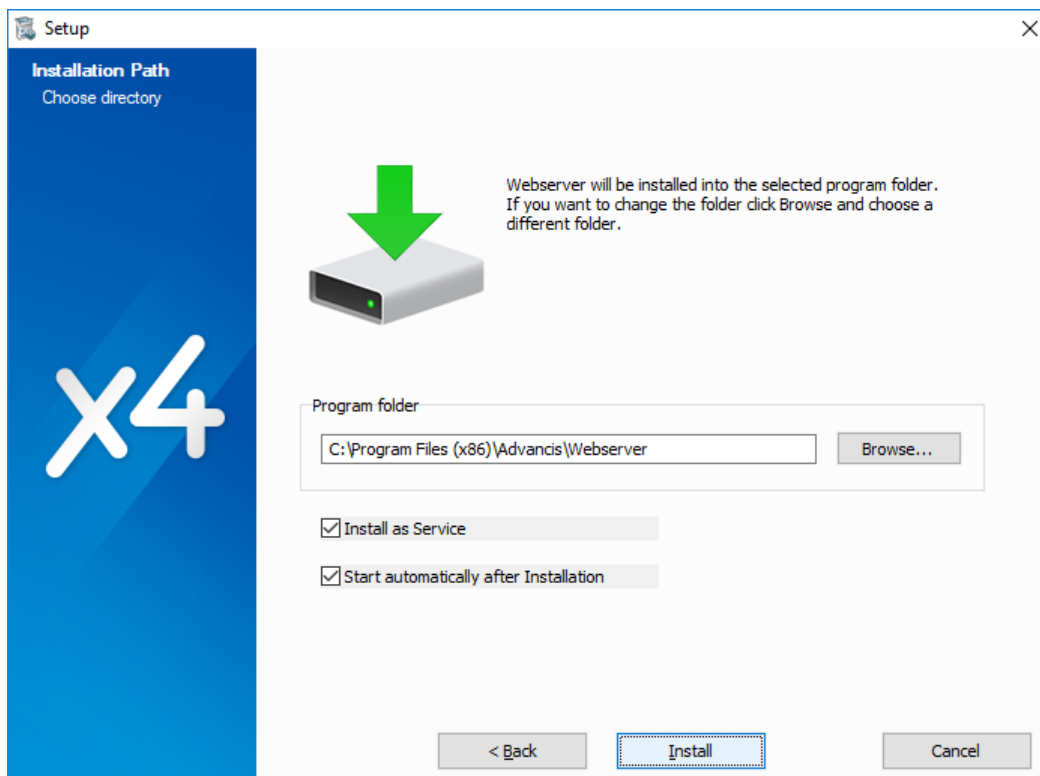


Figure 426: Directories

▼ **Dialogue: Setup completed**

After the installation of all required resp. desired components has been made, the installation of the Webserver is completed. The setup is terminated with the button **Close**.

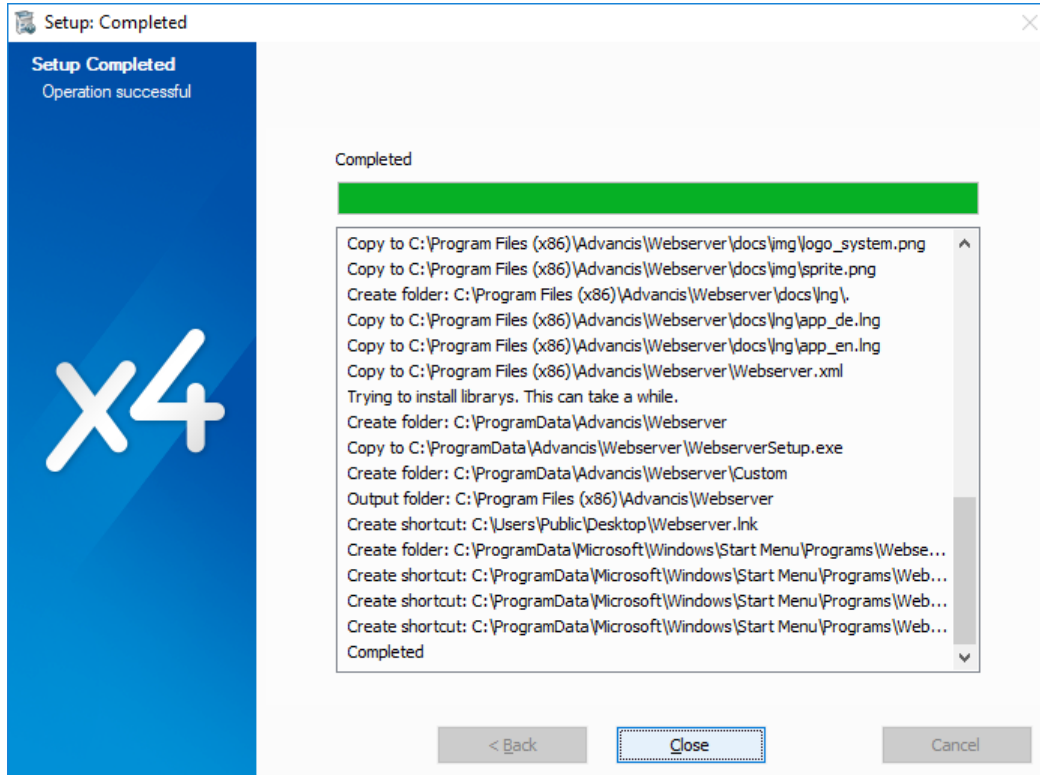


Figure 427: Setup completed

9.1.1.2 Setup (update)

If the WinGuard-Webserver has already been installed on your system and a more recent program version shall be installed, an update of the current version is required. Upon starting of the program **WebserverSetup.exe**, the installation automatically detects whether a version has already been installed and offers respective functions.

- Modify**
- Repair**
- Remove**

▼ Dialogue: Change installation

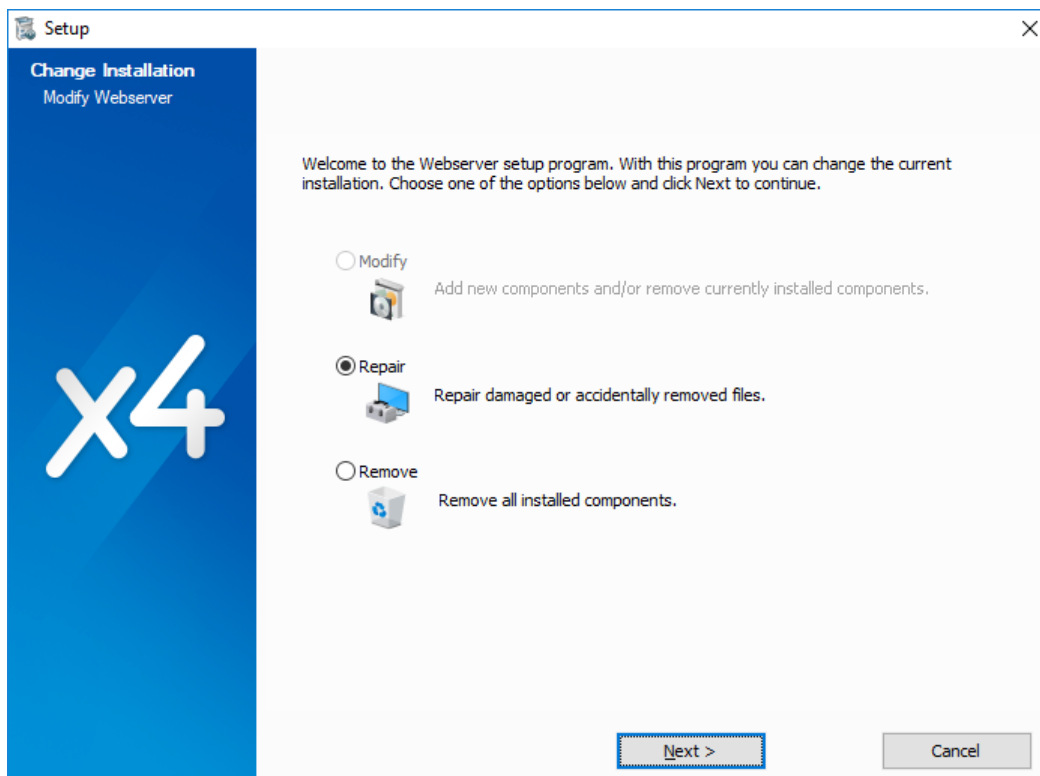



Figure 428: Change installation

9.1.2 Configuration


After the installation, the Webserver has to be configured and started, whereas the program start can be executed in several ways.

Automatic start:

- Automatic start as a service when starting the computer.

 *The Webserver has to be installed as a service!*


- Automatic start as console application through Windows Autostart during user login.

 *The Webserver must be contained as linkage in the Windows Autostart folder!*

Manual start:


- Manual start as an application (console).

➤ Start by double-clicking on the program **Webserver.exe**

 *Start the program as an administrator!*


- Manual start as an application (without window) via the configuration program.

➤ Start by double-clicking on the program **WebserverConfig.exe** and clicking on the **Start** button.

 *In this case, the Webserver must not be installed as a service!*

- Manual start as a service via the configuration program.

➤ Start by double-clicking on the program **WebserverConfig.exe** and clicking on the **Start** button.

 *In this case, the Webserver has to be installed as a service!*

Configuration of the Webserver as a service

In general, the Webserver is configured as a service so that it is directly available after starting the computer. The installation resp. uninstallation of the Webserver as a service is executed via the configuration program **WebserverConfig.exe**. The service can be installed resp. uninstalled using the dialogue **Settings** of the program.








During the installation, the service **WinGuard Webserver** is registered in Windows and configured in such a way that it is automatically started upon starting the operating system. In case the start of the service should fail, there will be an automatic re-start.

After installation, the parameters of the service **WinGuard Webserver** can be displayed resp. adapted via the Windows service console. The console **Windows Services...** is also available as function during configuration.


Further information with regard to the program **WebserverConfig** can be found in the section [Operation Webserver Config](#) ¹⁰⁸⁸.

▼ Configuration of the web server as a service

ToDo: Installation of the WinGuard Webserver as a service

-  Keep WinGuard installation resp. update ready.
(if required)
-  Execute WinGuard installation resp. update.
(if required)
-  Install and activate ASIPServer interface in WinGuard.
-  Install the firewall (port etc.) for access to the Webserver resp. for access of the Webserver to the ASIPServer interface of WinGuard .
-  Start the configuration program **WebserverConfig** start (admin mode!).
-  Install WebServer as a service (Dialogue: **Settings** Function: **Install**).
-  If necessary, start the service **WinGuard Webserver** (Function: **Start**)
Note: The service is automatically started upon starting the computer.

Further steps are not required for installation of the service.

 *The service can be started resp. terminated manually with the functions of the configuration program.*

9.1.3 Configuration Program

The start of the program WebserverConfig.exe for configuration of the Webserver is easily executed via a corresponding linkage, e.g. on the desktop or directly by double-clicking on the program. After program start, the functions for configuration and starting resp. termination of the Webserver are available.

The language of the interface depends on the selected language of the operating system and cannot explicitly be selected here. Currently German and English are supported, whereas English is used as default for other system language settings.



Please note that the configuration program has to be executed as an administrator in order to be able to use all functions!

9.1.3.1 Program Window

The window of the Webserver configuration program consists of a display area with information regarding the operating status, etc. as well as of buttons for execution of the available functions.

▼ Window: Webserver Config

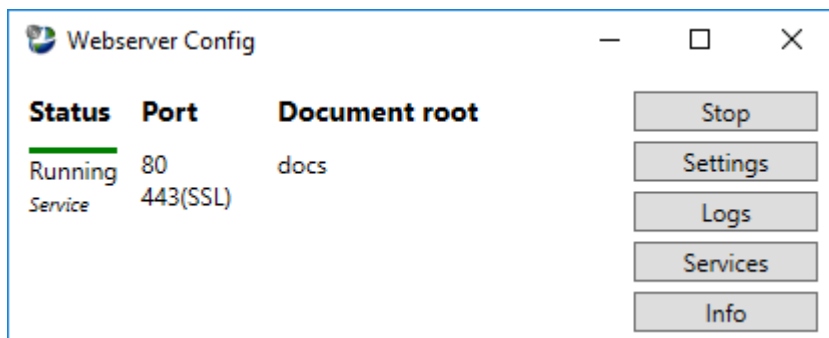
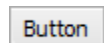


Figure 429: Webserver Config

▼ Functions: Webserver Config

These functions are directly available as buttons in the right area of the program window:



Start / Stop

This button starts resp. terminates the Webserver, however it is differentiated whether the Webserver has been installed as a service or is only available as an application and whether the Webserver is currently active or inactive.

- Application:
 - Start: Starts the Webserver from the same directory as an application without window.
 - Stop: Terminates the Webserver (application).
- Service:
 - Start: Starts the service **WinGuard Webserver**.
 - Stop: Terminates the **WinGuard Webserver** (service).



*The function **Start** is only available if the Webserver is not active, **Stop** is only available if the Webserver is active.*

Button **Settings**

With this function, the dialogue Settings can be opened to define different settings for the Webserver.

i *Here, the installation/uninstallation of the Webserver is executed as a service!*

Button **Logs**

This function opens a Windows file explorer with the log directory of the Webserver.

i *The log files can be opened with a text editor.*

Button **Services**

Selects the Windows Service Manager under which all installed services are listed, e.g., if installed, the service **WinGuard Webserver**. It is possible to further configure and monitor the services here, however it is normally not necessary to use these additional Windows functions.

i *The current status of a service can be seen from the display of the different functional entries (active, selected), e.g. if it is installed, started, etc.*

Button **Info**



This function opens the dialogue **Info** of the program, displaying information with regard to the Webserver and the configuration program.

▼ Display: Webserver Config

The left side of the program windows displays information in different columns with regard to the Webserver.

Status

This (first) column displays information concerning the Webserver status.

- A coloured bar signalizes the current status.
 -  active
 -  inactive
- In addition, the status is displayed as text.
 - Started
 - Stopped
- The last start category is displayed as text.
 - Manual
 - Service

Port

This (second) columns displays information with regard to the Webserver port.

- The port for non-encrypted HTTP connection is displayed.
- The port for encrypted HTTPS resp. SSL connection is displayed.

Document root

This (third) column displays the currently defined document directory.

9.1.3.2 Dialogue Settings

The required definitions for the operation of the Webserver are set via the dialogue **Settings**, e.g. the connection parameters to WinGuard and for the Webserver are configured here. After a first start, the single elements are predefined (defaults). As far as possible, the settings are monitored by the program and invalid definitions are marked resp. their saving will be prevented.

**⚠ A certificate is required for using SSL connections!
This is not included in the Webserver delivery scope!**

▼ Example: Dialogue Settings

The screenshot shows the 'Settings' dialog box with the following configuration:

- ASIP Connection:** Server: localhost; Fallback Server: (empty); Connection Timeout: 10 seconds; Request Timeout: 60 seconds; Device Id: (empty) with a 'Generate' button.
- HTTP Server:** Port: 80; Enable SSL: ; Port (SSL): 443; Session Timeout: 300 seconds; Document root: docs (with a file browser button).
- SSL:** Enforce SSL: ; Certificate: localhost.pfx (with a file browser button); Password: (empty).
- Service:** Install and Uninstall buttons.
- Misc:** Logging: Warnings, Errors (dropdown menu).

Figure 430: Dialogue Settings

▼ Functions: Dialogue Settings

The following functions are directly available as buttons in the upper right area of the dialogue window:

Button

Ok

The settings are saved and the dialogue will be closed.



The Webserver must be restarted to activate the settings!

Button

Cancel

The dialogue is terminated without execution of any further actions.

▼ Functions: Dialogue Settings - ASIP connection

This section defines the settings for a connection with WinGuard via the ASIPServer interface.

Server

The IP address resp. computer name (network) of the computer on which the WinGuard interface ASIPServer is active will be defined here.

In addition, it is possible to define the port by separating it with a colon (:) after the IP address resp. the name.

If no port is defined, the default port **40001** will be used.

localhost (default) - the interface is active on the local computer.

IP:Port - enter the IP address resp. the name of the respective computer and - if necessary - the port for the connection.



If this definition remains empty, no connection will be established!

Redundance Server

The connection to a redundance server can be defined here. In case of a connection interruption to the server, the Webserver will try to open the alternative connection.

In this case, the IP address resp. computer name (network) on which the alternative WinGuard interface ASIPServer is available will be entered here.

In addition, it is possible to define the port by separating it with a colon (:) after the IP address resp. the name.

If no port is defined, the default port **40001** will be used.

empty (default) - no alternative connection to a redundancy server.

IP-Port - enter the IP address resp. the name of the respective computer and - if necessary - the port for the connection.

Connection timeout (seconds)

If the connection is interrupted longer than the time that has been defined here, it will be tried to establish a connection with the redundancy server.

10 (default) - if necessary, adapt the time to your requirements.

Request timeout (seconds)

If a request from WinGuard is not answered within the time that has been defined here, the request will be abandoned and a corresponding message will be sent to the requesting application.

60 (default) - if necessary, adapt the time to your requirements.

Device Id

It is possible to define an ID (text) for the Webserver here. The server will identify at WinGuard with this ID and can be monitored e.g. with a corresponding datapoint there.

empty (default) - (optional) enter an ID, if necessary.



Alternatively, an ID can be created with the button **Create !**

Create

With this function, an ID is created and entered into the field Device ID.

▼ Functions: Dialogue Settings - HTTP Server

In this section, the settings for the HTTP Server resp. for connection of the Webclients are defined.

Port

Defines the port that is opened by the Webserver upon start to register non-encrypted connections.

80 (default) - if necessary, adapt the port to your requirements.



Activate SSL

With the help of this option, an additional port for SSL connections can be defined.

active (default) - the port for SSL connections is opened upon start.

inactive - no SSL connections can be established.

Port (SSL)

Defines the SSL port that is opened by the Webserver upon start to register SSL connections.

443 (default) - if necessary, adapt the SSL port to your requirements.

Session Timeout (Seconds)

The session timeout defines the time period during which every session remains active in the background after the connection was terminated without logout.

300 (default) - if necessary, adapt the time to your requirements.

Document directory

Defines the document directory for the application, e.g. for the Webclient. Normally this should be a subdirectory of the Webserver. In this case only the relative path to the directory of the Webserver will be displayed in that field.

docs (default) - if necessary, adapt the directory to your requirements.



Alternatively, the directory can also be defined by the corresponding selection dialogue!



(Selection dialogue for document directory)

This function opens a selection dialogue for directories and enters the selected directory in the document directory field.

▼ Functions: Dialogue Settings - SSL

This section defines the settings for SSL connections to the server, e.g. of Webclients. The term **SSL** (Secure Socket Layer) means secure resp. encrypted connections.

 *A valid certificate is required for SSL connections!*

Force SSL

This option controls whether the Webserver admits only encrypted or also non-encrypted incoming connections. If this option is active, non-encrypted connection attempts will be redirected to an encrypted connections (http - > https).

inactive (default) - non-encrypted and, if required, encrypted connections are possible.

active - only encrypted connections are possible.

Certificate

The name of the certificate for the SSL encryption has to be entered here. If the file is contained in the directory of the Webserver, the file name will be sufficient, otherwise the path has to be entered with its name.

empty (default) - enter the name incl. path of the certificate, if necessary.

 **(Selection dialogue Certificate)**

This function opens a selection dialogue for files. The corresponding certificate file (file extension: **.pfx**, **.p12**) can be selected here. The name is entered automatically in the field Certificate.


Password

The password for the certificate can be entered here.


empty (default) - (optional) if required, enter the respective password.

▼ **Functions: Dialogue Settings - Service**

This section contains the functions for installation resp. uninstallation of the Webserver as a service.


 **Install**

This function enables the installation of the Webserver as a service. The Webserver is located in the same directory as the configuration program. A successful resp. non-successful installation will be displayed by a corresponding dialogue, if necessary incl. an error message.

 *This function is only available in case WinGuard Webserver has not yet been installed as a service on the computer!*

 **Uninstall**

This function enables the uninstallation of the Webserver that was installed as a service. A successful resp. non-successful uninstallation will be displayed by a corresponding dialogue, if necessary incl. an error message.

 *This function is only available in case a WinGuard Webserver has been installed as a service on the computer!*

▼ **Functions: Dialogue Settings - Other**

This section defines the settings for the logging of events.

Logging

Using the options, different event types can be selected for logging. Logging is registered in corresponding files in the subdirectory **Log**.

The following can be selected: *Debug, Info, Warnings, Errors*
Warnings, Error (default) - if necessary, select logging type.

9.1.3.3 Dialogue Infos

The dialogue **Info** provides different information with regard to the Webserver resp. the used modules.

▼ Example: Dialogue Info

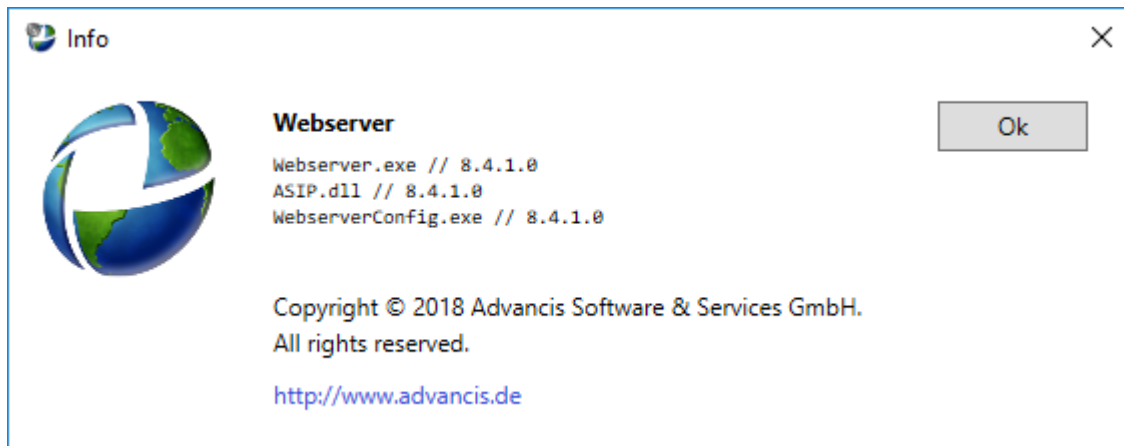


Figure 431: Dialogue Info

9.2 Webclient

The Webclient offers access to WinGuard via the web browser. Using HTML5 and Javascript, it is contained in the delivery scope of the WinGuard-Webserver. This website uses the web socket interface provided by the Webserver, whereas the Webserver itself uses the ASIP access for the connection to WinGuard.

The Webclient realizes its functionality via the ASIP access, using the Webserver as gateway. The Webclient can thus only provide the functionality that is allowed by the ASIP access. Therefore the Webserver and Webclient do not require any separate licensing as this is realized via the ASIP interface, i.e. via WinGuard.

Requirements:

- WinGuard-Webserver with ASIP interface (ASIPServer)
- WinGuard License module: **ASIP.WEB**
(direct the number of simultaneously connections / Webclients)
- HTML 5 compatible browser

Functional scope

It is expressly pointed out that the Webclient does not replace a WinGuard client. The Webclient rather serves as a viewer for display of datapoint states and event messages to be processed. The control and processing of events is only partly possible.

Basic functions:

- Display of datapoint states in the Explorer.
- Display of datapoint state counters in the Explorer.
- Display of datapoint graphics and text via the Explorer.
- Support of graphic event and state views.
- Control of datapoints via the Explorer.
- Control via switch areas, e.g. buttons.
- Display of events in the Eventlist.
- Display of event graphics and event message text.
- Processing of events with Eventlist functions.
- Display of the locations (Explorer) and the location graphics.
- Navigation in graphics incl. control of layers.

Important limitations:

- No automatic alerting!
(no automatic viewing of graphic and text, no sound)
- Datapoints cannot be controlled via graphics!
- Events can only be processed by the Eventlist functions!
- Texts resp. workflows cannot be edited!
- The rights are only user-dependent!

- System settings cannot be made!
- The editing of settings, rights, project data etc. is not possible!
- Additional functions such as e.g. user alarm are not possible!

