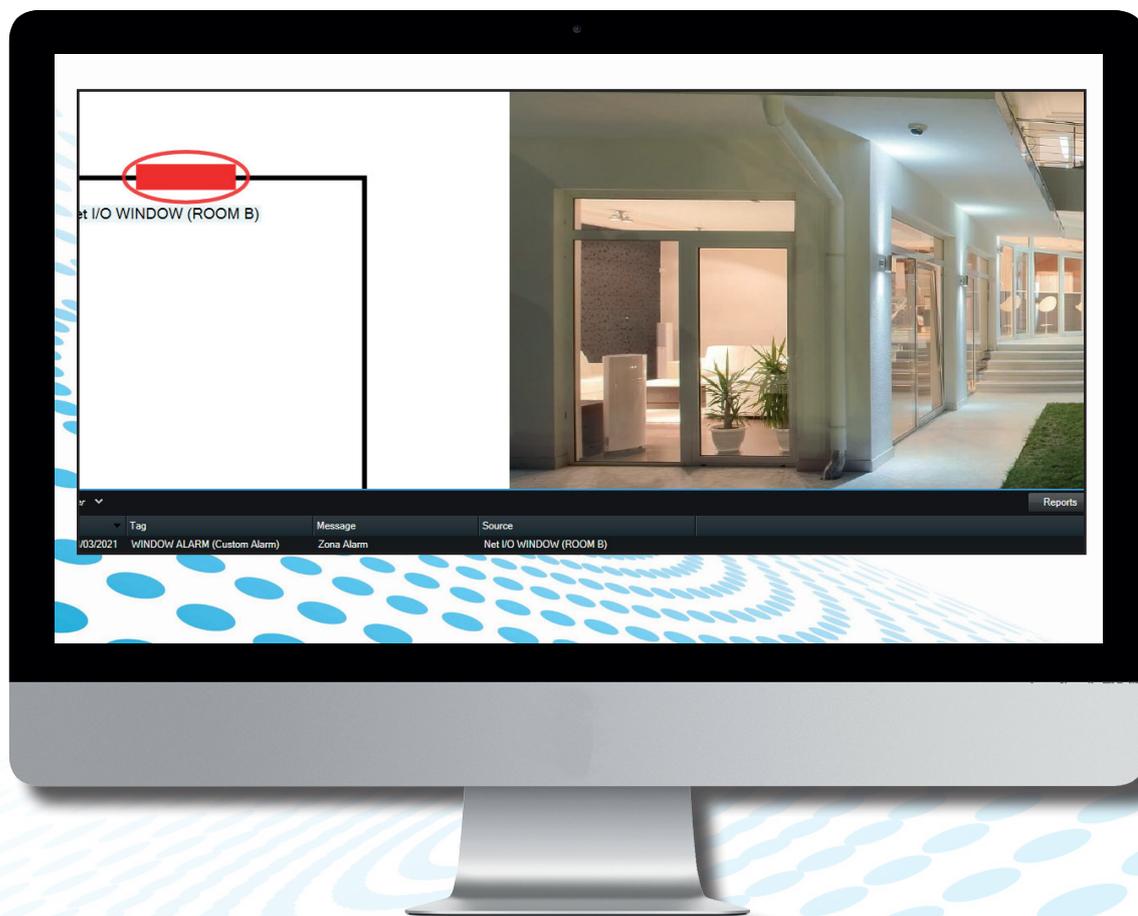


**INSTALLATION
GUIDE**



DEAVMS

PLUGIN INTERFACES



DeaVMS Plug-In V1.1.0

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1. INTRODUCTION

The DeaVMS plug-in provides a bidirectional interface connecting the DEA Security perimeter intrusion detection systems with the Milestone Video Surveillance System, XProtect, and reports all the information of alarm, pre-alarm, fault or malfunction detected.

Moreover, the plug-in allows the user to send control commands to the DEA Security system.

2. PLUGIN INSTALLATION

The DeaVMS plug-in must be installed using its DeaVMS Setup. Before the installation, it is necessary to stop the XProtect Event Server service. Once the XProtect Event Server is stopped, you can run the DeaVMS Setup.