9.2.1 Installation

The Webclient is automatically installed together with the Webserver installation and is usually located in the subdirectory **docs** of the Webserver. However, the files can also be saved in any other directory but this has to be defined during the configuration of the Webserver. The corresponding setting can be found in the [Dialogue Settings](#) ¹⁰⁹⁰ under **Documentation directory**.

The Webclient (content of the directory **docs**) can, as an option, also be copied to another WebServer and hosted there. The installation of any additional components is not required.

9.2.2 Configuration

Hosted via the WinGuard Webserver, the Webclient functions needs no further configuration. The necessary information for an SSL connection are configured via the used Webserver. Further settings are taken from the configuration file **web.cfg** out of the **Root** directory as well as from the WinGuard **ASIPServer** interface.

For hosting of another Webserver, it is only required to define the address of the WinGuard Webserver.

During configuration, there is also the possibility to define resp. extend different settings such as e.g. the available languages of the Webclient by making the necessary changes in the configuration file **web.cfg** (XML format) and by creating the respective language files with the localizer.



Changes should be done only at the described settings in sections "Redirect" and "AppSettings"!

▼ Example: Configuration file web.cfg

The following shows the default configuration file of the Webclient.

```
<?xml version="1.0" encoding="utf-8"?>
<WebCfg>
  <Websocket>
    <VerifyOrigin>true</VerifyOrigin>
    <UseXSRFToken>true</UseXSRFToken>
  </Websocket>
  <Redirect>
    <Rule match-path="(.*?)/de$" url="$1/#/de" />
    <Rule match-path="(.*?)/en$" url="$1/#/en" />
    <Rule match-path="(.*?)/version$" url="$1/#/version" />
  </Redirect>
  <Rewrite>
    <Rule match-path="^(.*\.(lng|css|js|png|gif|ico))(\?)" path="/$1" />
  </Rewrite>
  <AppSettings>
    <Setting name="DefaultWorkstation" value="Web" />
    <Setting name="AvailableLanguages" value="en,de" />
    <Setting name="DefaultLanguage" value="auto" />
    <Setting name="DateTimeFormat" value="DD.MM.YYY HH:mm:ss" />
    <Setting name="DateFormat" value="DD.MM.YYYY" />
    <Setting name="TimeFormat" value="HH:mm" />
    <Setting name="Mode" value="web,cop" />
    <Setting name="ValidAttachments" value="Note,GraphicRaster,Report,PDF,MP4,
      CameraImage,AVI,Word,CameraVideo,Powerpoint,Excel,Unknown" />
    <Setting name="OenormEnabled" value="0" />
  </AppSettings>
</WebCfg>
```

Figure 432: Webclient configuration file web.cfg

▼ Data: Configuration file web.cfg

Some definitions of the Webclient configuration file are as follows. This definitions can be modified and are used to add additional languages.

- **<WebSocket>**

Settings with regard to the websocket connection can be defined here.

<... > - if required, adapt the definitions.



These are important security settings that should only be adapted/deleted in exceptional cases!

- **<Redirect> - (Available Languages)**

For each language a correspondent line must be defined.

Example: `<Rule match-path="(^.*?)/de$" url="$1/#/de" />`

- **<Rewrite>**

Similar to Redirect, however the browser will not be redirected via a HTTP status code to a new URL, but the resource will be provided via an alternative path.

<Rule ... > - if required, adapt the definitions.

- **<AppSettings> - DefaultWorkstation**

This setting provides the possibility to adjust which workstation name is used after login.

...value="Web"... (default) - if necessary, define the name of the workstation.



*The workstation must be defined with the option **Usable as web station** in WinGuard and must not be active!*

- **<AppSettings> - AvailableLanguages**

This setting provides the possibility to adjust which languages are available. The languages are indicated separated by a comma.

...value="en,de"... (default) - if necessary, extend the available languages.

- **<AppSettings> - DefaultLanguage**

This setting defines which language will be selected as default upon loading of the Webclient.

...value="auto"... (default) - the language of the user's browser settings will automatically be used. If the browser language of the user is not contained in the list of available languages (AvailableLanguages), English will be set.

...value="xx"... - indicates a language abbreviation such as e.g. "en", "de", etc. for the corresponding language.

Example: `<Setting name="DefaultLanguage" value="auto" />`

- **<AppSettings> - DateTimeFormat**

Via this setting, the format for date and time that is used in the Eventlist can be set.

...value="dd.MM.yyyy HH:mm:ss"... (default) - if necessary, enter the desired format.



*A complete list of possible settings can be found under:
<https://docs.angularjs.org/api/ng/filter/date>*

- **<AppSettings> - DateFormat**

Via this definition, the date format can be controlled that is used for issue of the date at various points.

...value="DD.MM.YYYY"... (default) - if required, enter the desired format.

- **<AppSettings> - TimeFormat**

Via this definition, the time format can be controlled that is used for issue of the time at various points.

...value="HH:mm ... (default) - if required, enter the desired format.

- **<AppSettings> - Mode**

Via this definition, the mode for registration or functionality of the webclient can be controlled. If this setting is missing or has an invalid format, the default setting will always be "web,cop".

Allowed values are:

- *web* - full webclient.
- *cop* - limited webclient only for control operations (without event list, counters, datapoint control, etc.)

...value="web, cop"... (default) - if required, enter the desired functionality.

- **<AppSettings> - ValidAttachments**

- Via this definition, the types of allowed attachments can be set.

Allowed types are:

- *Note* - Notes
- *GraphicRaster* - Graphics
- *Report* - Reports
- *PDF* - PDF documents
- *MP4* - Video files in MP4 format
- *CameraImage* - Photo files / screenshots
- *AVI* - Video files in AVI format
- *Word* - Microsoft Word documents
- *CameraVideo* - Vendor specific video data
- *PowerPoint* - Microsoft PowerPoint Documents
- *Excel* - Microsoft Excel Documents
- *Unknown* - Other documents / files

...value="Note,GraphicRaster,Report,PDF,MP4,CameraImage,AVI,Word,CameraVideo,Powerpoint,Excel,Unknown ... (default) - if required, enter the desired types.

- **<AppSettings> - OenormEnabled**

The Ö-Norm display can be activated using this option.

"0" (default) - the Ö-Norm display is **not** active.

"1" - the Ö-Norm display is active.

Example: <Setting name="OenormEnabled" value="0" />



Changes are not taken over immediately - the Webserver and Webclient have to be re-started!

▼ Example: Add language in web.cfg

ToDo: Add additional language(s) (web.cfg)



The language abbreviation of the language (for example duch) to be added must be entered in the setting "AvailableLanguages" (see above).

Example: <Setting name="AvailableLanguages" value="en,de,nl" />



Activate forwarding.

Example: `<Rule match-path="(^.*?)/nl$" url="$1/#/nl" />`



Create the respective language file and define/translate accordingly:

Example path and file: `/lng/app_nl.lng`



Add key and complete name for the language in all language files:

Example for entry: `[lng.nl], Dutch`

9.2.3 Start and Login

The Webclient is started with an up-to-date web browser by entering the respective address (URL).

e.g.: <http://<Hostname or IP address>:<Port>>

Alternatively, with the help of an additional parameter, the language can be selected directly so that the login window will already be displayed in the corresponding language.

e.g.: <http://<Hostname or IP address>:<Port>/en>

To request information via the Webclient, the connection and the Webserver, the following address can be used after a user has been logged in:

e.g.: <http://<Hostname or IP address>:<Port>/version>

After successful establishment of the connection with the Webserver, the login page resp. the version information of the Webclient is displayed in the browser. The user has to enter his user name and password on the login page. After entering of the required data, the login will be executed using the button **Sign in**. After login the display area shows the information assigned to the location **All**.

i A webclient can not login using LDAP any time!

Example: Login

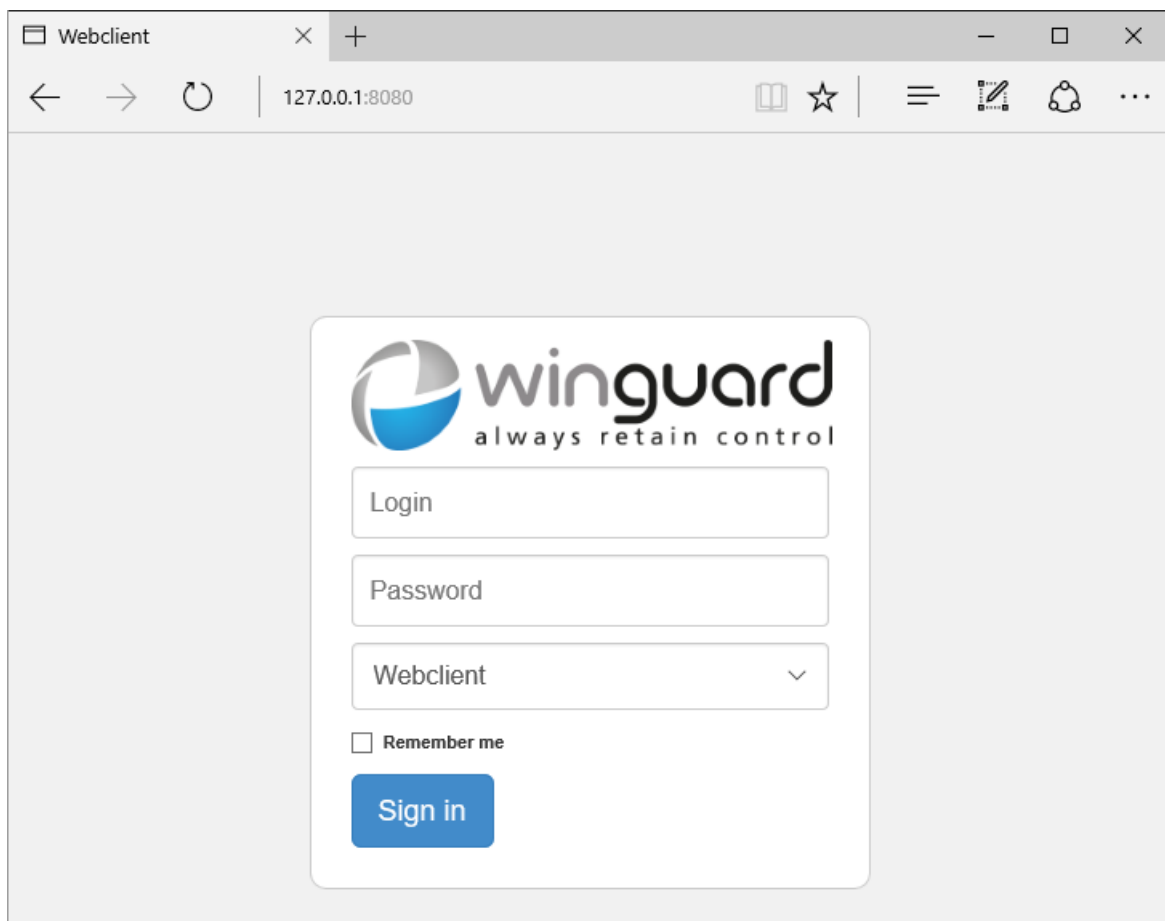


Figure 433: Login

▼ Functions: Login

After entering of the URL, the page for login to the Webclient is displayed in the browser window.

Login

The user name or identification of a user defined in WinGuard has to be entered.

empty (default) - enter the user name or identification.

Password

The password of the user must be entered.

empty (default) - enter the password.



The user password must not be empty!

▼ (Functionality)

The functionality for the webclient can be selected here, provided that it has been defined accordingly in the [Configuration](#) (web.cfg). Counters, event list, datapoint control etc. is not available under Control operations.

Webclient (default) - full webclient

Schaltvorgänge - limited webclient only for control operations



Remember me

This function allows the user to remain automatically logged in until the browser will be closed. If the option has not been selected, the user will automatically be logged out upon the next page request.

inactive (default) - a new login is required after a refresh.

active - the user remains logged in during the active session.

Sign in

This function executes the login process with the selected parameters.

9.2.4 User interface

The work and user interface of the WinGuard Webclient are mostly predefined and consist of the main window with the toolbar, the explorer bar, the display area and the Eventlist. In the explorer bar, both an explorer for the locations and an explorer for the datapoints are available. Using toolbar functions, the single explorers and the Eventlist can be displayed resp. hidden. The functions of the toolbar and the Eventlist are currently not configurable and preset by the Webclient.

Example: User interface

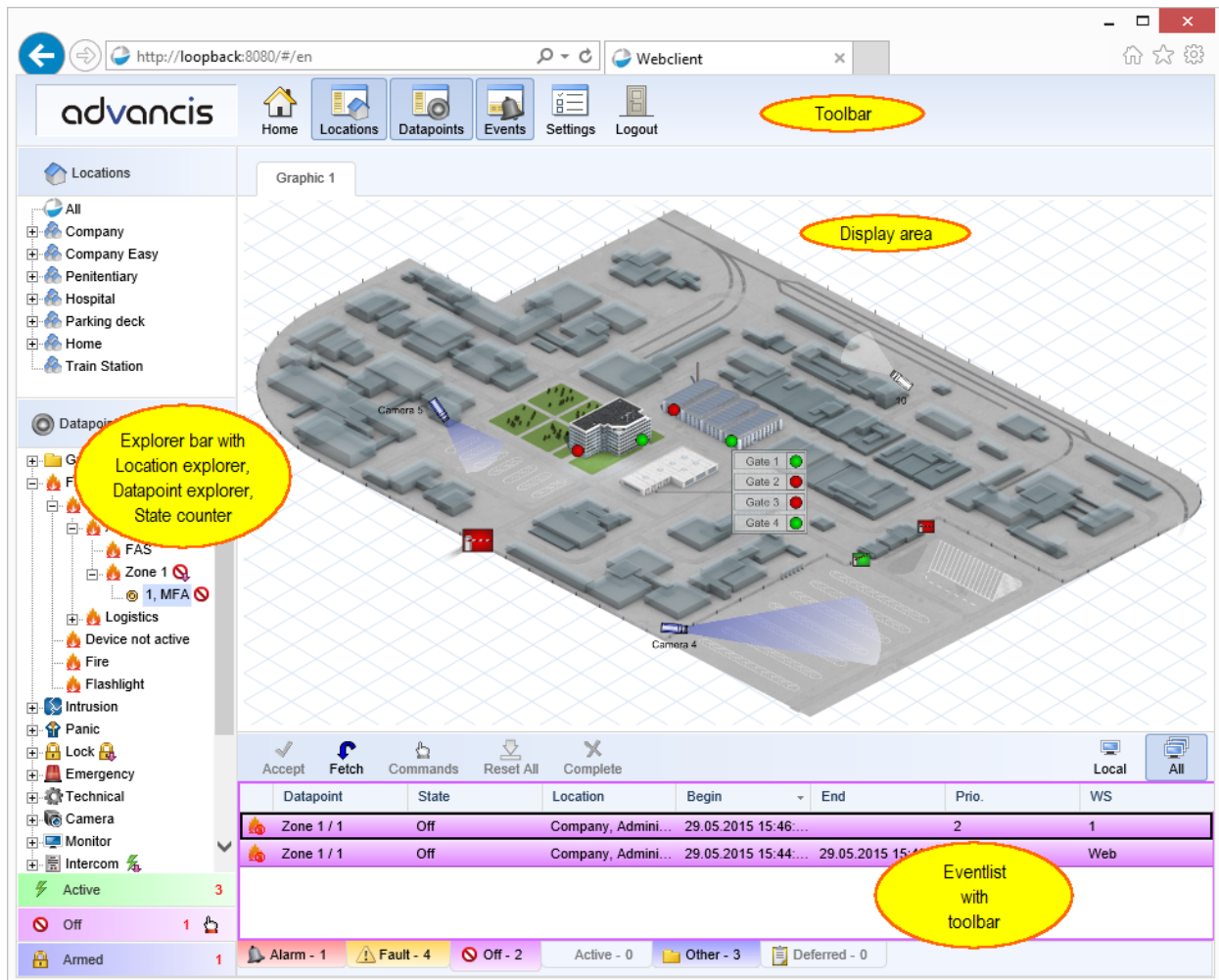


Figure 434: User interface

Important elements of the user interface are:

- Toolbar
- Explorer bar
- Display area
- Eventlist

Example: User interface with event display

The screenshot displays the Advancis WinGuard webclient interface. The top navigation bar includes 'Home', 'Locations', 'Datapoints', 'Events', 'Settings', and 'Logout'. A status indicator shows 'Off'. The main area is divided into a left sidebar for navigation and a central display area. The sidebar lists various locations and datapoints, with 'Administration' and 'Zone 1' selected. The central display shows a floor plan with rooms labeled 'Lobby', 'IT', 'Rest-room', and 'Office'. A device '1/1' is located in the lobby. Below the floor plan is a control bar with buttons for 'Accept', 'Fetch', 'Commands', 'Reset All', and 'Complete'. A table below the control bar displays event data:

Datapoint	State	Location	Begin	End	Prio.	WS
Zone 1 / 1	Off	Company, Admini...	29.05.2015 15:46:...		2	1
Zone 1 / 1	Off	Company, Admini...	29.05.2015 15:44:...	29.05.2015 15:46:...	2	Web

At the bottom of the interface, a summary bar shows: Alarm - 1, Fault - 4, Off - 2, Active - 0, Other - 3, Deferred - 0.

Figure 435: User interface with event display

9.2.4.1 Toolbar

The toolbar of the Webclient contains buttons via which general commands can be realized. The available functions are currently preset and cannot be changed by the user.

▼ Example: Toolbar

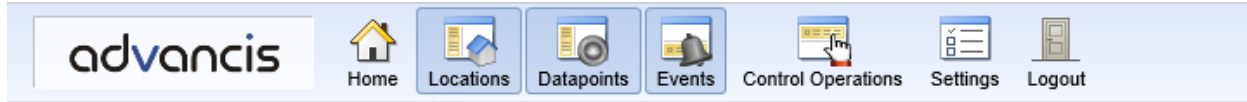


Figure 436:Toolbar

▼ Functions: Toolbar

This is a description of the standard toolbar functions.



Home

This function re-displays the view resp. interface that is displayed at the client after login. In the Webclient, the information assigned to the location **All** will be used.



Locations

Using this function, the explorer with the locations can be displayed resp. hidden.



Datapoints

Using this function, the explorer with the datapoints can be displayed resp. hidden.



Events

Using this function, the Eventlist can be displayed resp. hidden.



Control operations

Using this function, the corresponding view with COP functionality (see screenshot) is opened. However, via the webclient it is not possible to set up series control operations and calendar view is not available.



Settings

Using this function, the dialog **Settings** can be displayed.



Logout

This function logs the user out of WinGuard and terminates the active login session of the Webclient.

▼ Example: Event and datapoint display toolbar



Figure 437: Event and datapoint display toolbar

▼ Functions: Event and datapoint display toolbar

This toolbar (right side) is only available during an event or datapoint display. The respective display can

be closed via the symbol functions.

Button

Event type (alarm , fault, ...)

This element shows the triggering status (e.g. alarm, fault, etc.) of the event during an event display resp. the current status of the datapoint during a datapoint display. In addition, the corresponding display is closed with the help of this function.

9.2.4.2 Settings

The settings resp. the selection of language and workstation can be done within this dialog.

▼ Dialog: Settings

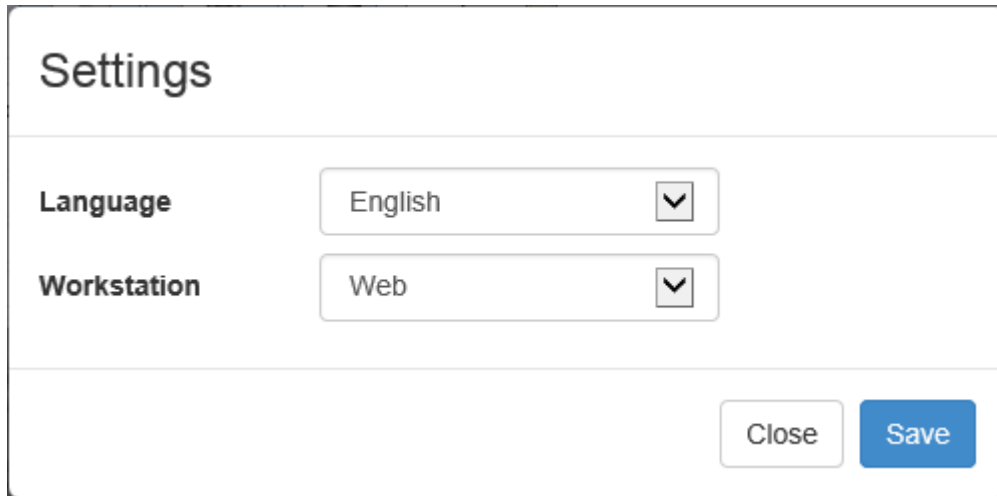


Figure 438: Settings

▼ Functions: Settings

This is a description of the standard settings functions.



Language

Using this drop-down menu, the language for the user interface of the Webclient can be selected.

Language - if necessary, select one of the available languages.



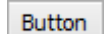
Workstation

Using this drop-down menu, the workstation name for the Webclient can be selected.

Web (default) - if necessary, select one of the available workstation names.

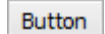


The selectable workstations must be defined in WinGuard with the appropriated settings!



Close

The dialog is closed without any confirmation, all changes will be discarded.



Save

Changes will be assumed and the dialog is closed.

9.2.4.3 Explorer - Locations

The location indications are centrally managed in WinGuard by a location registry that is hierarchically structured. Any number of hierarchy levels are available. By selecting a location, the location graphics can be directly displayed.

▼ Example: Explorer - Locations

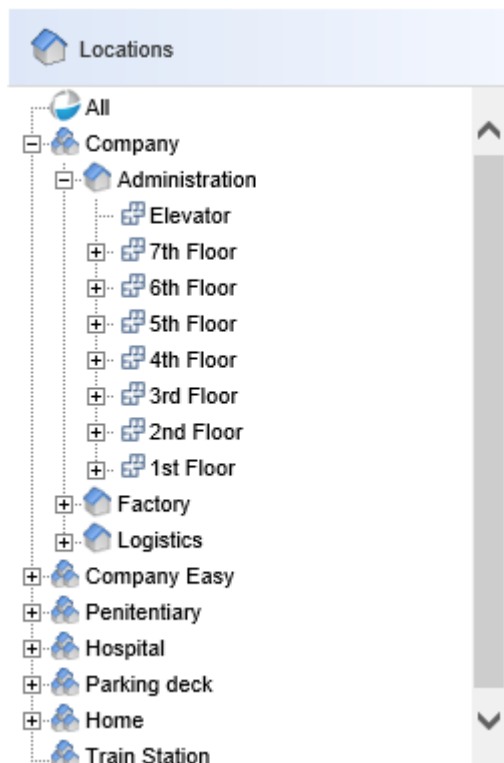


Figure 439: Explorer - Locations

▼ Functions: Explorer - Locations (general)

The general functions available in the location explorer are described here.

- **(Double resp. single click with left mouse key)**

By double-clicking on a location, the corresponding location graphic will directly be opened. If a location graphic is already active, a single click on a location will be enough to change the display accordingly.

i Please note that the selection of a location might influence the filter of the datapoint explorer!

9.2.4.4 Explorer - Datapoints

This explorer window displays the datapoints with their current states. Usually the datapoints are structured in a hierarchic order which can be changed via the settings in the filter. The datapoints are assigned to the corresponding datapoint categories in the top hierarchical level. The datapoint categories are only displayed here if datapoints of the respective category have been defined and assigned, otherwise these elements will be hidden.

The current states of the datapoints are marked by status symbols behind the datapoints. In addition to the symbol, it is possible to display a status text behind the symbol. If a symbol contains a small red down arrow [⚠], this means that not the datapoint itself is in the respective status but that one or several subordinated datapoints are in this status.

If the mouse is moved over a datapoint or detector, additional information concerning the datapoint is displayed in form of a small information window (**Tooltip**) next to the mouse position. As a standard, the datapoint name (incl. detector number if required), detector type, location and description will be displayed, provided that these contents have been defined. If detectors have been assigned to a datapoint, these are located under the datapoint to which they are assigned.

By selection of a datapoint, the display can be opened directly in the current status. If a test view is already active, a simple click on a datapoint is sufficient to change the display correspondingly. The display type (status or event view) depends on the settings in WinGuard.

The title bar contains additional symbols for display of the filter dialogue and for datapoint control.

Example: Explorer - Datapoints

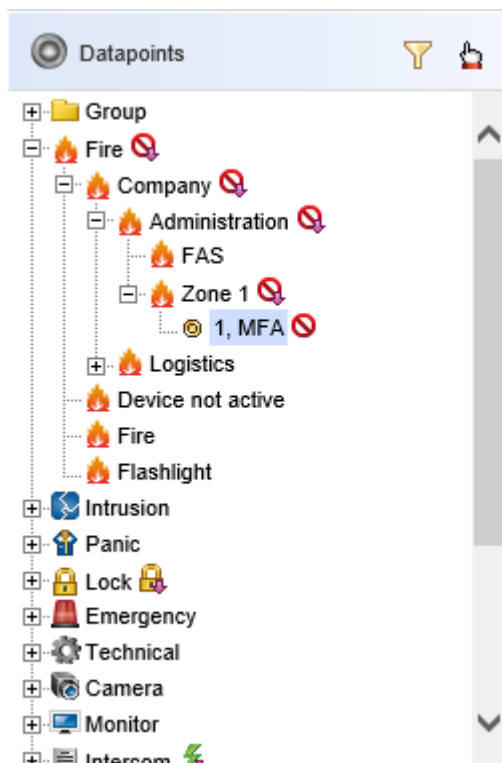


Figure 440: Explorer - Datapoints

Functions: Explorer - Datapoints (title bar)

 **(Datapoint filter)**

This function opens the dialogue for filtering of the datapoints.

 **(Commands)**

The dialogue **Commands** are displayed for the selected datapoints resp. detector. The desired command - if necessary with parameters - can be executed here.

▼ **Functions: Explorer - Datapoints (general)**

The general functions available in the datapoint explorer are described here.

• **(Double resp. single click with left mouse key)**

By double-clicking on a datapoint, the test view is opened directly for the datapoint in the current status. If a test view is already active, a single click on a datapoint is enough to change the display correspondingly.

▼ **Example: Explorer - Datapoints - Commands**

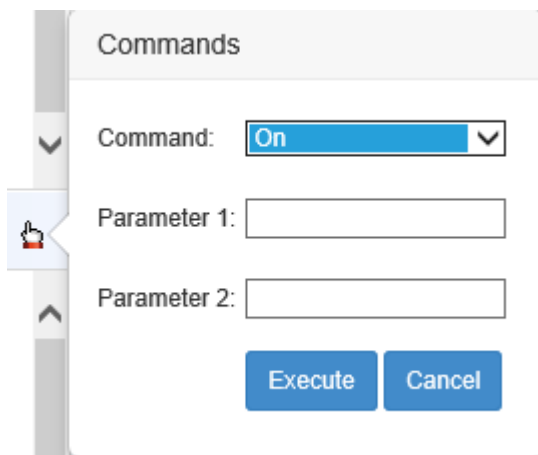


Figure 441: Explorer - Datapoints - Commands

▼ **Functions: Explorer - Datapoints - Commands**

Commands

The command to be executed is selected here.
empty (default) - select an available command.

Parameter 1

Optional field, depending on interface and datapoint category.
empty (default) - (optional)

Parameter 2

Optional field, depending on interface and datapoint category.
empty (default) - (optional)

Execute

The command selected from the command list is executed with the parameters entered in the fields Parameter 1 and 2 for the selected datapoint in the table, without any reconfirmation.

Cancel

No control function is executed and the dialogue will be closed.

▼ Example: Explorer - Datapoints - Filter

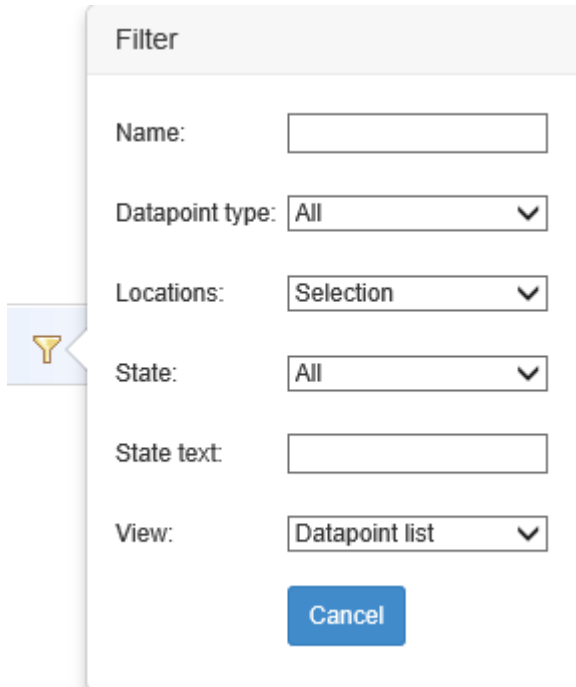



Figure 442: Explorer - Datapoints - Filter

▼ Functions: Explorer - Datapoints - Filter

 *All changes made here will immediately have an impact on the explorer display!*

Name

A text for searching in the datapoint names can be defined here. All datapoints containing this text in the datapoint name will be considered here.

empty (default) - no filter - all datapoints will be considered.

Text - only datapoints containing this text in their name will be considered.

▼ **Datapoint category**

A datapoint category can be selected as filter here. **All datapoint categories** and **All** can be selected.

All (default) - no filter - all datapoints will be considered.

Category - only datapoints of the selected category will be considered.

▼ **Locations**

This filter defines whether a location shall be additionally used as a filter.

All - no filter - the datapoints of all locations will be considered.

Current selection (default) - only datapoints assigned to resp. subordinated to the selected location will be considered.



Status

A status (status type) can be selected as filter.

All (default) - no filter - all states will be considered.

All<>Stand-by - all states **without standby** will be considered.

Status type - only datapoints that are currently in this status will be considered.



Status text

A text for searching in the status texts of the datapoints can be defined. Only those datapoints will be considered that contain **exactly** this text as status text.

empty (default) - no filter - all datapoints will be considered.

Text - only datapoints with exactly this text as status text will be considered.



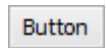
View

The display type of the datapoints in the explorer can be defined here.

Hierarchy (default) - The datapoints will be displayed in hierarchic order.

Datapoint list - The datapoints will be displayed as a list.

Single elements list - The datapoints incl. their detectors will be displayed as a list.



Cancel

This function deletes all defined filter elements and closes the dialogue.



The selected display type remains unchanged!

9.2.4.5 Explorer - State counter

The explorer with the state counters are available with the datapoint explorer. At the title bar you will find the number of datapoints with the dedicated state and a list of all this datapoints is shown in the explorer. Other filters are not available at the moment.

If you have selected a controllable datapoint you will find the control icon in the tile bar (q.v.: [Explorer - Datapoints](#) ¹¹¹⁰).

▼ Example: Explorer - State counter

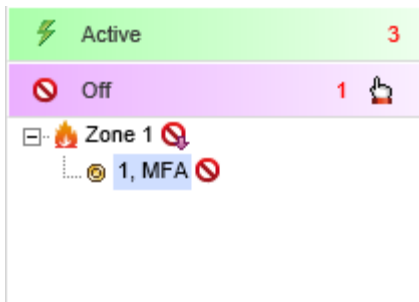


Figure 443: Explorer - State counter

▼ Functions: Explorer - State counter (Title bar)

(Commands)

The dialogue **Commands** are displayed for the selected datapoints resp. detector. The desired command - if necessary with parameters - can be executed here.

9.2.4.6 Display area

The so-called display area in the Webclient is a central element for information display. Elements for display and navigation are provided to the user. In addition, in case of an event, the graphic(s) or text assigned to the datapoint will be displayed here.

The control of datapoints is not possible directly out of graphics. The editing of texts resp. workflows is not possible as well.

Currently, commands in graphics are only provided by functional elements such as e.g. buttons so that correspondingly defined graphics are supported.

▼ Example: Display area without event display



Figure 444: Display area without event display

▼ Example: Display area with event display

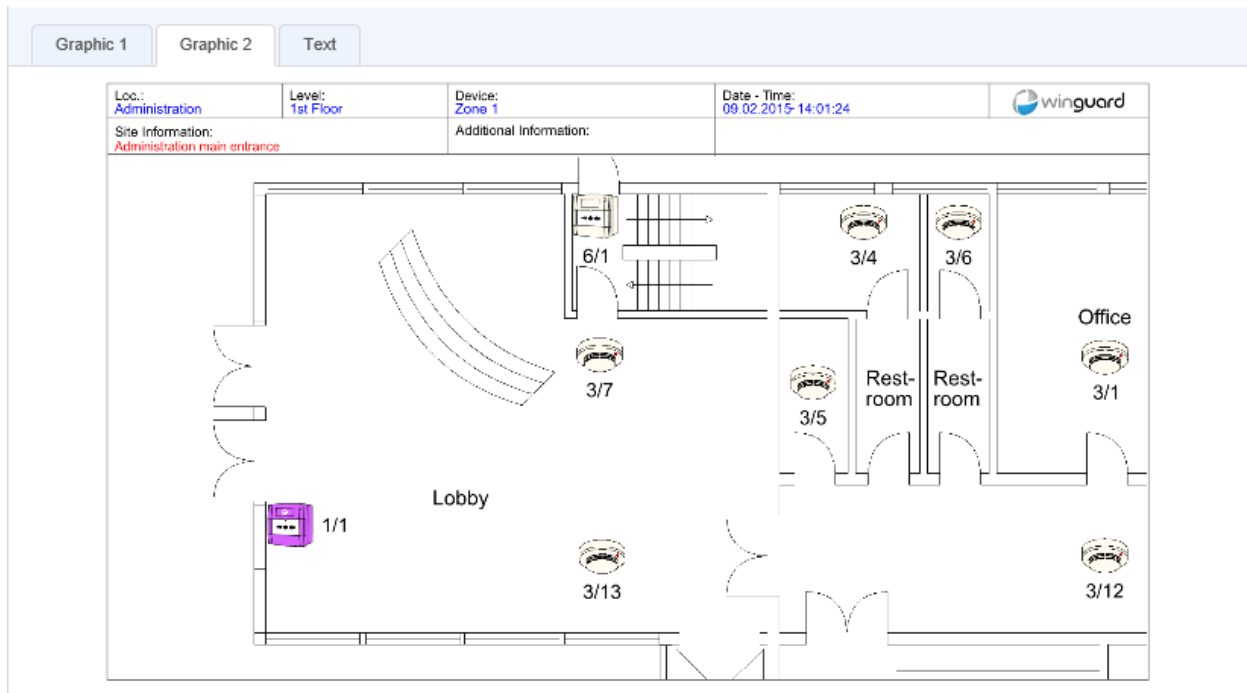


Figure 445: Display area with event display



The control of datapoints via graphics is not directly possible and texts resp. workflows cannot be edited!



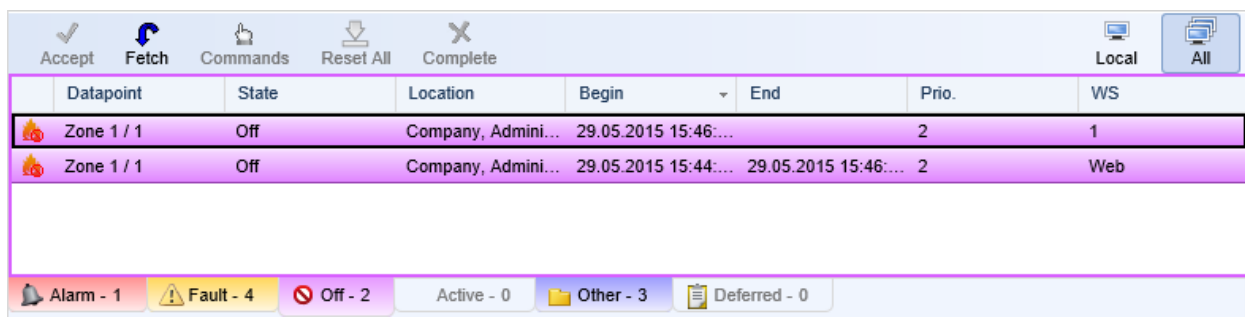
Functions in graphics are currently only available via buttons!

9.2.4.7 Eventlist

The Eventlist has its own toolbar. This toolbar and the tabs are preset and cannot be changed by the user. Tabs are shown for the following states:

- Alarm
- Fault
- Off
- Active
- Other
- Deferred

Example: Eventlist



Datapoint	State	Location	Begin	End	Prio.	WS
Zone 1 / 1	Off	Company, Admini...	29.05.2015 15:46:...		2	1
Zone 1 / 1	Off	Company, Admini...	29.05.2015 15:44:...	29.05.2015 15:46:...	2	Web

Toolbar: Accept, Fetch, Commands, Reset All, Complete, Local, All

Status Bar: Alarm - 1, Fault - 4, Off - 2, Active - 0, Other - 3, Deferred - 0

Figure 446: Eventlist

Functions: Toolbar - Eventlist (left)

Here is a description of the functions of the Eventlist toolbar.

Event selection

An event is selected by clicking on it. By a double-click, the assigned information such as e.g. graphic, text, etc. will be displayed automatically. If an event display is already active, a single click on an event is enough to change the display accordingly.



Accept

New events (blinking) will be accepted resp. confirmed. Events without client assignment (BPL = 0) will be assigned to the own client and can be edited there.



Fetch

Events assigned to another client are taken over to the own client and can be edited there.



Commands

The datapoint/detector that belongs to the selected event can be controlled via this function, if necessary. A corresponding menu with available commands will be displayed.



Defer

Using this function, a command for deferring can be sent directly to a system - provided that the respective system supports this command.

 **Complete**

The event will be removed from the current Eventlist and logged in the archive. The event cannot be further processed anymore.

▼ **Functions: Toolbar - Eventlist (right)**


Using this functions you will have the option to show all events or only the events assigned to this workstation.


 **Lokal**


Activating this function, only the events from this workstation are visible.

 **All**

Activating this function, all events from all workstation are visible.

 *Currently, events can only be edited with the Webclient using the functions of the Eventlist!*

 *Texts resp. workflows cannot be edited here!*

 *No automatic alarming (graphic, text, sound)!*

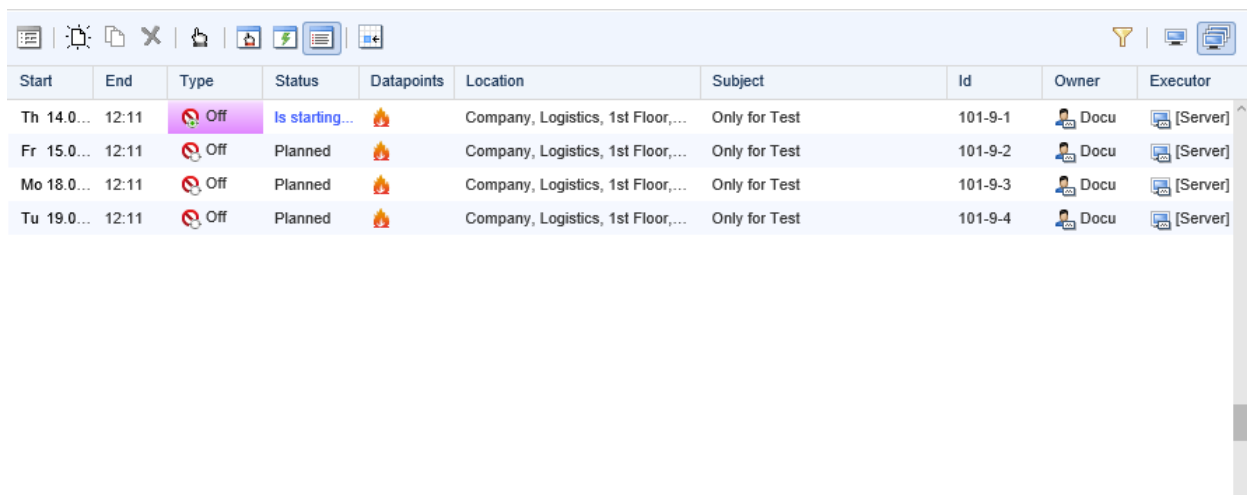
9.2.5 Control Operations - Tables

The table view lists the control operations that are defined in the system. Control operations can be set up, copied and deleted here. By doubleclicking on one of the entries or by selection of an entry and clicking on the button Form view, the edit window ([Control operations - Formular](#)¹¹²⁶) can be opened. Via corresponding functions of the toolbar, the general table view can also be switched to other views. Upon view of the list without time filter, the display is in so called **Endless Mode**. In this mode, the list will be sorted according to **Start** as the list might consist of infinite elements (in the future). Only with limitation by a time filter, the list can also be sorted according to other columns.

If sorting is available, by clicking on a column headline, the list will be sorted according to this column. Upon clicking once more, sorting will be made in reverse order. The fact that and how it is sorted according to a column is shown by a small symbol in the headline. In case of two similar entries, it will always be sorted according to the start time, if the start time is the same too, it will be sorted according to the Id.

Between toolbar and table view there is the info bar that contains information with regard to filtering. If no filters are active, the info bar is not displayed.

Example: Control operations table



Start	End	Type	Status	Datapoints	Location	Subject	Id	Owner	Executor
Th 14.0...	12:11	Off	Is starting...		Company, Logistics, 1st Floor,...	Only for Test	101-9-1	Docu	[Server]
Fr 15.0...	12:11	Off	Planned		Company, Logistics, 1st Floor,...	Only for Test	101-9-2	Docu	[Server]
Mo 18.0...	12:11	Off	Planned		Company, Logistics, 1st Floor,...	Only for Test	101-9-3	Docu	[Server]
Tu 19.0...	12:11	Off	Planned		Company, Logistics, 1st Floor,...	Only for Test	101-9-4	Docu	[Server]

Figure 447: Control operations table

Functions: Toolbar table view left



Table view

This function switches the window to table view.



New

This function sets up a new control operation.



Copy

This function creates a copy of the selected control operation.



Delete

This function deletes the selected control operation after confirmation.



Commands

This function opens a popup with the command menu.



Operation required

Using this function, it is switched to list view of control operations with required operation.



Active control operations

Using this function, it is switched to list view of active control operation.



List

Using this function, it is switched to the general list view.



Today

Using this function it can be switched to the current date or to the first COP with a start time >= today 0:00.



*Only active if the list is in **Endless Mode** (no time filter active)!*



Current timeframe (Date)



If calendar view is active, the current timeframe is displayed here that can also be changed via the arrow functions (◀ ▶).

▼ Functions: Toolbar table view right



Filter

This function opens the dialogue with the filter settings. The button will show a green checkmark (✓) if a filter is active.



*The filter is not available for list display **Operation required!***



Observed control operations

The filter for **Observed control operations** is activated via this function.



All control operations

The filter for **Observed control operations** is deactivated via this function.

▼ Example: Columns of table view / list

• Start




The start time including weekday, date and time is displayed here. The date is omitted for the next control operation at the same day, except for the top list entry where the date will always be displayed.



*Weekday and date will be displayed in **red** if it is a day defined as **free day** in WinGuard !*



In this case, no times will be displayed in the series list!

- **End**
Time and, if required, date (only for processes with date change) will be displayed.
 *In this case, no times will be displayed in the series list!*
- **Type**
In this column, the type of control operation is displayed with icon, whereas active processes are highlighted in colour.
 *Possible types are: **Disablement**, **Revision**, **Armed**, **Disarmed**, **Active**, **Inactive** and **Note**.*
- **State**
The execution state is displayed here as text, the colour depends on the state.
- **Datapoints**
The icons for all contained datapoint categories are displayed here. The names of the datapoints are visible over each icon as tooltip.
- **Location**
In this column, the superordinated location for the contained datapoints is displayed.
- **Subject**
This column contains the subject defined for the control operation.
- **Id**
The unique Id of the control operation generated by the system is displayed here.
 *The **Id** consists of the workstation number, a control operation number and, if required, a consecutive number of the series element!*
- **Owner**
This column displays the name of the owner including icon.
- **Executor**
This column displays the name of the executor including icon.

▼ **Functions: Context menu Table view**

- **Redo operation**
For single operations with state errors, this function re-sends the corresponding commands (according to state Started or Ended) to all datapoints that are not in target state.
- **Confirm End**
For single operations with status **Ended (Error)**, this function removes the (Error) in order to complete the control operation manually.
- **Approve**
For requested single operations with state **Approve?**, this function sets the control operation as planned, further steps will follow automatically.

- **Decline**
For requested single operations with state **Approve?**, this function sets the state to **Declined**.
- **Start now**
Using this function, the selected control operation (future single operations) can be executed directly.
- **End now**
Using this function, the selected control operation (active single operations) can be terminated directly.
- **Defer**
This function opens a dialog for deferring the start of the selected control operation.
- **Defer End**
This function opens a dialog for deferring the end of the selected control operation.
- **Activate**
Via this function, a deactivated control operation (single operation) can be re-activated.
- **Deactivate**
Via this function, the selected control operation (active single operations) can be directly deactivated.
- **New**
This function sets up a new control operation.
- **Copy**
This function creates a copy of the selected control operation.
- **Delete**
This function deletes the selected control operation after confirmation.
- **Edit**
This function switches the window to form view.

9.2.5.1 Filter

To select the data in the table view, the selection elements are provided via the filter dialog.

▼ Dialog: Control operations - Filter

Filter

[Text Input]

All Types

All Datapoints

All locations

All states

01.06.2016 00:00

01.09.2016 00:00

[Green Funnel]

[Red Funnel]

Figure 448: Control operations - Filter

▼ Functions: Control operations - Filter

i For activation of the filter elements, the checkboxes on the right side of the filter dialog have to be activated. In case of a change in the filter, the checkbox will be selected automatically!

(Free text)

It is possible to define a text for searching in Subject or Id. The search will be executed case-insensitively.

empty (default) - no filter - all elements will be considered.

... - only points with this text in their name will be considered.

(Operation type)

It is possible to select an operation type as filter here. The following types can be selected:

All types, Disablement, Revision, Arm, Disarm, Active, Inactive and Note.

All Types (default) - no filter - all operation types will be considered.

... - only datapoints of the selected operation type will be considered.

(Datapoint category)

A datapoint category can be selected as filter here. The following categories can be selected:

Current selection and single datapoint categories incl. datapoint groups.

All (default) - no filter - all datapoint categories will be considered.

... - only datapoints of the selected category will be considered.



(Location)

A location can be selected as filter here, whereas the location will be applied related to the datapoints. The following locations can be selected:

All locations or current selection

All locations (default) - no filter - all locations will be considered.

Current selection - only locations that are subordinated to the location selected in the location explorer will be considered.



The selection relates to the location selected in the location explorer!



(State)

A combination of control operation states can be defined as filter here.

All states (default) - no filter - all states will be considered.

Deactivated - all deactivated states will be considered.

Not deactivated - all active states will be considered.

Ended - all ended control operations will be considered.

Not ended - all control operations not ended yet will be considered.

Ended - all processed control operations will be considered.



(Schedule section)

It is possible to define a schedule section (start and end time) in the format DD.MM.YYYY SS:MM as filter here, in order to limit the result.

... - only control operations of which the execution is in the defined schedule section will be considered.



(Delete filter)

This function deactivates all active filter elements and closes the dialog.



The selected display form remains unchanged!



(Use filter)

By execution of this function, the defined filter elements will be used and the dialog will be closed.



(Activate / deactivate filter element)

Right to the filter elements or buttons of the dialog, there are checkboxes via which the corresponding filter elements can be activated.

inactive (default) - the element will not be considered for filtering.

active - the element will be considered for filtering.


9.2.5.2 Defer Control Operation


Using the dialog **Defer control operations**, the start times of control operations still waiting for execution or the end times of already active control operations can be deferred or changed. The dialog is opened via the corresponding functions of the definition windows for control operations.


▼ Dialog: Defer control operation


Defer Control Operation



Control Operation

 Off (101-9-2) Planned

 15.07.16 11:11 - 12:11 (1 h)

 Only for Test

 Company, Logistics, 1st Floor, Engineering Room

  Zone 2

Defer By

Hours ▾

New time





Start: Now

End:

Duration: Hours ▾

Figure 449: Defer control operation

▼ Data section: Control operation

-  **(Operation type and Id)**
The operation type and Id are displayed here for checking purposes.
For control operations left to be executed, the state (e.g. **Planned**, **Deactivated**, etc.) will always be displayed at the right top of this line, however no command will be available there.
-  **(Date and Time)**
For checking purposes, date, schedule section or duration will be displayed here.
-  **(Subject)**
The subject will be displayed here for checking purposes.
-  **(Location)**
The location structure which all datapoint categories have in common will be displayed here.

 (Datapoints)

A list of all datapoints including datapoint category (symbol) that are assigned to the control operation will be displayed here.

▼ Data section: Defer by

(Defer time)

Alternatively to entering the **Time**, it is also possible to directly indicate a time period for deferral of the control operation or to indicate the end of it. By this entry, the setting of Start and End will be adapted accordingly.


empty (default) - if required, enter the deferral as an alternative to **Start / End**.

▼ Data section: New execution time

Start

If active, the new start point with date and time for execution can be defined here.

... - enter date and time directly or select them.


 *If the control operation is already active, this entry will not be possible anymore!*

Now

Using this option, the execution time can be set to the current time so that the execution will be immediately started upon saving. The selection for the start time will be deactivated, if required.

inactive (default) - the defined **Start** time will be used for execution.

active - the control operations will be executed immediately upon saving.

 *If the control operation is already active, this entry will not be possible anymore!*

End

The end of execution with date and time can be defined here. By this entry, the value for **Duration** will be adapted automatically.

... - enter date and time directly or select them.

Duration

In addition, it is also possible to directly indicate the duration of the control operation, as an alternative to the entry of the end time. By this entry, the selection of the end time will be adapted accordingly.

... - if required, enter the duration as an alternative to **End**.

9.2.6 Control Operations - Form

In the form view, an edit form is displayed in which the data of a control operation can be entered or changed. For this purpose, corresponding entry elements are provided.


Via the display field at the top right side of the form, it is visible whether a **Single operation** or a **Single operation (from Series)** is displayed in the form. The contained characteristics are the same for both cases, as a series element is always displayed as single control operation (from series).


For **Single operations**, start and end of execution will be explicitly indicated with date and time. Saving will be executed in UTC time. For the user, time will be converted automatically in accordance with the


time zone. In case of a manual change of the time, no time conversion will be made.


The setup of **Series definitions** is not possible in the Webclient.

The datapoint list contains the datapoints and/or single sensors concerned by the control operation. In principle, datapoints of different categories and interfaces can be operated jointly.

 Upon automatic calculation of duration, the unit is set as well. The largest unit will be displayed if the value is a smooth number, or *.25, *.5 or *.75 (steps of 0.25).
Thus, in case the duration is 75 minutes, this would be displayed as **1,25** hours, 36 hours would be **1,5** days, but 30 minutes will remain 30 minutes, etc.!

 Furthermore it has to be considered that the duration resp. start and end can differ from the entered values if they are within the range of a time shift (e.g. summer time shift in Europe)!

 All contained datapoints should support the global commands required for the control operation!

 **A check whether the contained datapoints can actually be operated (also jointly) will not be performed!**

▼ Window: Control operations - Form

Type:

State: Id:

Subject:

Info:

Start: Now

End:

Duration:

Datapoints:

Name	State	Location
Zone 2		Company, Logistics, 1st F...

Options:

- Approval required
- Start requires confirmation
- End requires confirmation
- Set info as note

Executor:

Figure 450: Control operations - Form

▼ Functions: Toolbar Form

The functions of the toolbar change according to the current state of the form view, i.e. that functions such as **OK** or **Cancel** will only become visible or invisible after making changes.

Back (last list)

This function switches the window back to list view.

OK

This function saves the current settings (such as **Save**) and switches back to **Table view**.

Pending control operations might be executed directly!



Cancel

Using this function, the realized changes will be canceled without any further confirmation and it will be switched back to **Table view**.



New

This function sets up a new control operation.



Copy

This function creates a copy of the selected control operation.



Delete

This function deletes the selected control operation after confirmation. Here you can decide whether only this element or, if required, the total series shall be deleted.



Undo

This function resets the realized changes so that the information lastly saved will be displayed again.



Save

This function saves the current settings.



Pending control operations might be executed directly!

▼ Data section: Control operation

Type

The control operation type is defined here. This type is implicitly defining the actions to be executed upon start and end as well as the target state to be monitored, if required. Only global control commands (i.e. no interface-specific commands) will be used. Thus, an interface has to support global commands so that its datapoints can be controlled.

The following is available: **Disablement, Revision, Arm, Disarm, Active, Inactive and Note Disarm (default)** - select the required type.

(Series type)

The series type Single operation is defined or displayed here. A selection is not possible here.

Single operation (default) - a single control operation is defined.

State

The execution state of the control operation is displayed as Info. This field cannot be edited. In case of new data sets, the state **New** is displayed before first saving. However, there might be commands available via the context menu.

Id

The Id will be automatically created by the system and cannot be edited. It is displayed for information purposes.

Subject

The subject can be entered manually or selected from a list of predefined subjects for this control operation type.

empty (default) - enter a text or select it.

i This is a mandatory field - length of max.100 characters!

Info

In the multi-line entry field, any information can be entered for the control operation (free text).

empty (default) - if required, enter a text.

i Length max. 255 characters!

Start

For single operations, the start point with date and time will be defined here.

empty (default) - enter date and time directly or select them.

Now

Using this option, the execution time can be set to the current time so that execution will immediately be performed upon saving. The selection for the start time will be deactivated, if required.

inactive (default) - the defined **Start** time will be used for execution.

active - the control operations will be executed immediately upon saving.

i If activated, it is not possible to enter/select a **Start** time!

End

For single operations, the end with date and time for execution is defined here. By this entry, the value for **Duration** will be adapted automatically.

empty (default) - enter date and time directly or select them.

Duration

Alternatively to entering the end time, it is also possible to directly indicate a schedule section for the duration of the control operation. By this entry, the selection of the end time will be adapted accordingly.

empty (default) - if required, indicate the duration as an alternative to **End**.

(Datapoint list)

The datapoints or sensor belonging to the control operation are defined here and displayed in a list with information regarding the location and state.

Elements of the datapoint list.

- **(Symbol)** Symbol of datapoint category
- **Description** Name of datapoint, if required including sensor number
- **State** State of datapoint / sensor
- **Location** Location of datapoint / sensor

empty (default) - enter the datapoints from the explorer via drag&drop.


 **(delete selected datapoints)**

Using this function, the datapoints selected in the list will be deleted without any further confirmation.

Executor

The executor can be selected here. All workstations that have been defined as **Usable for control operations** can be selected here. The field can only be edited by users having the special right **Control operation.Administrate**.

Default (default) - if required, select an executor.

 *It is generally not possible to select an executor for series elements!*


Approval required

This is no option that is saved, however it can be selected upon setup of a new control operation. This option is automatically set if the user setting up the control operation does not have the required rights to control operations or the contained datapoints. If no control rights for datapoint(s) are available, the checkbox will not be selected automatically.

Only after approval, the control operation will actually be scheduled and executed in the same way as other control operations, under consideration of all other options.

inactive (default) - no approval required.

active - approval is required.

 *For series elements, this option is generally not available!*

Start requires approval

This options defines whether the control operation will be directly executed upon start time or whether a confirmation (popup) is required. If this is the case, the action will be set to **Wait for start approval** and displayed with the state **Start?**. The observers of this control operation will be notified. Only after given approval, the control operation will actually be started and the corresponding commands will be sent.

inactive (default) - no approval required for start.

active - approval required for start.

End requires approval

This option defines whether the control operation will automatically be terminated upon End of the action or if it will be set to **Wait for end approval** which will be displayed by the state **End?**. The observers of this control operation will be notified. Only after given approval, the control operation will actually be terminated and the corresponding commands will be sent.

inactive (default) - no approval required for end.


active - approval required for end.

Set info as note

This option defines whether the text defined under Info will be set as note text for all datapoints contained in the control operation or not. For the type Note, the option is set automatically and cannot be deactivated. The indication of an info text is mandatory for such control operations.

inactive (default) - the info text will not be used as note.

active - the info text will be used as note.

 *For control operations of the type **Note**, the option will be set automatically and cannot be deactivated!*

(Location)

In the output field at the bottom end of the window there is an information with regard to the joint location of all datapoints.

9.3 Hints

9.3.1 Windows Services

The service **WinGuard Webserver** is also managed by windows services. The current settings of the service can be checked and if necessary be adapted here.

The selection of the Windows console for the services is made via the corresponding windows function **Management|Services**. Alternatively, it can also be started directly via the button **Services** of the configuration program.

▼ Windows console: Services

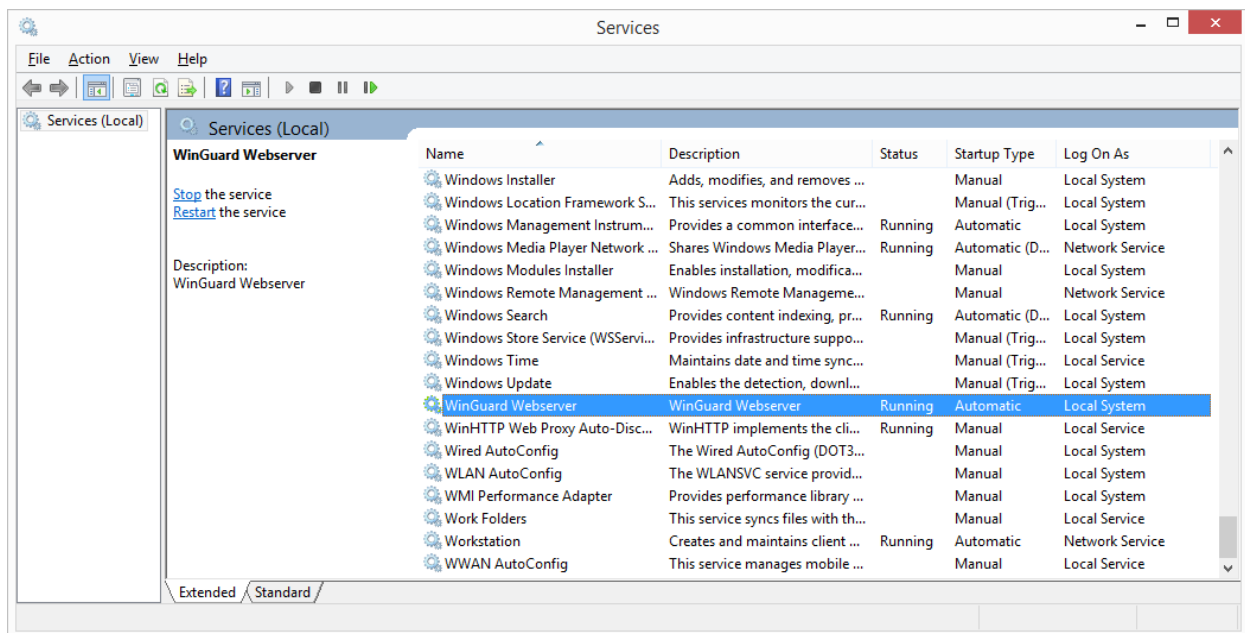


Figure 451: Windows console Services

9.3.2 System access (firewall)

There might occur a problem upon first start of the Webserver, if the connection is activated for the first time and the corresponding IP ports have not yet been activated in the local firewalls. A connection between WinGuard and the Webserver resp. the Webclient and the Webserver might be impossible in such case.

The easiest solution is to start WinGuard normally one time, including user interface (UI) and activated ASIPServer interface. When opening the IP port there will be a corresponding note from Windows, offering the possibility to activate the IP port directly. The same applies to the connection between the Webserver and the Webclient.

10 Tips and Help resolving Problems

In this section you will find various tips and support for working with WinGuard. Additionally, we want to help you identify potential problems early and to resolve them faster.



Further information can also be found on the internet on our homepage:

<http://www.advancis.net>

*as well as in the current support infos **supportinfos_en.chm** in the **help** subdirectory!*

10.1 Installation Folder

During installation, the directories for program installation and the project directory for the data are requested and used correspondingly. For this purpose, the program directory is linked with the data directory in the registry database of Windows®.

If WinGuard is started out of another directory and if no data directory has been assigned yet to this (new) program directory, the data will also be expected to be in the program directory. Then, a data directory can be selected or defined in the Local Settings. This process will create a corresponding entry in the registry database of Windows® and link the program directory with the data directory. After completion of this function, WinGuard will immediately interrupt the connection to the previous data directory and start with the data of the selected directory.

In case sufficient access rights to the installation directory and the project directory cannot be guaranteed, a copy of the installation folder can be created in a section with full access rights and W can be started from there. The same applies for the directory with the data. After that, it is only required to link the program with the data directory (as described above).

For any updating of the installation folder, the copy has to be updated manually as well! Even if several WinGuard systems shall or have to be operated on the same PC, e.g. for scenarios in which the SystemManager is applied, the program directory cannot be identical to the installation folder. Thus there are several situations in which an own program directory and usually also data directory is used. This has to be considered for later update processes.

During installation and update via %WINGUARD%>- setup, the installation folder contains a file Setup.xml describing the installed software scope. It is not relevant whether this file is taken over into a program directory during copying or not.



For every Windows® account under which WinGuard shall be operated, full execution and access rights to the program and project directory incl. all subfolders are required!












In case of an update using Setup, only the original installation folder will be updated. All other WinGuard program directories have to be updated manually!

10.2 Restore

If, due to data loss, there should be the case that you have to import a backup, the further proceeding depends on the current situation. Usually you will be able to set the WinGuard project directory with all its data and subdirectories back to the last saved status.

In principle, a Restore is a projection change that might affect all sections of a projection. For this reason, a total restart of the system has to be made after a Restore. This means that, in case of a multi-client system, not only the server but also the clients, in particular those having their own interfaces, should be restarted. However, in most cases a module restart of all interfaces will be sufficient, provided that all clients are connected online with the server again.

ToDo: Execute restore

-  Execute backup at the server resp. standalone system.
-  Shut down Standby Server (if existing).
-  Execute Restore at the server resp. standalone system.
(After completion of the restore, the client will directly be started with the new data)
-  Shut down Server resp. standalone system.
-  Restart Server resp. standalone system.
-  Start Standby Server (if existing).
-  Wait until all clients having own interfaces are online again.
-  Restart all interface modules of the clients (without Server resp. Standby server).
-  Test the total system and the interfaces.

10.3 Maintenance

During the use of WinGuard, the current data set is usually changing continuously, thus it is recommended to execute a regular data backup. In addition, it often makes sense to compress the database from time to time or to swap out archives and logs in order to optimize the current data set.

General information:

In general, in addition to their own log data, all servers also keep caches of all logs of all other workstations. A problem might arise if cached log files are deleted that still exist at their respective source - so that the servers will receive them again upon the next synchronization.

Each workstation, no matter of which type, should keep its log data at least until it has been connected and synchronized with all (other) servers min. once. Thus, if in a system with several servers, at least one server goes offline for a longer time, this time span should definitely be covered by the retention time. For this reason, the retention time for each server should be selected in such a way to avoid deleting something at the server which still exists at the clients.

Automatic compressing of the project database is usually not required, however this can make sense after numerous or extensive changes to the projection. It only has to be performed once then.

Settings:

The execution interval for maintenance should not be defined too long. It makes sense to have a weekly interval. For systems with a high amount of events, it can even be helpful to perform daily maintenance in order to optimize the event databases on all clients.

In case the maintenance is defined globally, all maintenance works will be performed approximately at the same time. In order to avoid deletion of new and not yet synchronized data (e.g. also if a client does not even run during planned maintenance), a retention time of 2 to 3 maintenance periods is helpful, i.e. the period length is defined, tripled and only data older than that will be deleted.



In general, it makes more sense to execute automatic maintenance more often than very seldom or never!

It makes sense to have a weekly interval!

Example:

Maintenance interval one week => Data retention should be at least around 20 - 30 days.

10.4 Encryption

For encryption, plain text, i.e. a readable text or data stream, converted into a ciphertext, i.e. an incomprehensible character or data sequence, by using a key. Cryptographic methods are used here. It is differentiated between symmetric encryption, i.e. both sides use the same key for encryption and decryption, and asymmetric encryption, i.e. both sides use different keys.

The principle of public and private key is based on the asynchronous encryption, i.e. what has been encrypted by the public key can only be decrypted using the private key and vice versa.

Although the use of public and private keys might indicate something else, the data streams in WinGuard are always encrypted using AES 256. The asynchronous encryption is only applied during the connection phase for negotiating the joint session key.

Public and Private Key

Public and private keys are a so called key pair within the scope of asymmetrical encryption. If a data stream is encrypted by the public key, it can only be decrypted using the private key and vice versa. Usually, a transmitter is realizing the encryption using the public key of the remote station, whereas the recipient only decrypts using the known private key. The advantage of an asymmetrical encryption system is that the private key only has to be known to one party, i.e. the owner of the keys.

Consequently, certificates are also encrypted (or signed) by the private key and can be checked by anyone using the contained public key, however it is not possible to change a certificate or corresponding parts of it without the secret private keys of all involved parties (owner, certification authority). Anyone possessing the private key can masquerade as user of a certificate and take over his identity. An encrypted file can only be read by somebody who possesses the private key. If the private key is lost, the encrypted data will be lost forever too. At the current state of the art, a decryption of the data is impossible without the private key. For this reason, special care is required using private keys!

Usually, the private keys are safely stored and managed in the Windows Certificate Store, in addition, their use can be limited to particular Windows user accounts.



Certificates for file encryption should always be saved additionally as a backup at a save place!



If the private key is lost, the encrypted data will be lost forever!

10.5 Certificate

A certificate is a data set containing particular characteristics of persons or objects whose authenticity and integrity can be checked by cryptographic methods.

A key pair, i. e. the so called public and private key, belongs to each certificate. In WinGuard, public key certificates are used according to the standard X.509, i.e. the public key required for checking the certificate is contained in the certificate itself.

Certificates are only issued by a certification authority. Usually, this will be an official organization, but it can also be the local computer. the information with regard to the certification authority is also included in the certificate.

A certificate is considered as trustworthy if the issuing certification authority is trustworthy, it is considered as not trustworthy if the certification authority is not trustworthy or if the certificate has explicitly been marked as not trustworthy.

It is stored in the Windows certificate store whether a certification authority is considered as trustworthy. In addition, the certificates themselves are also stored locally there and - if available - the related private keys.

For the use in WinGuard, the two characteristics of the applicant General Name = **CN** (Common Name) and Organization Unit = **OU** (Organization Unit) are of special importance for the certificates.

With the indication in the **OU** characteristics, the intended purpose of use of the certificate is defined. Currently, certificates in WinGuard are either used for IP communication - in the following called **IP** certificates - or for file encryption - in the following called **FS** certificates. In **OU**, the certificates are marked accordingly with **adv.ip** - for **IP** certificates or **adv.fs** for **FS** certificates. Upon selection of certificates, only those certificates corresponding to the purpose of use will be offered.

The **CN** characteristics is only relevant for IP certificates. The workstation name has to be entered here. In order to ensure the authenticity, the connection will only be established if the workstation name entered in the CN corresponds to the actual workstation name of the certificate user.



*For the customer certificate, a corresponding **adv.ip** or **adv.fs** entry always has to exist under **OU**!*

Windows Certificate Store

The Windows Certificate Store is a certificate administration integrated in the Windows operating system. All computer and user certificates including the private keys can be safely stored here. It is also saved here which certificate authorities are considered as trustworthy. The stored private keys can, in addition, be stored with Windows rights so that only specific users or groups can use them.

WinGuard only uses the Windows **Certificate Store** to manage the certificates for communication and file security.

10.6 Debug Log

For better problem analysis an activatable debug log was established. The debug logging is normally running in **normal mode** and can be modified by using a parameter at start time of the program.

To change the option while the program is running (in case of a problem and you will not restart the program) it is possible to start a new instance of WinGuard.exe (same path is required) with the desired parameter. This will modify the log parameter of the running instance. But this is only working in the same session (user environment), so it is not working if the program is running as a service.

The log files are stored in the same folder where the inspector saves his crash dumps (C:\ProgramData\Advancis\debug\log\). One log file will be generated per day if necessary.

Program start of WinGuard with one of the following parameters:

- **-disabledebuglog** Debug log is switched off (e.g. if active normal mode is not properly working).
- **-enabledebuglog** Normal logging is activated.
- **-extradebuglog** Extended logging is activated.

10.7 System Time Synchronisation

If the time on a workstation differs too much from that on the server it will be adjusted in case the option **Use server time** is set. If setting the workstation time fails due to a lack of rights for the process or because that option is not set, a warning event will be generated for the corresponding workstation datapoint (if defined). This event will be terminated in case the deviation will be too small. However, instead of using the **Use Server time** option, the usage of a time server (NTP) is strongly recommended to guarantee consistency of time on all workstations. The suppression of the warning events is possible simply by entering a negative **Warning** priority on the tab **Priorities** of each workstation datapoint.

10.8 Helpful Hints about CSV Editors

A CSV export file with Unicode/tab (preset) can be read and edited directly with programs such as MS Excel. MS Excel generally uses the default setting for all individual fields. A text **01234** is usually recognized as a number and converted to **1234**. This can create problems when the file is later imported into WinGuard, as this may invalidate the address of a datapoint.

For this reason, users should not simply open the file in Excel, but import it. This allows for a choice of separators and the option to format columns from **standard** to **text**. It is generally recommended that all columns be formatted as text.

After making this change, the following should be considered when saving/exporting to Excel: Excel offers various CSV export formats, but all are non-Unicode. Users should export files as a Unicode text file (files will have the suffix **.txt**) and prior to importing it into WinGuard rename it as **.CSV**.

Here are several items that should be noted:

- Different Excel versions use different separators.
- The Unicode standard is the tab.
- Data loaded into a program such as MS Excel is sometimes converted automatically.
- When saving in CSV format, watch for Unicode.



When editing CSV files in editors such as MS Excel, it is important to note that data is often converted automatically. For example, leading zeros (0) of numbers are sometimes removed (Conversion of text to a number or date)!



To avoid undesired changes, only use the required columns for assignment or modifications during export and import!

10.9 Print as Service

With regard to printing of WinGuard as service, different special characteristics have to be considered:

- Only those printer drivers are to be used that can be parameterized in such a way that they function without any further user entries, as in service operation there is no user interface available.
- To enable the service to access printer drivers of a specific user, the corresponding user account has to be assigned to the service (login).

10.10 Data Management

In the WinGuard database are all project data managed but the management respectively the keeping of data is done in different ways. Data objects like locations, datapoints, etc. are directly stored in SQLite data files, data like graphics, texts, etc. are stored in own files. This also affects the selection of the data e.g. in case of a backup (objects and files).

Objects:

- Control operations
- Datapoints and sensors
- Event handling
- Interfaces
- Locations
- Panes
- Persons
- Printer profiles
- Profiles
- Scheduled commands
- Segments
- Sensor types
- Settings - local
- Timer
- User
- Workstations

Files:

- Animations schemes (*.CAS)
- Calender (*.KLD)
- Columns (tabledef_*.XML)
- Commands (*.CMD)
- Graphics (*.WGD, *.DWG, *.DGN, *.BMP, *.PNG, ...)
- Layouts (*.LAY)
- Lists (*.LST)
- Menus (*.MNU)
- Overlays (overlaydef_*.XML)
- Rights (rights.dat)
- Schedules (*.ZPL)
- Settings - global (settings.XML)

- Shortcuts (*.ACL)
- Tags (tags.XML)
- Texts and Reports (*.WGT, *.TXT)
- Toolbars (*.CBR)

10.11 Duplicate Interface Modules (Update File)

In some projects it is necessary to use certain interfaces several times or independently from each other - as long as the interface is suitable for such an operation. Via the Update Manager only the original interface is updated, not copied into other folders. In such cases, appropriate update packages can be created.

The corresponding commands in the control files (Update.xml) can then be defined in these update packages (zip files). After creating an update package, it has to be signed by Advancis Software & Services GmbH. This can be done directly via the partner portal or via support.

i *Unsigned update packages, those with incorrect signatures and files with invalid hash codes are not processed by the system!*

ToDo: Duplicate interface

➔ Create a new package with any name (e.g. virtual_2).

➔ Create empty update.xml file.

➔ A corresponding action must be created for each required copy.

e.g.: `<action type="copy" src-ref="installdir" src="mod/virtual/*" dst="mod/virtual_2" />`

➔ Alternative:

- If there is already a script (e.g. a batch or Powershell file) that creates the desired copies, the script can simply be called via an **exec** action.
- If a file or a script is to be distributed with the update, then this file must be integrated with an additional **file** section and current hash.

➔ Compress the update.xml (e.g. as virtual_2_V1.0.zip).

➔ Sign the package in the Advancis Partner Portal.

➔ Drag the new version of the interface into the job window.

i *If this file already exists, then there is a corresponding error message!
(Name and/or version number under **<updatedef>** have to be changed)*

➔ Add the created package to the job **after the interface**.

➔ Execute the job, the interface is updated and then copied to all specified folders.

i *For future updates of these interfaces it is then only necessary to execute the last two steps of the above ToDo instructions!*

Examples

Here you will find examples for copying individual files or entire module directories of the program installation. The copying can be done by general or specific commands. You can also include and execute your own files for corresponding tasks. After creating the files they have to be signed. The signature is then automatically entered at the end of the **Update.xml** file during this process.

▼ Example: Update script file (Update.xml) to copy from interface subdirectories

In the following example, all elements from the corresponding module directories of the program installation are copied to the specified directories. If the target directories do not exist, they are created. The update package consists only of a zip file (name any) with integrated Update.xml.

```
<?xml version="1.0" encoding="utf-8"?>
<!--*****
Example script file for project Xxx to create and copy additional interface subdiretoles
Advancis 2018-11-26, Version 1.0
Parmeter frm <updatedef>
- version=2                      (at present =2)
- modulaname="..."             (Text)
- moduleversion="1..."        (Value >= 1)
- architecture="x64"            (x64/x86)
- softwaredate="JJJJ-MM-TT"     (Date - optional)
- softwaredate="JJJJ-MM-TT ss:mm" (Date+Time - optional)
*****
-->
</-->
<updatedef version="2" modulaname="IF-Copy_TestPrj" moduleversion="1.1" architecture="x64" softwaredate="2018-11-26 11:38">
  <!-- Copy contents of "mod\virtual" with all subdirectories into "mod\virtual_2" -->
  <action type="copy" src-ref="installdir" src="mod\virtual\*" recursive="1" dst="mod\virtual_2" />
  <!-- Copy contents of "mod\virtual" with all subdirectories into "mod\virtual_3" -->
  <action type="copy" src-ref="installdir" src="mod\virtual\*" recursive="1" dst="mod\virtual_3" />
  <!-- Copy contents of "mod\asipserver" with all subdirectories into "mod\asipserver_2" -->
  <action type="copy" src-ref="installdir" src="mod\asipserver\*" recursive="1" dst="mod\asipserver_2" />
</updatedef>
```

▼ Example: Update script file (Update.xml) to copy from interface files

In the following example, the corresponding files are copied from the package to the specified directories. If the target directories do not exist, they are created. The update package here consists of a zip file (name any) with integrated Update.xml and the corresponding files, whereby the files must be specified with the valid hash code.

```
<?xml version="1.0" encoding="utf-8"?>
<!--*****
Example script file for project Xxx to create and copy additional interface subdiretoles
Advancis 2018-11-26, Version 1.0
Parmeter frm <updatedef>
- version=2                      (at present =2)
- modulaname="..."             (Text)
- moduleversion="1..."        (Value >= 1)
- architecture="x64"            (x64/x86)
- softwaredate="JJJJ-MM-TT"     (Date - optional)
- softwaredate="JJJJ-MM-TT ss:mm" (Date+Time - optional)
*****
-->
</-->
<updatedef version="2" modulaname="Virtual_2" moduleversion="8.4.5.0" architecture="x64" creationtime="2018-11-26 11:38">
  <!-- Copy the following files from "mod\virtual" to "mod\virtual_2" -->
  <file src="Virtual.dll" hash="7E26...">
    <action type="copy" dst="mod\virtual_2\Virtual.dll" />
  </file>
  <file src="Virtual.ini" hash="1EC0...">
    <action type="copy" dst="mod\virtual_2\Virtual.ini" />
  </file>
  <file src="Virtual_cz.lng" hash="6CE3...">
    <action type="copy" dst="mod\virtual_2\Virtual_cz.lng" />
  </file>
  <file src="Virtual_de.lng" hash="E2A7...">
    <action type="copy" dst="mod\virtual_2\Virtual_de.lng" />
  </file>
  <file src="Virtual_en.lng" hash="34CF...">
    <action type="copy" dst="mod\virtual_2\Virtual_en.lng" />
  </file>
  <file src="Virtual_nl.lng" hash="8704...">
    <action type="copy" dst="mod\virtual_2\Virtual_nl.lng" />
  </file>
</updatedef>
```


10.12 Description Update.xml

The update script defines the content and execution of an update. It is an XML file named **update.xml**. It lists all files with the actions to be performed on them that belong to an update. In addition, the file may contain a number of additional information such as name, version number, software date, etc. Such an update script is used to describe update packages in the update package (Zip). Without a valid signature, the update script is not valid and is not accepted by WinGuard. It can be edited with a normal text editor. An individual adaptation of the script by the experienced system administrator - for example to implement special project requirements - is also possible. After each change, however, it is necessary to recreate the signature.

Although manual editing of the update script is certainly the exception, the file format will be briefly described here.

▼ <updatedef> - Root Element, general meta data for the update

This element forms the root of the definition. All other elements must be contained here.

- **version**
The attribute specifies the version of the UpdateDef file, currently always 2.
- **creationtime**
Time of UpdateDef creation, may be required (:?:) to define installation sequences.
- **modulename**
Name of the module (e.g. ASIPServer).
- **moduleversion**
Version of the module, is required for possible version checks (between modules).
- **modulepreview**
Preview version of the module, if build version was a preview.
- **softwaredate**
Optional attribute that specifies the update limit date in ISO 8601 format. This attribute is only set if the package contains WinGuard.exe.
- **architecture**
Optional attribute that specifies the target architecture of the package, e.g. x86 or x64.
- **restart**
Attribute indicating whether a WinGuard restart (program update) is necessary or not (module update).
 *Is only set in the top update.xml of the update directory!*
- **admin**
Attribute that indicates whether admin rights are required to apply the package.
- **available**
Attribute (for internal use only) that indicating whether the package is available at the station that created the update.xml.

▼ <file> - Node, describes a file

This element is used to define files.

- **src**
The attribute specifies the relative path to the file, starting from the folder where the update.xml is located.
- **src-ref**
The attribute (optional) specifies what the src path refers to.
Possible values are:
 - package (src inside the package archive)
 - installdir (src relative to App installation directory).



*Default is package. **src-ref** has no effect if src is not a relative path!*

- **recursive**
Attribute (optional) that specifies whether non-empty directories are processed or not (not the case by default).
- **hash**
The attribute contains the hash code of the file (SHA256 hash).

▼ <action> - Node, define an action

An action can be part of a <file> node or stand alone. A <file> node used without <action> implies the action copy.

- **type**
Attribute that specifies the action, if not specified copy is used.
- ...
Additional attributes depending on the specified action.

▼ <condition> - Node, gibt eine Bedingung an

This element can be used to define a condition that must be fulfilled in order to execute the action.

- **type**
Attribute that specifies the type of condition to be fulfilled.
- ...
Additional attributes depending on the specified condition.

▼ <dependencies> - Node, Collection of <dependency> items

This element can be used to define a collection of package dependencies.

▼ **<dependency> - Node, defines package dependencies**

This element defines package dependencies.

- **modulename**
Attribute that specifies the module name of the package to which a dependency exists.
- **version**
Attribute that define the required dependency version, see Dependency Version Format.
- **architecture**
Attribute that define the required dependency architecture, optional (if not present, architecture of parent updatedef applies).

▼ **<info> - Node, contains package information for the display (optional)**

This element can contain other elements with information about the package.

- **<type> - Node**
This element describes the type of package.
Possible values are: **core, mod, addon, sdk**
- **<desc> - Node**
Groups textual descriptions and may contain additional elements.
 - **<text> - Node**
The element contains the textual description of the package OR refers to a corresponding text file (if both are specified, the text file is ignored).
 - **lng** - attribute, specifies the language (in case of multiple entries for the same target language, only the first entry found will be considered).
 - **src** - Optional attribute: references a text file.
 - **hash** - Optional attribute: hash of the text file.
- **<icon> - Node**
Groups graphic icons.
 - ** - Node**
The element references a graphic file.
 - **src** - attribute, relative path of the graphic to the package.
 - **hash** - Optional attribute that contains the hash of the image file.
 - **type** - Optional attribute specifies how the graphic is stored (base64 for files embedded in the XML, or file for files stored in the ZIP, default is file).

▼ **<!-- SIGNATURE:... --> - Optional signature**

This element is defined as a comment at the end of the script file and contains the signature of Advancis Software & Services GmbH to verify the authenticity of the file (as in LIC files).

▼ Actions

Actions can be used to perform various functions using the script.

- **copy**

Copies the file to any target path, rollback is supported.
Parameter:

 - **dst** - Relative / absolute destination path to which the file is to be copied. If destination is not specified, the relative path of the file from the file node is used.
- **exec**

Executes the specified file, rollback is not supported.
If the started program ends with exit code != 0, the action is considered failed.
Parameters:

 - **params** - Optional, parameters to be passed to the file to be executed.
 - **workingdir-ref** - Optional. Sets the base for the working directory.
(same function as **src-ref** for file)
- **writeRegistry**

Writes a key / value to the Windows registry, rollback is supported.
Parameter:

 - **key** - Key path, e.g. HKEY_LOCAL_MACHINE\SOFTWARE\Advancis.
 - **value** - Optional, value of the key / entry to write.
 - **regtype** - Optional: key, string, dword, qword. Default: key.
 - **architecture** - Optional: auto, x86, x64. Default: auto.
- **regsvr32**

Register or deregister OLE controls in Windows, similar to the regsvr32.exe command line utility, rollback is supported.
Parameters:

 - **value** - Relative or absolute destination path of the OCX file to register / deregister from the installation directory.
 - **operation** - registers and deregisters
 - **architecture** - Optional: auto, x86, x64. Default: auto.

▼ Conditions

The conditions can be used to check various information in the Windows registry and to perform corresponding actions depending on these information.

- **registryEquals**

Checks if the desired Windows registry key/entry corresponds to a certain value.

Parameter:

- **key** - Key path, e.g. HKEY_LOCAL_MACHINE\SOFTWARE\Advancis.
- **value** - The expected value, the version format for dependencies is supported.
- **architecture** - Optional: auto, x86, x64. Default: auto.

- **registryLessThan**

Checks whether the desired Windows Registry key/entry is smaller than the specified value.

Parameter:

- **key** - Key path, e.g. HKEY_LOCAL_MACHINE\SOFTWARE\Advancis.
- **value** - The value to use: [value in the registry] < [value].
- **architecture** - Optional: auto, x86, x64. Default: auto.

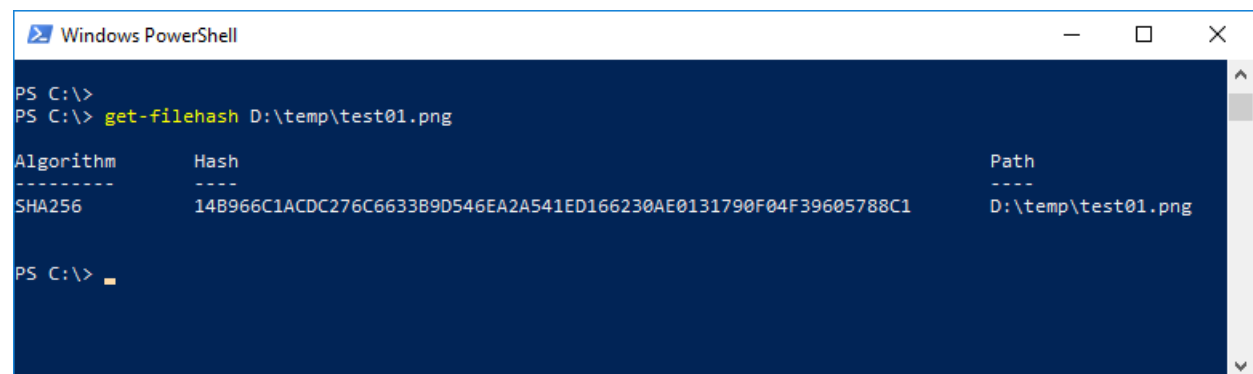
10.13 Create File Hash

When creating update packages, it may be necessary to generate the hash code for a file to be integrated and to store it in the update script. The file hash can be calculated with the help of Windows PowerShell and the **get-filehash** function.

ToDo: Datei-Hash

- ➔ Start Windows PowerShell.
- ➔ Specify and execute the command with parameters (file path and name).
get-filehash <path><file>
- ➔ Transfer hash.

Window: Windows PowerShell - get-filehash



```
Windows PowerShell
PS C:\>
PS C:\> get-filehash D:\temp\test01.png

Algorithm      Hash                                     Path
-----
SHA256         14B966C1ACDC276C6633B9D546EA2A541ED166230AE0131790F04F39605788C1  D:\temp\test01.png

PS C:\> █
```

Figure 452: Windows PowerShell - get-filehash

10.14 Update Helper Service

The Advancis Software & Services GmbH Update Helper (UpdateHelper.exe) is a standalone system service that runs in the background. It is installed only once on a system, regardless of the number of WinGuard installations.

The service is necessary to perform operations during an update that require administrator rights, even if the logged-on user does not have such rights. For security reasons, the service can only be used locally and by Advancis Software & Services GmbH signed applications.

The following command line arguments are used to install and control the service:

- **install**
Installs the Advancis Software & Services GmbH Update Helper service after program Files \Advancis\UpdateHelper, if no or an older version is installed. This operation requires admin rights.
- **uninstall**
Uninstalls the Advancis Software & Services GmbH Update Helper completely. This operation requires admin rights.
- **status**
Determines the current status of the service and displays information on the console.

Example: <Pfad>\updatehelper install

The service is not mandatory for the update functionality of WinGuard, but operations that require elevated rights cannot be performed without it. For example, it is not possible to install a new runtime environment (necessary for the update from WinGuard X3 to WinGuard X4) or update vendor SDKs.



It is strongly recommended to install this service once on all WinGuard stations before performing an update. After a one-time installation, the service will be automatically adapted for future installations!

11 FAQ

This section provides answers to frequent questions with regard to working with WinGuard. In addition we would like to provide assistance to analyze possible problems and to resolve them.



Further information can also be found on the internet on our homepage:

<http://www.advancis.net>

as well as in the current support infos **supportinfos_en.chm** in the **help** subdirectory!

11.1 Installation

Common problems encountered during WinGuard installation are due to missing administrator rights. However, incompatibilities with modules from other developers may also be the culprit. This may occur when different operating systems are used within one WinGuard network.



Do you have administrator rights for every workstation?



Ensure that all workstations have the required authorizations.



Are you using the correct/current software?



Check with Advancis support which WinGuard release should be used in your project (note system compatibility).



Do you have all requisite licenses and are they current?



For operation (not installation) WinGuard requires a dongle with the requisite activation (module and interface) at every workstation.

For some interfaces, additional modules (for example, SDKs) from other developers are required. Some of these modules require the additional license of the respective developer.

For upgrading to a new program version or integrating new modules, dongle updates may be necessary.




Are you using different operating systems or 32/64 bit?





Please note that normally, all program modules are replicated in the network (Server -> Client). Deactivate this function if necessary.


Modules of some developers are installed in separate directories. Make sure that the installation is the same at all workstations (identical directory name, etc.).

11.2 Settings


 Which is the current data directory?


 You can find the current data directory of your workstation using the Settings dialog box, which you can access via the menu item **System|Settings**. In the folder, **Local Installation**, under **System**, in the **General** section, you will find the definition for the "Current Project Directory". Using this setting, you can also select another data directory.

 What determines the role of my workstation?

 You can define the role of your workstation using the Settings dialog box which you can access via the menu item **System|Settings**. In the folder, **Local Installation**, under **Network**, in the **General** section, you will find the definition for the **workstation type**. Here you can define the type of workstation: server, client, etc. The role of the workstation is further defined by the "Workstation Name" (next definition) and the number of the workstation.

 Why should an autostart user be defined?

 If a workstation is started without a defined automatic user registration, then several functions of that workstation (for example, alerting, automatic actions, etc.) are deactivated. How the workstation operates is always defined by the profile of the registered user.

 Which setting has priority? Global, workstation, or profile?


 During the validation or application of settings, the following order is always maintained:


1. User profile settings
2. Workstation settings
3. Workstation profile settings
4. Global settings

If the profile does not have a definition for the required setting, then those of the workstation are reviewed. If the workstation does not have its own definition, then the respective global setting is applied.


11.3 Network


Here you will find help regarding network operation. Additional information on this topic is also available in the support pages.

 The client cannot connect to the server?


 Please check the following items:

- Configuration of the network, firewall, etc.
- Check connections, including cable connections.
- Is the network functional between workstations (test with PING if necessary).
- Are all participants set up correctly (IP, port, workstation type, etc.)?
- Is the server booted up and configured correctly (test with TELNET if necessary)?
- Is the network module activated (license)?
- Is the correct workstation name indicated?
- Are the workstations installed on the server?
(a server re-start is necessary after making any changes!)


 How can you test that the server is live or that participants can be reached?

 Running the PING utility to test your network connection will give you your initial status. In order to perform this test, the respective port and necessary functions in the network, firewall, etc. must be active.

- You can start PING from a command window (DOS box) as follows: "ping <address>", and enter the name or IP address of the server/target system for the <address>.
- **Connection ok:** If a successful connection has been initiated, you will receive a corresponding answer in a matter of milliseconds from the respective target system.
- **No connection:** You will receive a "timed out" message indicating that the target system is not reachable.

 "TELNET" is helpful in analyzing problems in WinGuard networks relating to missing port activations. For releases prior to Win7, a Telnet client must first be activated (see support information).

- You can start TELNET from a command window (DOS box) as follows: "telnet <address> <port>", enter the name or IP address of the server for <address> and the port registered with the server for <port>, for example, "telnet server 1234".
- **No connection:** That means the port is not reachable. Please check the settings of your firewall or other applicable network components.
- **Connection ok:** The WinGuard server sends 8 characters that are displayed in the TELNET window. Enter any 12 characters and your WinGuard server will disconnect.

 The programs IPCONFIG or NETSTAT may also be used to analyze network problems at a workstation.

- Start IPCONFIG from a command window (DOS box) as follows: "ipconfig".
The program delivers useful information regarding the current network settings of the workstation.
- Start NETSTAT from a command window (DOS box) as follows: "netstat -a".
The program delivers helpful information regarding current network connections such as ports used, etc. by the workstation.




Are you experiencing a high network load and the system is slow in responding?




Please ensure that each workstation is registered under its own name. Having two different workstations try to connect to the server with the same name may result in serious impairment of the WinGuard network traffic flow.

11.4 Interfaces

In this section, you will find information about starting and operating interfaces. Please note the following points:


 Please begin by carefully reading through the appropriate help section for the interface!

 How to assign an interface to an other workstation?


 Please follow this instructions!


- Remove the workstation-assignment in the interface definition.
- Restart the interface / module.
- Assign the new workstation to the interface.
- Restart the interface / module again.
- Test.

 There is no connection to the system.

 Please check the following items!

- Are there messages in the interface log?
- At which workstation is the connection activated?
- Are the corresponding hardware components connected and active?
- Is the cabling intact (null modem line, etc.)?
- Is the equipment programmed correctly and connected?
- Are the necessary licenses on file or active?
- Are any required additional modules installed correctly?
- Are the communication modules compatible (versions)?
- etc.

 You have no connection to your system - the COM port initialization fails. Why?




 Check your COM port on the respective workstation or server. It may be that the port does not exist or that it is already in use. Here, the MODE program can provide helpful information.


- Start **MODE** from a DOS box as follows: *mode <port>*, for <port> enter, for instance, the designation com1, com13, etc. for the utilized COM port -- thus for example **mode com1**.
- **Status of device COM#:** In the window you will see a list of the last used interface parameters. That means that the COM port is available and is not currently in use.
- **Unauthorized device name - COM#:** If you see this message, the respective COM port is not available or the operating system does not recognize it. Check your hardware, or if using COM servers, their configuration.
- **Device COM# is momentarily unavailable:** This message means that the COM port is already being used by another program, or another WinGuard interface.


11.5 Sounds

Which sound (.WAV sound file) is played in WinGuard for each event can be defined in the system settings. Below you will find tips and support to help you identify/resolve any problems relating to sound.


Perform the following actions:


-  Check if there is a sound card and is it installed.
-  Check if the speakers are hooked up and turned on.
-  Test the sound with the default sounds by Windows.

 Is there no sound following installation?

 Check the sound settings in WinGuard

- Check to see if the WinGuard sound directory is in existence. Normally, it can be found in the project directory.
- Are the sound files included in the sound directory (.WAV)?
- Can the sound files be played in Windows?

 Is it possible to change the sounds?

 Generally, separate sound files can be added to the system and activated via the system settings. This makes it easy to integrate other sounds like alarm sounds with softer opening sequences.

In server/client operation, the files should be stored in the data directory of the server. When the server or the individual clients are re-started, the files are then automatically transferred to the clients.

Index

- < -

<action> 1147
 <Alt> 132, 650, 658
 <Alt>+<Back> 157, 811, 900
 <Alt>+<Esc> 424
 <Alt>+<F4> 424
 <Alt>+<Tab> 424
 <Alt>+G 650
 <Auto> 99, 111
 <BLOCKNAME> 485, 943
 <condition> 1147
 <CONTEXT> 893, 943
 <Ctrl+C> 316
 <CTRL> 139
 <Ctrl>+- 158
 <Ctrl>++ 158
 <Ctrl>+<Back> 658
 <Ctrl>+ 658
 <Ctrl>+<Esc> 424
 <Ctrl>+<Ins> 157, 658
 <Ctrl>+<L> 148
 <Ctrl>+A 157, 658
 <Ctrl>+C 157, 658
 <Ctrl>+L 658
 <Ctrl>+Num0 158
 <Ctrl>+P 658
 <Ctrl>+V 157, 658
 <Ctrl>+X 157, 658
 <Ctrl>+Y 157, 658, 811, 900
 <Ctrl>+Z 157, 658
 <DATA> 943, 1037
 <DATAPOINT> 943, 1037
 <DATE> 943, 953, 1023
 <DATESHORT> 943, 953, 1023
 <DATEVERBOSE> 943, 953, 1023
 64, 157
 <dependencies> 1147
 <dependency> 1147
 <desc> 1147
 <Display1> 135, 197
 <F1> 15, 128, 171, 174, 658
 <F10> 658
 <F11> 658
 <F12> 658
 <F2> 64
 <F4> 658
 <F5> 199, 658
 <F8> 658

<F9> 658
 <file> 1147
 <GRAFIK#> 999, 1001, 1008, 1011, 1039
 <GRAPHIC#> 943, 999, 1001, 1008
 <icon> 1147
 <info> 1147
 <INPUT:xxx> 943, 953
 <Key> 2
 <LOCATIONTEXT> 943, 975, 988, 997, 999, 1003, 1008, 1011, 1014, 1017, 1020, 1032, 1037, 1043
 <ORTSTEXT> 975, 988, 997, 999, 1003, 1008, 1011, 1014, 1017, 1020, 1032, 1037, 1043
 <PROG> 943
 <REPORT> 943, 999, 1008
 <SENSOR> 943, 1037
 <Shift> 658
 <Shift> + <Enter> 900
 <Shift>+ 157
 <STATETEXT> 943, 990, 1035
 <SYS> 943, 1074
 <SYSLOG> 943
 <T> 943, 975, 988, 997, 999, 1003, 1008, 1011, 1014, 1017, 1020, 1032, 1037, 1043
 <TEXT> 943, 975, 988, 997, 999, 1003, 1008, 1011, 1014, 1017, 1020, 1032, 1037, 1043
 <TEXTMACRO#> 943, 975, 988, 997, 999, 1003, 1008, 1011, 1014, 1017, 1020, 1032, 1037, 1043
 <TEXTMAKRO#> 1037
 <TIME> 943, 953, 1023
 <TIMESHORT> 943, 953, 1023
 <TM#> 943, 975, 988, 997, 999, 1003, 1008, 1011, 1014, 1017, 1020, 1032, 1037, 1043
 <updatedef> 1147
 <VALUE> 893, 911, 919, 943
 <Variable> 2
 <WGT:Filename.wgt> 911, 919, 943, 970
 <Windows-Key> 424

- A -

About 105
 Accepted 939
 Access 672
 Access points 810
 Access rights 1134
 Acoustic notification 964
 Acoustics 422
 Across layers 826
 Action 59, 197, 424, 466, 564, 654, 661, 846, 854, 869
 Action text 475
 Activate offline 111, 120, 124
 Activate online 111, 119, 122

- Activate SSL 1090
- Activation 122, 124
- Activation server 424
- Active 188, 216, 324, 455, 731
- Active control operations 1119
- Active directory 148
- Activity 554, 557, 560, 564, 699
- Activity extends time 401
- AD 3
- Add 734, 746
- Add attachment 951
- Add log entry 953
- Add to group 716
- Address 36, 43, 47, 407, 409, 500, 526, 527, 710, 715, 726, 746, 939
- Address 2 726
- Adjust 823, 837, 839
- Administration 683
- Administrator 24, 34, 58, 63, 672, 676
- adv.fs 1138
- adv.ip 1138
- Advancis.WGOpcServer.1 72
- AES256 415
- Alarm 59, 188, 216, 324, 455, 731
- Alarm transmission 745
- Alert 424, 466
- Alerting 3
- Alias 597
- Align 765, 885
- Aligned center 885
- Aligned left 884, 885
- Aligned right 884, 885
- All
 - Assign 822
 - Copy 822
- Analog 321
- Analysis 335
- Analyze 345
- AND 1047, 1048
- Angle 860, 874
- Animation 3, 422, 485, 661, 774, 794, 831, 860
- animation by symbol 800
- Animation color 798
- Animation scheme 167, 601, 798, 956
- Animation type 188
- Announcement 967
- Antialiasing 485, 865
- API 105
- Application 55, 683
- Application window 450, 619, 1041
- Apply RTU 105
- Approval required 1126
- Arc 874
- Archiv 334, 1136
- Archive 135, 162, 283, 286, 307, 316, 330, 424, 500, 523, 909, 966, 982
 - Files 348
- Archive control 283
- Archiving 422, 475
- Area 3, 130, 139, 604, 605, 627, 770, 785, 798, 828, 854, 867, 931
 - ID 138
- Armed 188, 324, 424, 455
- Arming command 739
- Arrange 759, 765, 819
- Arrows 466
- ASCII 338
- ASIP 1096
- ASIP.WEB 1078, 1096
- ASIPServer 1078, 1079, 1098, 1133
- Aspect ratio 767
- Assault 466
- Assign 716, 822
- Assign cameras 957
- Assign tags 959
- Assigned cameras 979
- Assigned datapoints 734
- Assignments 734, 979
- Attachment 214, 450, 475, 951
- Attachments 475, 619, 1041
- Audio 514
 - Connect 967
 - Control panel 158, 229
 - Cyclic 967
 - In 187, 229, 967
 - Monitor 229
 - Out 187, 229, 967
 - Partial 967
 - Prio 229
 - State 229
- Austrian Standard 36, 424, 542, 557, 774
- Auto switch 39, 43, 47, 409, 424
- Auto-add 719
- AutoAdminLogon 64
- AutoCAD 485, 756, 797, 798
 - Version 2017 797
- Automatic 500, 746
- Automatic Projection 710
 - Online Help 710
- Automatically 455
- AutoRun 15, 24, 84, 1080
- AutoRun.exe 74
- Autostart 51, 64, 66, 1086
- AvailableLanguages 1098
- AvailableWorkstation 1098

- B -

Back 298, 765
 Background 424, 601, 668, 765, 882
 Background color 466, 831
 Background fill 466
 Background graphic 756
 Backup 3, 85, 87, 152, 341, 353, 357, 424, 523, 524, 1136
 Bar 3, 130, 138, 139, 442, 604, 605, 617
 Bars 636
 Base graphic 774
 Basic 92, 93
 Batch file 714, 1145
 Bedienplatz 557, 576
 Bedienplatzprofil 557
 Bell 324
 Bend 881
 Benutzer 557
 Benutzergruppe 557
 Besitzer 275
 Bestätigung 275
 BHE 774
 Binding licenses 99
 BIOS 64
 Bitmap 214, 442, 654, 661, 756, 757, 775
 Blickfeld 773
 BMP 59, 756, 757, 775
 Boat 324
 Bookmark 277, 283, 291, 292, 294, 296, 300, 348, 500
 Borderlines 424
 Box 466
 Browser 1096
 Buffer 338
 Building 693
 Business 527
 Button 2, 240, 242, 424, 601, 654, 756, 775, 795, 796, 828, 852, 854, 869, 891, 900, 906
 Button text 661
 Buzzer 424

- C -

CAD 59, 370, 422, 699, 795
 CAD-Symbol 801
 Calendar 167, 244, 583, 585, 691

- Fixed holidays 583
- Non-workdays 583
- Workdays 583

 Calendar view 264
 Call destination 1020
 Call sequence 1020

Camera 187, 277, 289, 291, 294, 295, 297, 300, 301, 303, 422, 466, 734, 746, 747, 748, 957, 972, 979

- Control panel 158
- Define 290
- Selection 500

 Camera control 281
 Camera control parameter

- /archive 972
- /autoplay 972
- /deviceparams 972
- /live 972
- /loop 972
- /marker 972
- /time 972

 Can maximize 613
 Cancel 146, 298, 542, 680
 Canonical format 527
 Castle 324
 Category 316, 319, 650, 654, 658, 723, 987
 CCTV 3
 CD 84
 Center 765
 Centered 884
 Certificate 415, 1090, 1137

- Accept unknown 415
- Accept untrustworthy 415
- Revocation list 415

 Certifikate 1138
 Change 703
 Change in registration 424
 Change in state 731
 Change Language 961
 Change user profile 962
 Change workstation profile 963
 Check box 210, 570
 Checkbox 891, 900, 909
 CHM 85, 128
 Choose sound 964
 Choose workstation 965
 City 527
 Client 3, 18, 19, 24, 34, 51, 60, 66, 100, 103, 341, 407, 541, 542

- Connection 409
- Delay client check 409
- Delay client login 409
- Settings 36, 43

 Client (with interface server) 34, 51
 Client (with local server function) 34
 Client list 675, 676
 Client states 676
 Client (with local server function) 51

Index

- Clip 277, 283, 291, 292, 294, 295, 296, 300, 301, 348
- Clipboard 822
- Clips 365, 367, 500
- Clock 668
- Close 307, 455, 721
- Close all 170
- Closed 878
- Closure area 466
- CLR 415
- CN-Common name 1138
- Color 424, 455, 466, 485, 500, 601, 609, 613, 619, 850, 865
 - Background 517
 - Curve 517
 - Expired 517
 - Hint 517
 - Limit lines 517
 - Scale 517
 - Start 517
 - Text 517
 - Time lines 517
 - Warning 517
- Color adjustment 882
- color animation 800
- Color bar 770, 818
- Color change 207, 485, 774, 790, 792, 793, 831
- Color scheme 818
- Color selection 818, 933, 934
- Color switch 601
- Color value 933
- Column 466, 636, 642, 647
- Column widths 466
- Columns 167, 466
- COM# 1158
- Combination 767
 - Uncombine 819
- Combine 819
- Combobox 891, 900
- Command 167, 197, 199, 307, 424, 450, 557, 654, 658, 661, 691, 711, 716, 727, 731, 740, 795, 796, 887, 891, 906, 913, 929, 930, 939, 946, 970, 987, 1075, 1106, 1110, 1115
 - Activate pane 1075
 - Add attachment 951
 - Add log entry 953
 - Assign animation scheme 956
 - Assign cameras 957
 - Change language 961
 - Change user profile 962
 - Change workstation profile 963
 - Choose sound 964
 - Choose workstation 965
 - Connect audio 967
 - Control datapoint 970
 - Control display device 975
 - Create bookmark 979
 - Create incident 981
 - Create report 982
 - CSV Export 984
 - CSV Import 985
 - Execute menu command 987
 - Execute text 988
 - Generate event 990
 - Ignore event 993
 - Login user 994
 - Notify workstation 996
 - Play sound 997
 - Print document 999
 - Print graphic 1001
 - Print text 1003
 - Remove Command 1005
 - Scheduled 162, 1057
 - Select datapoints 1006
 - Send email 1008
 - Send fax 1011
 - Send SMS 1014
 - Send to pager 1017
 - Send voice message 1020
 - Set input 1023
 - Set symbol filter 1025
 - Show control panel 1028
 - Show display 1030
 - Show text 1032
 - Simulate event 1035
 - Start application 1037
 - Switch graphic 1039
 - Switch pane 1041
 - Switch text 1043
 - Switch video split 1045
- Command list 219
- Command Monitor 158, 233
- Command states
 - Confirm? 247
 - Deactivated 247
 - End (Fault) 247
 - Ended 247
 - Ended (Error) 247
 - Ends 247
 - Planned 247
 - Rejected 247
 - Start? 247
 - Started 247
 - Started (Error) 247
 - Starts 247
- Command text 731

- Communication parameters 707
- Compact display 709
- Company 188, 526, 527, 531
- Comparison operator 915
- Compatibility 68
- Compatibility mode 485
- Complete 424
- Complete event 966
- Components 3, 91, 92, 1080
- Compressed 353
- Computer name 407
- Concept 691
- Condition 573, 913, 915, 929, 930, 1066
- Condition element 887, 891, 900, 1047, 1050, 1053, 1054, 1055
- Condition list 915
- Configuration 100, 391, 409, 715
- Configuration file 353, 357, 395, 399, 746, 1098
- Confirmation 275, 422, 424, 541, 542, 721
- Conformance 424
- Connect 680
- Connect audio 967
- Connection 36, 43, 47, 409, 424, 675, 676
 - External 36
- Connections 407, 707
- Console 683, 1133
- Contact data 891, 900, 905, 916
- Container
 - Adjust 769
 - Place inside 769
- Content 130, 138, 442, 450, 617, 627, 1041
 - Edit 769
 - Extract 769
 - Place 769
- Content type 668
- Contents 422
- Context 319, 699, 719, 759, 889, 895, 897, 927, 929, 1023, 1028, 1055
- Context Menu 240, 242, 243, 523, 524, 525, 721, 810, 819, 823, 903
- Context variable
 - cop_id 251
 - cop_info 251
 - cop_subject 251
- Context-dependent 860
- Continuous tone 475
- Control 133, 158, 187, 240, 242, 253, 277, 424, 466, 557, 701, 715, 716
- Control actions
 - Active 246
 - Armed 246
 - Disablement 246
 - Disarmed 246
 - Inactive 246
 - Info 246
 - Revision 246
- Control command 557
- Control datapoint 970
- Control display device 975
- Control element 281
- Control operation 240, 243, 246, 251, 252, 255, 265, 275, 450
- Control operations 244, 245, 250
- Control operations - Form 1126
- Control panel 3, 144, 219, 234, 240, 422, 500, 513, 682, 701, 710, 819, 826, 860, 1028
 - Audio 144, 158, 229, 514
 - Camera 144, 158, 221
 - Command Monitor 144, 158, 233
 - Datapoint 144, 219
 - Event simulation 231
 - Intercom 144, 158, 224
 - Interface 231
 - Main 158
 - Notification 227
 - Notifications 142, 144, 158
 - Telephone 144, 158, 226, 514
- Control station 740
- Control Timer 593, 977
- Controller 710
- Controlling 242
- Controlling workstation 80
- Convert 767, 819
- Convert to Curve 819
- Coordinates 834
- Cop 348, 424
- Copy 419, 693, 721, 819, 822
- Copy to layer 819
- Copyright 128, 146
- Corner 865, 881
- Countdown 401
- Country code 92
- Create 1090
- Create bookmark 979
- Create incident 981
- Create report 982
- Create RTC 105
- Creation 939
- Criteria 307, 316
- Crossbar 285
- CST 580
- CST file 101
- CSV 371, 386, 1141
 - Export 152, 316, 334, 371
 - Import 152, 386
- CSV Export 984

Index

- CSV Import 985
- Current selection 1110
- Current time period 255
- Current timeframe 1119
- Cursor 899
- Curve 424, 810, 819, 828, 850, 854, 865, 878
- Custom 15
- Customizer 83, 580, 818
- Cut 819
- Cycle 589
- Cycle length 589

- D -**
- Data
 - Directory 3, 58, 59, 63
 - Replication 3, 36
 - Structure 60
 - Type 3
- Data directory 407, 1134
- Data encryption 1138
- Data exchange 335
- Data package 361, 450
- Data point unit 92
- Data set 250, 292
- Data setup 15
- Data traffic 701
- Data type 212, 726, 727
- Database 151, 152, 164, 341, 352, 353, 407, 424
- Database-Id 747
- DataLayer 341
- Datapoint 133, 135, 164, 167, 195, 212, 216, 219, 236, 237, 240, 262, 273, 307, 313, 316, 319, 321, 324, 370, 371, 378, 386, 442, 455, 542, 557, 564, 573, 619, 661, 691, 693, 699, 708, 710, 715, 716, 719, 721, 727, 734, 746, 747, 756, 931, 939, 970, 972, 990, 1025, 1035, 1050, 1054, 1066, 1104, 1119, 1125, 1126
 - Add 1006
 - Category 3, 185, 187, 455, 466, 719, 734, 740
 - Delete 1006
 - Graphic 774
 - Group 240
 - Name 185, 740
 - Select 1006
 - State 601
 - Unit 3, 146
 - Value 601
- Datapoint category 260, 485, 597, 798, 939, 1025, 1050, 1123
 - Audio-In 97
 - Audio-Out 97
 - Camera 97
 - Control 97
 - Door 97
 - Emergency 97
 - Fire 97
 - Group 97
 - Intercom 97
 - Interface 97
 - Intern 97
 - Intrusion 97
 - Light 97
 - Monitor 97
 - Other 97
 - Panic 97
 - Security Area 97
 - Structure 97
 - Tamper 97
 - Technical 97
 - Value 97
- Datapoint control panel 240, 242
- Datapoint name 798
- Datatype 711
- Date 142, 939, 943
- DateFormat 1098
- Datenpunkt 576
- DateTimeFormat 1098
- Day copy 589
- Day header 585
- DCOM 69
- Dead man's control 754
- Dead man's handle 400
- Deadman 400, 401
- Deadman's alarm 401
- Deadman's control 400
- Debug 1090, 1139
- Decimal places 321
- Default 597, 703, 749
- DefaultLanguage 1098
- DefaultPassword 64
- Default-Symbol 801
- DefaultUserName 64
- Defer 475
- Deferral time 262
- Deferred 466
- Definition 525
- Delay 946, 967, 1014, 1020
- Delay time 687
- Delete 541, 693, 709, 721, 734, 785, 819
- Demo
 - Modus 103
 - Panel 103
 - Project 774, 775
- Demo-Panel 103

- Department 527
- Dependency 78
- Description 551, 552, 723, 939
- Design 424, 442, 668
- Desktop 58, 144, 146, 422
- Destination pane 1075
- Details 319
- Detection 3
- Detector 3, 1117
- Detector number 798
- Detector type 3, 798
- Device 500, 710
- Device Id 1090
- DGN 3, 756, 776, 800
- Diagnostics 52, 424
- Diagonal 839
- Dialog 404, 557, 654, 658, 819, 828, 909, 928
 - Close 541, 542, 703
- dictionaries 442
- Digital camera 736
- Dimension 834
- Direct print 403
- Direction 636, 856
- Directories 424
- Directory 1080
 - Data 3, 15, 63
 - Docs 1098
 - Graphic 190
 - Help 58
 - Lng 58
 - Mod 58
 - Program 15, 58, 63
 - Project 15, 58, 63, 341
 - Setup 58
 - Text 193
 - Tools 58, 68
- Directory physically
 - Attachments 59
 - Core 59
 - Db 59
 - Files 59
 - Media 59
 - Temp 59
- Directory virtual
 - Attachments 59
 - Buttons 59
 - Data 59
 - Graphics 59
 - Media 59
 - Other 59
 - Reports 59
 - Scripts 59
- Sounds 59
- Symbols 59
- Texts 59
- Disabled 534
- Disarmed 188, 324, 424, 455
- Display 3, 18, 19, 130, 162, 422, 442, 450, 500, 526, 604, 693, 721, 809, 848, 854, 975, 1030
 - Display2 158
 - Display3 158
 - Display4 158
 - End 731
 - first 731
- Display area 3, 135, 138, 197, 450, 611, 776, 809, 823, 842, 886, 1104
- Display control 277, 286
- Display device 975
- Display field 1039
- Display form 185
- Display locally 990, 1035
- Display logo 442
- Display text 975
- Display window 693
- Display# 1075
- Display1 1075
- Distance 856
- Dividing line 819
- Division 611
- Document 450, 619
 - Show 693
- Document directory 1090
- Document root 1088
- Document view 721
- Documentation 127, 162, 330
- Documentation directory 1098
- Documents 619, 1041
- Domain 424, 533, 534, 539, 547
- Dongle 3, 15, 34, 91, 99, 101, 103, 104, 105, 109, 115, 117, 146
- Dongle-ID 105
- Door 187, 466, 802
- DotNet Framework 1078
- Download 295
- Drag 139, 442, 455, 693, 771, 793, 810
- Drag & Drop 277
- Drag&Drop 455
- Drawing Interchange Format 756
- Drawing size 809
- Drawing surface 809
- Driver 103
- Driver name 419
- DSN 3
- Duplicate 785
- Duration 265, 294, 295, 300, 303, 594, 977, 979

DWG 3, 756, 757, 774, 776, 800
 DWG/DXF-Support 801
 DXF 3, 756, 757, 776, 800
 Dynamic 887
 Dynamical evaluation 1048, 1055

- E -

Edit 541, 557, 721, 759, 767
 Editbox 891, 900
 Editor 605
 Efficiency 62
 ELA 158
 Element 636
 Element type 636
 Ellipse 819, 828, 850, 854, 865, 874
 Else 731, 915, 1047, 1048
 Else if 915, 1047, 1048
 E-mail 111, 422, 514, 526, 527
 Emergency 122, 124, 187, 466, 740
 Activation 99
 PIN 99
 EMF 756, 757
 Encryption 415, 1137
 End 301, 731, 915, 1047, 1048
 IF condition 929
 End angle 874
 End date 307, 316, 321, 326
 End marker 283
 End time 250, 307, 316, 321, 326
 Endless mode 255
 Enterprise 92, 93
 Entry 2, 455
 Entry field 2, 919
 Error 319, 328, 953, 1090
 WK2205 104
 Error dialog
 Close automatically 424
 Display 424
 Error dialogue 393
 Error file 386
 ESPA 1017
 Evaluation 316
 Event 3, 127, 135, 188, 198, 199, 207, 216, 217, 231, 237, 289, 290, 294, 300, 305, 324, 424, 557, 691, 735, 741, 745, 747, 756, 939, 951, 1075, 1096
 Accept 475
 Accepted 313
 Archive 162, 307, 313, 330, 371
 Begin 313
 Complete 475
 Completed 313
 Description 313
 Display 475
 Don't save 986
 Edit/process 475
 End 313
 Fetch 475
 Non-deferred 475
 Simulation 162
 Symbol 313
 Event archiv 365, 367
 Event archive 348, 375, 384, 570, 926
 Event attachment 214
 Event caption 442
 Event Complete 152
 Event content 3
 Event context 197, 776, 1053
 Event database 348, 424
 Event display 3, 135, 152, 172, 197, 207, 289, 450, 500, 683, 727, 756, 1050, 1075
 Event Display Ende 152
 Event distribution 990, 1035
 Event end 475, 731
 Event filter 965
 Event graphic 475
 Event graphics 772
 Event handling 127, 162, 214, 307, 422, 475, 955, 1065, 1066, 1075
 Always (even if no display) 703
 Auto complete 703
 Event end 703
 Event history 450
 Event list 127, 129, 141, 158, 172, 174, 197, 422, 542
 Event log 197, 211
 Event message 990, 1035
 Event Printing 152
 Event processing
 Complete 703
 If accepted 703
 If deferred 703
 Event receipt 442
 Event reception 731, 956, 964, 1072
 Event related 860
 Event report 212
 Event routing 152, 197, 236, 237, 290, 422, 475, 542, 946, 965, 996, 1072
 Event time 979
 Event toolbar 1106
 Event type 297, 741, 1106
 Event view 207, 315, 1104
 Event/message 455
 Eventcmd 1075
 EventDisplay.wgt 450
 Eventlist 466, 1104, 1117

Index

- Events 353, 357, 365, 367
 - Excel 1141
 - EXE 1037
 - Execute 424, 1110
 - Execute menu command 987
 - Execute text 913, 988
 - ExecuteFile 687
 - ExecuteSection 687
 - Execution
 - Daily 1059
 - Monthly 1059
 - Once 1059
 - Weekly 1059
 - Execution time 233, 687, 1050
 - Accept 731, 1050
 - Complete 731, 1050
 - Display 731, 1050
 - Display end 1050
 - Duration 1125
 - End 1125
 - end of display 731
 - Event end 731, 1050
 - Event reception 731, 1050
 - First display 731, 1050
 - State change 1050
 - Executor 245, 248, 250, 255, 275, 1119, 1126
 - Explore 424
 - Explorer 127, 133, 158, 178, 179, 181, 185, 188, 190, 192, 195, 236, 240, 243, 531, 693, 715, 716, 757, 785, 826, 887
 - Explorer bar 129, 158, 422
 - Explorer window 133
 - Datapoints 158
 - Graphic structure 158
 - Graphics 158
 - Locations 158
 - Persons 158
 - Segments 158
 - Symbols 158
 - Texts 158
 - Explorerbar 455, 1104
 - Export 341, 386, 390, 475, 500, 759, 984, 1141
 - continuous 392
 - manually 393
 - Export LIC 105, 111
 - Express 92, 93
 - Extensions 128
- F -**
- Facility 774
 - Failure 319, 328, 953
 - Fallback 36, 43, 51, 60, 409, 424
 - Fallback display monitor 500
 - Fallback entity 407
 - Fallback user 149
 - Father 939
 - Fault 188, 216, 324, 455
 - Fax 422, 514, 526, 527
 - Number 527
 - Field 1014
 - Field of view 805
 - File 361, 442, 831
 - Insert 152
 - File changes 424
 - File folder 711
 - File Interchange Format 756
 - File selection 619, 776, 876, 894, 923, 927, 951, 988, 1001, 1003, 1032, 1039, 1043
 - File size 475
 - File type 475
 - Files 353, 357, 365, 367, 424, 1143
 - Fill 822
 - Filling 850, 860
 - Filling color 818
 - Filter 181, 185, 217, 255, 264, 292, 297, 307, 324, 330, 335, 338, 345, 371, 455, 466, 475, 573, 619, 642, 693, 699, 715, 716, 719, 926, 1114
 - All 1072, 1073
 - Criteria 307
 - Datapoint category 219, 231, 1110, 1117
 - Group 226
 - Interface 219, 221, 224, 231
 - Local 1072, 1073
 - Location 219, 224, 231
 - Locations 1110
 - Name 1110, 1117
 - Settings 709
 - State 219
 - Status 1110, 1117
 - Status text 1110
 - View 307, 316, 321, 325, 326, 1110
 - Filter view 307, 316
 - Filters
 - Category 375
 - Datapoint 375
 - Interface 375
 - Location 375
 - Name 375
 - State 375
 - Fire 187, 466, 693
 - Fire alarm 475
 - Fire detector 774
 - Firewall 105, 684, 1133
 - First display 731
 - First Name 526, 527, 534, 539, 939

- Fixpoint 848
- Flashing 601
- Floor 693
- Focal length 736, 805
- Focus box 466
- Foil 825
- Folder 485, 500, 776
 - Data 69
 - Help 84
 - Mod 84
 - Program 69
 - WinGuard OPC server 69
- Folder entry 531
- Font 636, 822, 852
- Force SSL 1090
- Foreground 765
- Form 526, 887
 - View 542
- Form view 255, 264, 265, 270, 273, 275, 292, 300, 301, 526, 527, 533, 534, 547, 633, 634, 696, 715, 719, 721, 1059
 - LDAP name 546
- Format 636, 642, 889, 1008
 - Canonical 527
 - Update 152, 352
- FOV 485
- FOVs 805
- Frame 3, 442, 466, 485, 613, 756, 776, 828, 854, 867, 876, 1039
- Free search 307
- Free sound 424
- Free text 297
- Function 403, 500, 533, 1096
 - <DELETE> 597
 - <INSERT> 597
 - Accept 174, 198, 199, 609, 1072, 1117
 - Action 393
 - Add 75, 214
 - Add to group 182
 - Add to job 75
 - All 174, 199
 - Answer 227
 - Aperture 221, 281
 - Apply 828, 905
 - Apply immediately 828, 905
 - Archive beginning 283
 - Archive control 280
 - Archive end 283
 - Assign 174, 199
 - Back 172
 - Brightness 281
 - Camera 172
 - Camera control 280
 - Cancel 231, 404, 1062
 - Change 570, 650, 654, 658, 661
 - Change hierarchy 696
 - Change to bars 139
 - Change to tabs 139
 - Close 198, 224, 393, 404, 570, 597, 650, 654, 658, 661
 - Close program 146
 - Commands 174, 182, 1117
 - Complete 174, 199, 1117
 - Complete event 966
 - Connect 224, 226
 - Contrast 281
 - Control 172
 - Copy 75, 157, 182, 227, 554, 570, 597, 650, 654, 658, 661, 696
 - Cut 157
 - Datapoints 1106
 - Decrease playback speed 283
 - Defer 174, 1062, 1117
 - Define all here 523, 524, 525
 - Define here 523, 524, 525
 - Delete 75, 157, 182, 227, 554, 570, 597, 650, 654, 658, 661, 696, 736
 - Delete signature 609
 - Details 214
 - Disconnect 224, 226
 - Display 214
 - Distribute 75
 - Download 75, 78
 - Edit 182, 214, 597, 736
 - End 198
 - Endless loop 283
 - Event 176
 - Event type 176
 - Events 172, 1106
 - Execute 75, 219, 393, 1062
 - Explorer 172
 - Export 214
 - Fast forward 283
 - Fast rewind 283
 - Fetch 174, 199, 1073, 1117
 - File 214
 - Fill 583
 - Floating window 139
 - Focus 221, 281
 - Focus length 281
 - Forward 172
 - Full-screen view 280
 - Generate rule 554
 - Graphic display 224
 - Hands-free talking 224
 - Help 146, 609, 828, 905

Index

- Function 403, 500, 533, 1096
 - Hierarchy 554, 650
 - History 172
 - Home 172, 1106
 - Horn off 176
 - Increase playback speed 283
 - Info 146, 1088
 - Insert 157, 570, 650, 654, 658
 - Intercom 172
 - Keep background active 280
 - Local 174
 - Locations 1106
 - Login 146
 - Logout 1106
 - Logs 1088
 - Map print 182
 - Menu 172
 - Modify 1085
 - Monitor zoom 280
 - Move 570, 650, 658
 - Move down 654
 - Move up 654
 - New 182, 227, 554, 570, 597, 650, 654, 658, 661, 696, 736
 - New area 139
 - New datapoint 182
 - New folder 554
 - New pane 139
 - New window 280
 - Notes 214, 219
 - OK 231
 - Open 224
 - Overwrite here 404
 - Park 199
 - Pause 283
 - Permanent acceptance 609
 - Permission 554
 - Play backwards 283
 - Play forwards 283
 - Play sound 514
 - Preset 221, 281
 - Print 172, 219, 227
 - Priority 554
 - Process 198
 - Prohibition 554
 - Receipt 198
 - Redo 157
 - Refresh 78
 - Remove 214, 233, 570, 650, 654, 658, 1085
 - Remove all 233
 - Remove all definitions 523, 524, 525
 - Remove definition here 404
 - Remove ID 233
 - Remove this definition 523, 524, 525
 - Rename 182, 214
 - Repair 1085
 - Report 176, 214
 - Reset 174, 931
 - Retrieve from deferred area 174
 - Return to live mode 283
 - Saturation 281
 - Save 554, 570, 650, 654, 658, 696
 - Select all 157
 - Select Group 199
 - Send 227
 - Send e-mail 514
 - Send fax 514
 - Send message to pager 514
 - Send SMS 514
 - Send voice message 514
 - Separation line 650
 - Services 1088
 - Settings 1088, 1106
 - Sign in 1102
 - Sign layout 609
 - Single image backwards 283
 - Single image forwards 283
 - Sound off 1062
 - Start 172, 1088
 - State 931
 - Stop 229
 - Symbols 172, 214
 - Test view 182
 - Time display archive 283
 - To install 75
 - Transfer 199
 - Transparent operation 280
 - Undo 157
 - Unpark 199
 - Upload 75
 - Use as work area 139
 - User alarm 182
 - Video 172
 - View 182
 - View direction 281
 - WSE file 393
 - Zoom 172, 221, 281
- Function group 560
 - Control 560
 - Edit 560
 - Observe 560
 - Special right 560
 - System function 560
 - View 560
- Function profile 547, 960

Functions

- Add 361
- Copy 341
- Delete 341, 605
- Export 341
- Extract package 361
- Insert files 341
- New 341, 605
- Open 341
- Paste 341
- Properties 341, 605
- Redo 605
- Remove 361
- Rename 341
- Restore 361
- Save 605
- Save all 605
- Save under 605
- Select all 341
- Toggle 605
- Undo 605
- View 341

Funktion

- Change 573
- Delete 573
- New 573

Funktionsprofile 557

- G -

- Gadget 450, 619, 668, 1041
 - Clock 619
- Gateway 1096
- General 442, 455, 466, 475, 854
- Generate event 990
- Geo 729, 803
- Geographic Information System 803
- Get clip 298
- Get Code 105
- Get LIC 105
- Get-filehash 1152
- GIF 756, 757
- GIS 3, 59, 729, 803, 804, 805, 834
- GIS map 759, 771
- Global 289, 392, 404, 422, 450, 525, 776
- GPS coordinates 577
- Grafik 576
- Grafik Content 826
- Graphic 133, 135, 151, 165, 170, 190, 195, 197, 199, 214, 240, 352, 361, 422, 424, 450, 455, 485, 557, 568, 597, 619, 691, 693, 696, 699, 715, 727, 756, 759, 774, 775, 776, 807, 809, 825, 828, 854, 876, 923, 1025, 1041, 1096, 1115
 - Content 793, 794

- Display 485, 776

- File 757

- Format 757

- Frame 3

- Layer 3

- Name 727

- Object 819

- Parameter 727

- Powerclip 3

- Selection 727

- Show 693

- Symbol 3

- Graphic Content 195, 785, 814

- Graphic editor 165, 485, 756, 809, 811

- Graphic file structure 775

- Graphic format 923

- BMP 190

- DGN 190, 797

- DWG 190, 797

- DXF 190, 797

- EMF 190

- GIF 190

- JPG 190

- PNG 190

- TIFF 190

- WGD 190, 192, 797

- WMF 190

- Graphic function 771, 814

- Adjust container 769, 811

- Align Bottom 765, 811

- Align Left 765, 811

- Align Right 765, 811

- Align Top 765, 811

- Area 762, 814

- Backwards One 765, 811

- Button 764, 814

- Center Horizontally 765, 811

- Center Vertically 765, 811

- Combine 767, 811

- Curve 762, 814

- Edit content 769, 811

- Edit Panes 762, 814

- Ellipse 762, 814

- Extract content 769, 811

- Finish editing 769, 811

- Flip Horizontally 767

- Flip Vertically 767

- Forward One 765, 811

- Frame 762, 814

- Free Rotation 767

- Graphic 764, 814

- Graphic Properties 811, 819, 822, 823, 824

- Graphic function 771, 814
 - Group 767, 811
 - LCD Display 764, 814
 - Pane 764, 814
 - Place inside container 769, 811
 - Rectangle 762, 814
 - Reset Aspect Ratio 767
 - Rotate by 90° 767
 - Same Height 765, 811
 - Same Width 765, 811
 - Selection 762, 814
 - Shape 762, 814
 - Symbol 764, 814
 - Text 764, 814
 - To Back 765, 811
 - To Front 765, 811
 - Uncombine 767, 811
 - Ungroup 767, 811
 - Ungroup All 767, 811
 - Variable 764, 814
 - Zoom 762, 814
 - Graphic Interchange Format 756
 - Graphic name 776, 876, 923, 951, 1001, 1039
 - Graphic parameter 776, 876, 923, 951, 1001, 1039
 - Graphic parameters 776, 876, 923, 951, 1001, 1039
 - Graphic referencing 776
 - Graphic window 442
 - Graphics 370
 - Grid 770, 785, 823, 837
 - Grid height 485
 - Grid width 485
 - Group 187, 188, 525, 526, 531, 767, 785, 793, 796, 819
 - Ungroup 819
 - Group childs 204
 - Group functions
 - Add group 204
 - Create group 204
 - Create group as 204
 - Delete group 204
 - Disband group 204
 - Remove group 204
 - Select group 204
 - Group link 776
 - Group list 204
 - Group parent 204
 - Group switch command 240
 - Grouping 1066
 - Gruppierung 749
 - Guides 823
- H -**
- Hardware ID 99
 - Hardware-ID 99, 116
 - Height 455, 466, 613, 617, 619, 765, 848
 - Help 84, 85, 128, 146, 171, 174, 661, 701, 726
 - Helpline 770, 785, 839
 - Hex 335, 338
 - Hex column on/off 709
 - Hide Event 992
 - Hierarchic structure 716
 - Hierarchy 650, 693, 696, 699, 716, 826
 - Hint 977
 - History 332, 424, 450, 517, 619, 1041
 - History Display 158
 - Graphics 332
 - Time stamp 332
 - X axis 332
 - Y axis 332
 - History1 450
 - Home 158
 - Horizontal 767, 839
 - Hostname 1102
 - Hot Standby 747, 753, 1022
 - Shift 152
 - Hot-Standby 3, 399, 424, 670, 675, 676, 703, 750
 - Autoswitch if necessary 409
 - Hot-Standby Server 60
 - HTML 727
 - HTML5 1096
 - Hybrid 771, 803, 804, 834
- I -**
- I/O systems 734, 746
 - Icon 133, 199, 248, 455, 466, 604, 609, 613, 619, 676
 - Id 148, 212, 233, 307, 313, 533, 534, 540, 542, 604, 617, 846, 939, 946, 1005, 1050
 - Identification number 550
 - Idle state 882
 - If 731, 915, 1048
 - IF conditions 1047
 - IF conditions
 - AND 1047
 - ELSE 1047
 - ELSE IF 1047
 - END 1047
 - OR 1047
 - If higher 741
 - If lower 741
 - Ignore event 993

Index

- Image change 774, 790, 792, 794, 831
- Images 500
- Impact of zoom 485
- Implementation 1
- Import 341, 371, 985
 - Delete all 386
 - No change 386
 - Overwrite 386
 - Refresh 386
 - Reset 386
- Import LIC 105, 111, 115, 117
- Impot LIC 120, 124
- IMS 514
- Inactivity 424, 455, 475
- Incident 319, 691, 953, 981
- Incident control system 981
- Incident management system 514
- Incident type 328
- Incoming 1054
- Incompatibilities 90
- Index card 734, 746
 - Documents 727
- Info 128, 146, 174, 294, 319, 534, 953, 979, 1088, 1090, 1095, 1126
- Info about 171, 676
- Info bar 475
- Info entry 534, 539
- Inheritance 523, 524, 525
- Inherited 523
- INI file 89, 711
- Input screen 307, 316, 326
- Insert 759, 793, 796, 823, 889, 891
- Inspector 3, 15, 68, 84, 152
- Install 1090
- Install Service 672, 674, 676
- Installation 1, 15, 34, 43, 58, 68, 84, 85, 87, 146, 171, 526, 691, 715, 746, 1085, 1086
 - Client 24
 - Directory 15, 24
 - Folder 31
 - Inspector 68
 - Interface 24
 - Language 24
 - Modify 29
 - Modul 24
 - Multi-client 60
 - Network 34
 - OPC server 23, 24
 - Program 31
 - Progress 31
 - Project data 23, 31
 - Project files 24
 - Remove 29
 - Repair 29
 - Server 24
 - Standalone 24
 - VideoDisplay 51
 - WebServer 23
 - WinGuard 23
 - Workstation 22
- Installation CD 103
- Instance 714
- Interactive 887
- Intercom 187, 224, 422, 450, 466, 513, 734, 740, 746
- Intercom control panel 158
- Interface 3, 15, 36, 43, 100, 127, 142, 144, 151, 152, 185, 187, 216, 224, 231, 285, 307, 321, 324, 326, 328, 335, 338, 381, 424, 442, 455, 466, 500, 514, 691, 701, 708, 710, 714, 715, 719, 726, 734, 739, 746, 747, 939, 961, 975, 1028, 1050, 1066
 - Add 703
 - Define 703
 - Delete 703
 - Log 162, 325, 326, 371
 - Modul 24
 - Module 703, 710, 715, 746
 - Monitor 709
 - Pause monitor 709
 - Restart 708
 - Save monitor 709
 - Setup 707
- Interface ID 100
- Interface list 675, 676
- Interface log 348, 375, 384, 926
- Interface module 701
- Interface server 19
- Interface states 676
- Interfaces 51, 92
- Intern 749, 753, 1022
- Internal 749, 751, 753
- Interrupt 680
- Intersection 767
- Interval 1057
- Intervention button 661
- Intrusion 187, 466
- Inversion 466
- Invisibility 772
- IP 500
 - Address 36, 43, 409
 - Name 43
- IP address 407, 680, 1102
- IP Port 684, 1133
- IP Version
 - v4 34, 409
 - v6 34, 409

Index

- ISDN 527
- Item 307, 1023
- Interface server 18

- J -**
- Javascript 1096
- JPG 756, 757
- Junction point 878
- Justified 884

- K -**
- Key 43, 47, 324, 409, 693
- Key combination 144, 658
- Keyboard 2, 132, 403, 810
- KeyManager 3, 91, 103, 105, 109

- L -**
- Label 823, 854, 856
- Label distance 485
- Label position 485
- Label size 485
- Language 105, 422, 442, 527, 581, 676, 939, 1008, 1011, 1014, 1017, 1050, 1088, 1102, 1108
- Lanugage 961
- Large core image 424
- Last 466
- Last name 526, 527, 534, 539, 939
- Layer 3, 485, 568, 729, 756, 776, 794, 798, 802, 803, 804, 810, 819, 825, 826, 827, 828, 858, 867, 1096
 - Activate 824
 - Arrange 824
 - Delete 824
 - Duplicate 824
 - Invisible 824
 - Locked 824
 - New 824
 - One down 824
 - One up 824
 - Printable 824
 - Rename 824
 - To the bottom 824
 - To the top 824
 - Visible 824
- Layout 3, 138, 167, 197, 210, 243, 277, 450, 466, 475, 500, 604, 605, 609, 619, 703, 776, 800, 886, 1039, 1041
- Layouts 370
- LCD
 - Display 850
- LCD Display 828, 852, 854, 879
- LDAP 3, 148, 424, 539, 685
 - Attribute 685
 - Domain 685
 - Server 685
- LDAP name 547
- Leap sizes 500
- Legend 802
- Library 774, 775
- LIC 111, 116, 117
- LIC file 99, 100, 101, 103, 105, 110
- LIC Online updaten 111
- lic@advancis.de 111, 116, 117, 120, 124
- LIC-Datei 111
- Licence file 74
 - License 3, 15, 85, 91, 92, 99, 100, 103, 105, 111, 116, 146, 171, 353, 361, 399, 408, 450, 604, 605, 1030
 - Dongle 34
 - SoftKey 34
- License file 99, 100, 101, 117
- License ID 99
- License Manager 3, 99, 110, 111, 115, 119, 120, 122, 124
- License module 3
- License selection 111
- License server 111
- License update 117
- LicenseMangaer 103
- Light 187, 466
- Light color 601
- Lightning 324
- Limit 234
- Limitation 1096
- Limitations 204
- Limits
 - Max-Hi 741
 - Max-Lo 741
 - Min-Hi 741
 - Min-Lo 741
- Line diagram 403
- Line end 865
- Link 3, 424, 485, 854, 856, 860, 1025
- Linked 242, 793
- Linked to event 979
- LIR 111, 116, 120, 124
- List 141, 167, 307, 345, 466, 557, 570, 658, 691, 909
- List display 709
- Live 283
- Lizenz-Manager 109
- LNG file 713
- Load method 485
- Local 513
 - Installation 407

- Local camera 748
- Local installation 38, 404
- Local Settings 353, 357, 367
- Localizer 3, 83, 581, 713
- Location 133, 164, 178, 179, 185, 212, 224, 231, 236, 237, 255, 260, 262, 294, 295, 297, 300, 303, 307, 313, 371, 378, 386, 450, 455, 541, 542, 564, 573, 642, 691, 693, 696, 699, 715, 719, 727, 798, 931, 939, 990, 1035, 1050, 1066, 1096, 1104, 1109, 1119, 1123, 1125, 1126
 - Edit 693
 - Selection 727
- Location entry 693
- Location folder 696
- Location graphic 1109
- Location link 776
- Location name 696
- Location overview graphic 450
- Location register 693
- Location server 18, 19
- Location text 939
- Locations 370
- Lock 187, 424, 455, 734, 746, 785, 819
- Locked 188, 324, 785, 854, 858
- Locked objects 822
- Log 307, 316, 325, 330, 338, 424, 619, 982
 - Compress 348
 - Interfaces 348
 - Query 699, 891, 900, 905
 - Remove 348
 - State 348
 - System 348
- Log folder 709
- Log Out 149
- Log query 330, 926
- Logging 292, 1090, 1139
- Login 133, 142, 146, 148, 151, 152, 422, 424, 533, 534, 539, 684, 939, 994, 1050, 1102, 1133
- Login user 994
- Logo 442, 475
- Logo.bmp 133
- Logoff 424
- Logon 36
- Logosmall.bmp 133
- Logout 152
- Logs 353, 357, 365, 367

- M -**
- MAC address 99
- Macro 642
- Mailing address 527
- Main area 809
- Main connection 703
- Main control panel 158, 715
- Main panel 240
- Main window 133, 172, 442
- Maintenance 3, 152, 216, 341, 348, 424
- Maintenance alarm 324
- Maintenance contract 3
- Manage 889
- Manage control exclusively 703
- Management 1133
- Mandatory entry 893, 909, 911, 919
- Manufacturer 701
- Map 834
- Margin 475, 668
- Marking 466
- Max values 517
- Maximized 442
- Maximizing allowed 442
- Maximum message size 409
- Measured value 332, 466
- Measured values 517
- Meldungen 576
- Memory image 52
- Menu 59, 129, 132, 133, 151, 167, 174, 422, 442, 526, 650, 661
- Menu bar 889
- Menu command 2, 132, 403
- Menu function 772
- Menu text 661
- Menu tree 650
- Message 43, 1008, 1014, 1017, 1020
- Message control panel 142
- Message distribution 36
- Message function 142
- Messaging 226, 514
- MicroStation 756, 797
 - Tag 485
 - V8 797
- Mirror 767
- MMI 500
- Mobile 527
- Mod 85
- Mod directory 89
- Mod folder 711
- Mode 796, 869, 960, 1006, 1098
- Mode <port> 1158
- Model 776, 800
- Modify event 995
- Modul 92
- Module 171, 316, 319, 676
- Module restart 701
- Module update 82
- Modules 91, 422

Index

Monitor 68, 187, 221, 277, 280, 285, 289, 442, 466, 485, 500, 619, 701, 747, 752
 Monitoring 233, 335, 701
 More 105
 Mouse 716, 810
 Mouse key 716
 Movable 442
 Move
 To Layer 819
 MS Access 348
 MS Excel 1141
 MSSQL.WSE 391
 Multi-client 60, 1072, 1135
 System 142, 541
 Multi-client system 15
 Multi-lingual 581
 Multi-monitor 1030
 Multi-monitor operation 135
 Multi-selection 466
 MySQL 390

- N -

Name 307, 455, 526, 527, 542, 551, 552, 594, 597, 661, 703, 719, 723, 939, 977
 Network 36, 38, 407
 Address 43
 Addresses 409
 Installation 34
 Monitor 146
 Operation 34
 Settings 409
 Traffic 335
 Workstation 142
 Network adapter 99
 Network monitor 335, 541
 New 541, 693, 721, 759, 785
 New start 64
 Node 326, 328, 710, 726, 746, 939
 Nordwinkel 773
 Normal 324
 North angle 736, 805, 834
 Notes text 219
 Notice 424
 Notification 252, 676
 Control panel 227
 Function 227
 Notification control panel 158
 Notification list 675, 676
 Notify workstation 996
 Number 541, 542, 725
 Number of datapoints 1114
 Number of sensors 939

Number of Servers 39, 424

- O -

Object 242, 699, 819, 822, 823
 Object classes 424
 Object type 557, 560
 Animation Scheme 559
 Bookmark 559
 Calendar 559
 Clip 559
 Command 559
 Control Operation 559
 Datapoint 559
 Event 559
 Event Handling 559
 Graphic 559
 Interface 559
 Layout 559
 List 559
 Location 559
 Menu 559
 Overlay definition 559
 Pane 559
 Person 559
 Printer profile 559
 Profile 559
 Rights 559
 Schedule 559
 Schedule commands 559
 Segment 559
 Sensor type 559
 Settings 559
 Shortcut 559
 System 559
 Tag 559
 Text 559
 Timer 559
 Toolbar 559
 Users 559
 VideoManager 559
 Workstation 559
 Object-oriented 756
 Objects 353, 357, 367, 800, 1143
 Observed control operations 255, 1119
 ODBC 3
 ODBC driver 399
 ODBC export 152
 OenormEnabled 1098
 Off 188, 324, 455, 701
 Office 527
 Offset 442, 636, 979, 1066
 Offspring area 604

- OK 298, 542
 - OLD_KEYWORDS----<GRAPHIC#> 999, 1001, 1008, 1011, 1039
 - One-time 1057
 - Online 116
 - Online help 171, 707, 710, 714
 - On-screen keyboard 148, 158
 - OPC client 69
 - OPC server 15, 69, 72
 - Open 500, 759
 - Operating station 3
 - Operating system 403, 672, 1088
 - Operation 1, 714, 977
 - Operation mode 948
 - Operation required 1119
 - Operation states
 - Approve? 252
 - End (Error) 252
 - End? 252
 - End? (Error) 252
 - Start? 252
 - Started (Error) 252
 - Operation type 260, 262, 1123, 1125
 - Operations 244
 - Option 636, 885, 928
 - Options 759, 823
 - OR 1047, 1048
 - Orientation 475, 636, 1011
 - Origin 844
 - Ort 181, 576
 - Other 187, 392, 422, 424, 466, 475, 746
 - OU-Organisation unit 1138
 - Outgoing 1054
 - Outline color 818
 - Outside system 15
 - Overlay 500, 773
 - Overlays 167, 636, 860
 - Owner 244, 245, 255, 260, 275, 1119
- P -**
- Package 80
 - Padding 636
 - Page 842
 - Pager 514, 527
 - Palette 934
 - Pan 3
 - Pane 167, 605, 611, 617, 633, 634, 756, 827, 1043, 1045
 - Panel 981
 - Panic 187
 - Paper 770, 842
 - Paper height 485
 - Paper size 475, 809
 - Paper width 485
 - Param 970
 - Parameter 207, 219, 827, 876, 894, 972, 1039, 1110
 - Parameters 776, 984, 985
 - ParamId 627
 - ParamValue 627
 - Password 36, 148, 353, 357, 361, 533, 534, 540, 676, 680, 685, 994, 1090, 1102
 - Change 152
 - Confirmation 149
 - New 149
 - Old 149
 - Password for external connections 409
 - Pattern 850
 - PDF 212, 214, 332
 - Pen 822, 865
 - Performance 687
 - Period 589, 591
 - Current month 589
 - Whole year 589
 - Permission 564
 - Person 133, 164, 188, 371, 378, 386, 455, 533, 534, 576, 916, 1008, 1011, 1014, 1017
 - Persons 526, 527, 531, 540
 - PIN 99, 122, 124
 - Pipette 818, 933, 934
 - Pixel 661
 - Play clip 298
 - Play sound 997
 - Play stream 298
 - PNG 756, 757
 - Popup 3, 130, 604, 605, 613, 617
 - Port 43, 47, 52, 53, 409, 419, 500, 672, 680, 1088, 1090, 1102
 - 1234 34, 36, 43
 - Portable Network Graphic 756
 - Position 442, 500, 613, 636, 834
 - Power outage 64
 - Powerclip 3, 756, 759, 769, 828, 850, 854
 - Container 769, 811
 - PowerShell 1152
 - Powershell file 1145
 - Pre alarm 455
 - Prealarm 731
 - Pre-alarm 188, 216, 324, 424
 - Preset 277, 455, 736
 - Name 736
 - Number 736
 - Presets 422, 776, 860, 867
 - Preview 370, 450, 485
 - Primary 442

- Primary groups 424
 - Print 152, 219, 800, 858, 1001
 - Direct 403
 - Print command 551
 - Print document 999
 - Print graphic 1001
 - Print text 1003
 - Printability 827
 - Printable 785
 - Printer 551, 999
 - Driver name 419
 - Name 419
 - Profile 142, 152, 371, 407, 419, 424
 - Publishing 419
 - Publishing setup 419
 - Selection 142
 - Settings 419
 - Setup 152, 419
 - Printer drivers 1142
 - Printer profile 381, 551, 552
 - Prio 237, 475, 990, 1035
 - Priority 3, 197, 212, 216, 313, 466, 564, 727, 731, 735, 741, 745, 754, 939, 995, 1014, 1050
 - Private 527
 - Private Key 1137
 - Problem analysis 68
 - Process 466
 - Processing path 895
 - Processor 99
 - Professional 92, 93
 - Profil 455
 - Profile 132, 133, 141, 144, 148, 172, 289, 371, 381, 404, 422, 525, 526, 533, 534, 540, 546, 547, 550, 564, 568, 685, 776, 960, 962, 963, 1055
 - Change 152
 - Profile for user 568
 - Profile for user group 568
 - Profile for workstation 568
 - Profile from LDAP 568
 - Profile from user profile 568
 - Profile from workstation profile 568
 - Profile name 547
 - Program 63, 424
 - Directory 3, 15, 58, 63
 - Execution 408
 - File 43
 - Folder 407
 - Module 43
 - Release 63
 - Replication 3
 - Program directory 672, 774, 893, 1134
 - Program file
 - Replicate 43, 47, 409
 - Program folder 711
 - Program function 1
 - Program ID 72
 - Program interface 526, 581, 948
 - Program module 701
 - Program start 146, 526
 - Program update 82
 - Program window 442, 1030
 - Prohibition 564
 - Project 63, 92, 424, 774
 - Data 774
 - Directory 3, 58
 - Folder 407, 408, 709, 774
 - Project data 15, 774, 893, 1096
 - Project database 348
 - Project files 85
 - Project graphics 775
 - Project information 87
 - Projection 132, 141, 485, 557, 691, 693, 701, 715, 746, 756, 1135
 - Automatic 710
 - Properties 731, 756, 785, 811, 819, 822, 823, 824, 828, 831, 837, 842, 844, 846, 848, 850, 854, 856, 858, 860, 865, 867, 869, 878, 879, 881, 882, 885, 905
 - Dialog 822
 - Property 485, 609
 - Proportionality 776
 - Protocol description 701
 - PSK 415
 - PTZ 3, 277, 280, 281, 805
 - PTZ control 736
 - PTZ status 736
 - Public Key 1137
 - Published 341
- Q -**
- Query 939
 - Question mark 324
 - Quick help 661
 - Quit 152
 - Quit Service 674
- R -**
- Radio button 909
 - Range 589
 - Range of functions 171
 - Received 328
 - Recht 557
 - Rechtoprofile 557
 - Record 546
 - Rectangle 819, 828, 850, 854, 865, 881

- Redundance Server 1090
 - Reference 699, 876
 - References 939
 - Registration 66
 - Release Notes 84
 - Remember me 1102
 - Remote EXE 89
 - Remote Monitoring 674
 - Remote-access 680
 - Remove 455
 - Remove Command 1005
 - Remove LIC 105
 - Rename 693, 716, 785
 - Repeat/Redo 811
 - Repetition 1057
 - Replicate 43
 - Replicate program files 409
 - Replication 43, 341
 - Report 162, 316, 330, 424, 699, 951
 - Create 982
 - Print 982
 - Save 982
 - Show 982
 - Reports 390
 - Representation 442, 466
 - RescanInterval 687
 - Reset 400, 424
 - Resolution 370, 485
 - Resource 485
 - Restart 43, 404, 424, 672
 - Module 701
 - Total 701
 - Restore 3, 85, 152, 341, 353, 357, 361
 - RevAlarm 324
 - RevEvent 324
 - RevFault 324
 - Revision 188, 324, 424, 455, 475, 731
 - Revision alarm 188
 - Revision event 188
 - Revision fault 188
 - RGB 455, 466, 485, 500, 517, 589, 601, 609, 613, 619, 668, 831, 850, 860, 865, 882, 917, 921, 933, 934
 - Right 684
 - Rights 58, 59, 63, 148, 152, 179, 195, 197, 240, 242, 245, 291, 526, 533, 540, 546, 554, 557, 560, 568, 573, 691, 699, 1055
 - Rights profile 547
 - Rights system 557
 - Roads 771, 803, 834
 - Rollback 82
 - Rotate 767
 - Route card
 - Display 162
 - Print 716
 - Show 693
 - Row 466
 - Row height 466
 - RS232 701
 - RS485 701
 - RTC 105
 - RTU 104, 105
 - Rule set 554, 1055
 - Ruler 770, 844
 - Rules 554, 564
- S -**
- Sabotage 187, 466
 - Salutation 527
 - Satellite 771, 803, 834
 - Save 298, 721, 759, 811
 - Save history 741
 - Saved until 294, 295
 - Scale 424, 844, 865
 - Schedule 585, 589, 591, 691, 1053, 1123
 - Schedule section 260, 589
 - Scheduled commands 162, 240, 1057, 1059, 1062
 - Scheduler 244
 - Schema 934
 - Scheme 860
 - Schnittstelle 576
 - Screen 3, 130, 403, 442
 - Screen layout 167
 - Script 3, 80, 197, 450, 1075
 - Scroll 911, 919
 - Scrolling text 879
 - Search 127
 - search filter 424
 - Second bank 500
 - Seconds 668
 - Section 585
 - Secured 357
 - Security 62, 407, 415
 - Security management 1
 - Segment 62, 133, 152, 217, 275, 341, 576, 577, 696, 703, 860, 874
 - Segmentation 62, 424
 - Segmetation 365, 367
 - Select 811, 1006
 - Select datapoint 1006
 - Selection 307, 316, 796, 860, 869
 - Selection field 570, 911
 - Selection window 824
 - Send email 1008

Index

- Send fax 1011
- Send SMS 1014
- Send to pager 1017
- Send voice message 1020
- Sensor 219, 231, 375, 597, 725, 727, 747
- Sensor number 557, 939, 1050
- Sensor position 729
- Sensor size 805
- Sensor type 167, 212, 231, 371, 378, 386, 597, 598, 691, 725, 801, 1050
- Sensors 378, 381, 384, 774
- Sent 328
- Separator 424, 654
 - Comma 371, 386
 - Semicolon 371, 386
 - Tab 371, 386
- Sequence 277, 283, 286, 300, 303
- Serial 707
- Serial number 110
- Series 245, 247
- Series definition 265, 1126
- Series element 248, 253
- Series type 265, 270, 1126
- Server 3, 18, 19, 24, 34, 38, 51, 55, 66, 103, 341, 357, 407, 424, 541, 542, 670, 734, 753, 1022, 1090, 1135
 - Settings 36
- Service 55, 66, 146, 670, 672, 683, 1086, 1088, 1133, 1142
- Service access 409
- Service Management 674
- ServicePanel 55, 66, 672, 676
- Set info as note 1126
- Set input 1023
- Set symbol filter 1025
- Set up 64
- Settings 38, 51, 52, 63, 141, 152, 242, 289, 381, 404, 424, 442, 455, 475, 500, 513, 525, 526, 554, 714, 1088, 1108
 - Client 36
 - Server 36
 - System 36
- Settungs 392
- Setup 15, 84, 85, 87, 526, 701, 1080
 - Client 24
 - Data 15
 - Directory 24, 31, 69
 - Interface 24
 - Language 24, 69
 - Modul 24
 - OPC server 23, 24, 69
 - Program 31
 - Progress 31
 - Project data 23, 31, 69
 - Project files 24
 - Server 24
 - Standalone 24
 - WebServer 23
 - Welcome 69
 - WinGuard 23
- Setup.xml 85
- Shadow color 601
- Shift schedule 585
- Shortcut 167, 526, 658, 810
- Shortcut key 144, 422, 442, 557
- Shortcut keys 129, 661
- Show 982
- Show control panel 1028
- Show display 1030
- Show full height 158, 903
- Show locally 236, 237
- Show text 1032
- Shut-down 216, 324
- Signature 609
- Silent 188, 324
- Silent Setup 56
- Simulate event 1035
- Simulation 162, 231, 475
- Single operation 265, 1126
- Single operations 247
- Single Process 245
- Single right 554, 557, 560, 564
- Single rights 554
- Single Sign On 685
- Size 158, 442, 485, 611, 613, 903
- SLD 756, 757
- Sleep mode 324
- Slide file 756
- Slider 234
- SMS 422, 514, 526, 527, 1014
- Snapshot 214, 475
- SoftKey 3, 15, 34, 91, 99, 101, 103, 110, 111, 115, 116, 117, 119, 120, 122, 124
- Sort 693
- Sortable 466
- Sorting 466
- Sound 3, 59, 361, 424, 514, 594
 - File 424
- Source 330, 371, 926
- Special function 1072
- Special right 557
- Speed 348
- Spell check 442
- Splashscreen 580
- Split 3, 53, 130, 289, 292, 605, 611, 617
- Split pane 617
- Splitter 611

Index

- SQL 390
 - Database 399
- SQL
 - Export 392, 393
- SQLite 59
- SRV 105
- SSL 1077, 1088, 1090
- Stability 348
- Stair 802
- Standalone 3, 18, 19, 142, 357
- Standalone system 15
- Standard 934
- Standard menu 132
- Standard toolbar 174
- Standby Server 19, 34, 55, 60, 1135
- Start 1, 64, 146, 301
- Start angle 874
- Start application 1037
- Start date 307, 316, 321, 326
- Start marker 283
- Start menu 146
- Start screen 424, 442
- Start Service 674, 676
- Start text 879
- Start time 250, 307, 316, 321, 326
- Start UI 674, 676
- Start window 146
- Start without replication 43, 47, 146, 409
- Startup 709, 714
- State 3, 219, 237, 260, 265, 313, 321, 324, 424, 741, 745, 796, 869, 931, 995, 1096, 1119, 1123, 1126
 - Active 601
 - Alarm 601
 - Armed 601
 - Delete 735
 - Disarmed 601
 - Fault 601
 - Lock 601
 - Log 324
 - Message 601
 - Off 601
 - Pre-alarm 601
 - RevAlarm 601
 - RevFault 601
 - Revision 601
 - RevMessage 601
 - Set 735
 - Silence 601
 - Unknown 601
 - Warning 601
- State change 1054
- State color 601
- State counter 3, 195, 455, 1114
- State counter list 133
- State display 3, 601
- State graphics 772
- State log 162, 321, 348, 375, 384
- State mode 776
- State picture 214
- State text 3, 185, 231, 455, 475, 939, 995, 1050
- State type 3, 185, 455, 466, 475, 485, 939, 1050, 1054
- State View 207, 811
- States 442, 774, 811
- Station 513
- Statistics 390
- Status 990, 1035, 1088
- Status bar 129, 142, 158, 422, 442, 676
- Status field 142, 400
- Status text 475
- Stop Service 676
- Stoppable 594
- Store sequence as clip 979
- Stream 292
- Strikeout 852
- String-ID 573
- Style 819, 906
- Sub counter 422
- Sub menu 650
- Subcounter 455
- Sub-directory
 - Data 391, 393, 399
 - Mod 391, 393, 399
- Subfolder 776
 - Data 713
 - Mod 713
- Subject 246, 265, 1125, 1126
- Subject selection
 - cop_subjects 246
 - cop_subjects_activate 246
 - cop_subjects_arm 246
 - cop_subjects_deactivate 246
 - cop_subjects_disarm 246
 - cop_subjects_note 246
 - cop_subjects_off 246
 - cop_subjects_rev 246
- Subsection 611, 617
- Substitute 527
- Substitution function 527
- Success 319, 328, 953
- Sum counter 133, 422
- Sum function 3
- Summer time 253
- Supply 691
- Supportinfos 85, 87, 90

- SupportInfos_en.chm 84
 - Switch 424, 650
 - Switch command 716
 - Switch graphic 1039
 - Switch pane 1041
 - Switch text 1043
 - Switch video split 1045
 - Symbol 2, 3, 142, 167, 319, 324, 328, 422, 424, 455, 485, 597, 598, 601, 650, 725, 756, 774, 790, 792, 793, 794, 795, 802, 810, 828, 831, 854, 882, 1110
 - Arrange 170
 - Symbol change 207
 - Symbol filter 1025
 - Symbol size 485
 - Symbols 759, 772
 - Symbols for states 188
 - Symmetrical 881
 - Synchronisation 1140
 - System 144, 151, 407, 422, 691, 701, 715
 - Log 162, 316, 319, 371, 424
 - Manager 424
 - Settings 36
 - System area 542
 - System control panel 152
 - System function 557
 - System ID 3, 92, 100, 101, 105
 - System key 424
 - System license 3
 - System log 211, 212, 348, 375, 384, 450, 926, 1041
 - System manager 408
 - System name 424
 - System preset 404
 - System protocol 83, 619, 1041
 - System requirements 15
 - System settings 151, 408
 - System start 146
 - System status 133
 - System text 961
 - System time 754
 - System tray 72
 - SystemManager 1134
- T -**
- Tab 3, 130, 138, 139, 442, 604, 605, 617, 693, 819, 826, 828, 886
 - Table 526, 577
 - Table view 255, 264, 294, 295, 296, 305, 307, 313, 315, 316, 321, 324, 325, 526, 527, 533, 534, 541, 546, 547, 633, 634, 715, 719, 721, 746, 1057, 1119
 - Tag 167, 181, 185, 217, 348, 573, 642, 696, 716, 723, 939, 1066
 - Tagged Image File 756
 - Tailor 767
 - TAPI 3, 158, 226, 514
 - Target area 3
 - Target Id 1005
 - Target pane 450, 1041
 - Target status 244, 246, 250
 - Tastatur 403
 - TCP/IP 701
 - Technical 187
 - Technology 466
 - Telegram 338
 - Telephone 226, 514, 526
 - Telephone button 531
 - Telephone control panel 158
 - Telephone number 226, 527
 - Template 132, 133, 442, 703
 - Term limits 146
 - Test 63
 - Test context 807
 - Test mode 807, 811, 886, 889, 897, 900
 - Test view 716, 719
 - Text 133, 135, 151, 166, 170, 197, 199, 240, 242, 307, 316, 326, 330, 352, 361, 424, 442, 450, 455, 466, 576, 619, 650, 654, 661, 691, 693, 696, 699, 715, 727, 735, 775, 819, 828, 850, 852, 854, 884, 887, 891, 894, 897, 905, 1041, 1117
 - Display 693
 - Manage 887
 - Selection 727
 - Text color 466, 601
 - Text context 929
 - Text documents 197
 - Text editor 166, 330, 887, 899, 900
 - Text entry 2
 - Text file 889, 1014
 - Text function
 - Button 891, 900
 - Checkbox 891, 900
 - Combobox 891, 900
 - Command 731, 891, 900, 1059
 - Contact data 891, 900
 - Editbox 891, 900
 - Font 852, 921
 - Graphic 891, 900
 - Insert condition element 731, 891, 900, 1059
 - Insert Else 731, 1059
 - Insert End 731, 1059
 - Line 891, 900
 - Log query 891, 900
 - Script 852, 921
 - Size 852, 921
 - Strikeout 852, 921

- Text function
 - Style 852, 921
 - Text module 731, 891, 900, 1059
 - Text Properties 731, 903, 1059
 - Underlined 852, 921
 - Variable 891, 900
 - Text macro 3, 727, 939, 1050
 - Text module 210, 891, 900, 905, 927
 - Insert 731
 - Text name 927, 988, 1003, 1032, 1043
 - Text parameter
 - <VALUE> 911, 919
 - Allow free text input 911
 - At WS 906, 913, 946
 - Automatic horizontal scrolling 911, 919
 - Automatic vertical scrolling 919
 - Command 906, 913, 946
 - Context 909, 919
 - Delay 906, 913, 946
 - Height 906, 909, 911, 919, 923
 - Id 906, 913, 946
 - Log entry 906, 909, 911, 919
 - Mandatory entry 909, 911, 919
 - Multiline 919
 - Width 906, 909, 911, 919, 923
 - Text parameters 988, 1003, 1032, 1043
 - Text selection 2
 - Text2Speech 1020
 - Texts 193, 370
 - TIFF 756, 757
 - Tilt 3
 - Time 142, 319, 324, 328, 424, 466, 642, 668, 939, 943, 1140
 - Display 661
 - Time bar 283
 - Time period 244
 - Time schedule 151, 167, 247
 - Time section 585, 1053
 - Time server 34
 - Time shift 247
 - Time stamp 212, 250, 292
 - Time zone 265
 - TimeFormat 1098
 - Timeout
 - Connection 1090
 - Request 1090
 - Session 1090
 - Timer 167, 517, 593, 594, 642, 977
 - Timestamp 378, 381, 384
 - Titel 455
 - Title 442, 604, 609, 613, 619, 642
 - Title bar 442, 455, 1114
 - Titlebar 604, 716
 - Titlebar/caption 613
 - TLS 415, 424, 1137
 - To the second 466
 - Toggle 796, 869, 1028, 1030
 - Tolerance time 250
 - Tollbar 605
 - Tool 759
 - Toolbar 129, 133, 142, 158, 167, 172, 174, 176, 280, 400, 442, 466, 475, 500, 526, 654, 661, 696, 703, 811, 899, 900, 1104, 1106
 - Event display 654
 - Event list 654
 - Main window 654
 - VideoManager 654
 - Tools 84, 85, 581
 - Tooltip 182, 442, 703, 1110
 - Total restart 701
 - Touchscreen 158
 - Track 277
 - Translate 581
 - Translation 167
 - Translations 581
 - Transparency 485, 771, 834, 850
 - Tray 676, 682
 - Triggered 188
 - Troubleshooting 709
 - Turn on 158
 - TXT 727, 1008, 1011
 - Typ 885, 928
 - Type 307, 316, 326, 735
 - Type of day
 - All days 1059
 - Free days 1059
 - Working days 1059
- U -**
- Unattended.ini 56
 - Underline 852
 - Undo 298, 721, 811
 - Unended 424
 - Ungroup All Groups 819
 - Unicode 1141
 - Uninstall 1090
 - Uninstall service 672, 674, 676
 - Unit 741, 844
 - Unknown 188, 324, 455
 - Unlock 822
 - Unlock All 822
 - Update 29, 68, 84, 85, 87, 103, 105, 111, 128, 352, 1086
 - Update directory 75
 - Update LIC online 111
 - Update LIC online 116

- Update limit 3
 - Update Manager 74, 75, 81, 84
 - Update package 74, 75, 78
 - Update process 75
 - Update states 80
 - Update status 75
 - Update.xml 80
 - Update-/service contract 146
 - URL 1102
 - Use license 111
 - User 56, 64, 66, 127, 148, 152, 245, 251, 307, 316, 319, 353, 361, 422, 424, 525, 526, 533, 540, 564, 581, 676, 685, 939, 1050
 - Account 64
 - Change profile 962
 - ID 142
 - Password 64
 - Requirements 129
 - User alarm 162, 236, 237, 283, 475, 745, 747, 754, 1096
 - User defined 934
 - User defined buttons 795
 - User domain 685
 - User entry 929
 - User group 245
 - User groups 56
 - User identification 539
 - User interface 55, 66, 127, 129, 135, 149, 422, 442, 533, 546, 674, 948
 - User interface/desktop 450
 - User login 547
 - User manual 135
 - User name 539, 680
 - User profile 3, 148, 404, 450, 546, 547, 962, 994
- V -**
- Value 187, 234, 321, 324, 741
 - Variable 219, 573, 828, 850, 852, 854, 885, 891, 900, 928, 929, 939, 1050
 - Variable fields 939
 - Variable type 928, 939
 - VdS 774
 - Vector graphic 756, 757
 - Version 128, 146, 171, 353, 361
 - Vertical 767, 839
 - Video 53, 277, 450, 619, 756, 1041
 - Archive 957
 - Arcive 500
 - Banks 289, 500, 957
 - Interface 703
 - Manager 158, 289, 500, 957
 - Server 746
 - Subsequent banks 289, 500
 - Video Archive 277, 291, 292, 294, 295, 296, 297, 300, 301, 303, 305, 353, 357, 367
 - Video sequence 214
 - Video stream 285, 291
 - Video system 277, 283, 286
 - Video type 221
 - VideoDisplay 3, 51, 52, 53, 85, 174, 277, 285, 286, 289, 422, 828, 854
 - VideoManager 3, 53, 277, 286, 289, 291, 422, 1045
 - View 151, 557, 716, 759, 770, 776, 800, 823, 834
 - View angle 736, 805
 - Visibility 197, 217, 422, 485, 636, 772, 826, 827, 858, 860, 1025
 - Visible 442, 785
 - Visualization 887
 - Voice 422, 514
 - Voice message 526
- W -**
- Wall 802
 - Warning 188, 216, 319, 324, 328, 455, 953, 977
 - Warnings 1090
 - Watchdog 3, 424
 - WAV 59, 964, 997
 - Web 527
 - Web.cfg 1098
 - Webclient 1077, 1080, 1096, 1098, 1102, 1104, 1106, 1115, 1117, 1133
 - Webserver 409, 1077, 1078, 1079, 1085, 1086, 1088, 1090, 1096, 1098, 1102, 1133
 - WebserverConfig 1079, 1086, 1088
 - WebserverSetup 1080, 1085
 - Website 450, 619, 1041, 1080
 - Weld 767
 - WGD 59, 774, 775, 798, 1008, 1011
 - WGT 59, 330, 727, 731, 887, 891, 900, 997, 1008, 1011, 1059
 - WIBU 103
 - WibuBox 104
 - WibuKey 15, 64, 91, 103, 104, 105
 - Width 455, 466, 613, 617, 619, 642, 765, 848, 865
 - Window 2, 3, 130, 139, 151, 174, 178, 442, 475, 500, 802
 - Below one another 170
 - Close 554, 709
 - Next to each other 170
 - Overlapping 170
 - Symbol 133
 - Title 500
 - Windows 58, 64, 424
 - Bitmap 756

Index

- Windows 58, 64, 424
 - Enhanced Metafile 756
 - Metafile 756
- Windows 10 1078
- Windows protocols 683
- Windows Server 2012 1078
- Windows Services 674, 676
- WinGuard X4 92
- Winter time 253
- WMF 756, 757
- Work area 3, 139, 442, 605, 617
- Work time 585
- Workday 583
- Workflow 198, 204, 210, 887, 895, 929, 930, 1055, 1096, 1115, 1117
- Workstation 3, 19, 22, 24, 34, 51, 60, 64, 142, 152, 158, 197, 199, 227, 233, 289, 313, 316, 319, 321, 324, 326, 353, 361, 371, 381, 404, 407, 442, 525, 541, 542, 551, 554, 564, 699, 701, 703, 747, 754, 939, 946, 961, 994, 1050, 1108
 - Change profile 963
 - Choose 965
 - Configuration 541
 - Define 1072, 1073
 - Name 34, 36, 43, 409
 - Notify 996, 1072, 1073
 - Number 36, 541
 - Type 34, 36, 43, 409
- Workstation name 34, 43, 47, 409
- Workstation profile 3, 148, 404, 450, 523, 524, 546, 547, 963
- Workstation Type
 - Client 34, 36, 43, 409
 - Client (with interface server) 34, 36, 51
 - Client (with local server function) 34, 36, 51
 - Client (with interface-server) 34, 409
 - Client (with local server function) 34, 409
 - Display 34, 36, 409
 - Server 34, 36, 409
 - Standalone 34, 409
- Write on dongle 111
- WS 307, 319, 324, 328, 939, 946
- WSE 395, 399
- WSE file 392
- WSE sections 395

- X -

- XML 580
- XML file 101
- XML-Format 1098

- Z -

- ZIP code 527

advancis