During the setup phase, you make sure that the path where the plugin is installed is correct. By default, the path is: **C:\Program Files\Milestone\MIPPlugins\DeaVMS**

The installation process creates a new folder called DeaVMS located within the Milestone MIPPlugin folder. Inside the folder there is the plugin library and all the dependencies necessary to guarantee its functioning:

- DeaMapNet is a folder where is saved the signal map configuration
- ApplicationInfo.dll
- DeaMap.dll
- DeaMapNet.dll
- DeaVMS.dll
- DeaVMS.dll.config
- icon_DeaSecurity.ico
- LicenseManagerLib.dll
- LicenseManagerTool.exe
- LicenseManagerTool.exe.config
- log4net.dll
- logo_DEA_Security.png
- Newtonsoft.Json.dll

2.1. PREREQUISITES

The DeaVMS plug-in is targeting .NET 4.7.

The following products can be used:

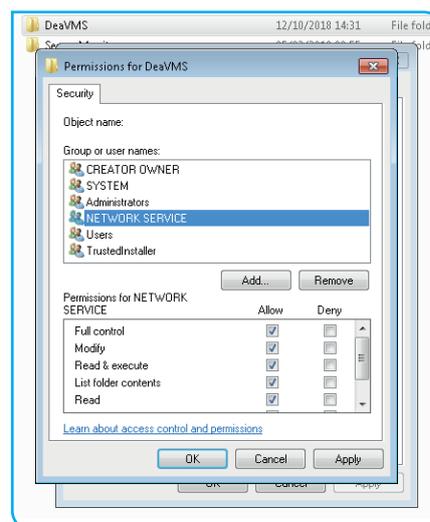
- XProtect Corporate
- XProtect Expert
- XProtect Professional+
- XProtect Express+
- XProtect Essential+

Do not use XProtect versions that are no longer supported. Please check the Milestone Product Lifecycle page at <https://www.milestonesys.com/support/tools-and-references/product-lifecycle>

2.2. PERMISSIONS ASSIGNMENT

Once the **DeaVMS** plug-in folder has been created, it is necessary to enable read and write permissions of the user who manages the “**XProtect Event Server**” service. The default user assigned to this service is the “**NETWORK SERVICE**” user / group.

To verify the user / service association it is necessary to access the windows services page (Direct command from shell to open the services panel: *Services.msc*).



2.3. DEA SECURITY LICENSE

The DeaVMS plug-in is under software license. To enable the plug-in, a license request must be sent to DEA Security. Once the license has been delivered, the plug-in can be licensed using the *LicenseManagerTool*.

As long as the plug-in is not licensed, the communication with the DEA systems will be interrupted.

The graphical controller objects will change icons and show the 'Controller not licensed' icon, while all the other objects (Zone/Sector/Group of zones) will settle on the 'Unknown' status:

	Controller not licensed
	Zone/Sector/Group of zones not licensed

2.3.1 SOFTWARE LICENSE REQUEST

To request a new license, it is necessary to fill all the fields highlighted with a red asterisk and then click on the 'Generate Request' button.

The software will create a request license (*.txt) to be sent by email to: deavms.license@deasecurity.com

2.3.2 SOFTWARE LICENSE INSTALLATION

DEA Security will reply with the software license (*.lic) generated by the *LicenseManagerGenerator* that has to be installed on the computer using the *LicenseManagerTool* selecting the 'Load License' button and then the 'Install License' button.

After the installation is complete, the License Status field will display the following message: *License installed*.

If an error occurs, it is likely that the license that you intend to install is not compatible with this PC. The license is created so that it can only work on the PC where the request license was generated. If the error persists, check that the *LicenseManagerTool* application is activated as *An Administrator*.

 **DEAVMS AUTOMATICALLY READS THE LICENSE, SO IT IS NOT NECESSARY TO STOP ANY SERVICE.**

2.3.3 SOFTWARE LICENSE DEMO

The customer can request to use the DeaVMS in Demo mode for a temporary period. The Demo request must be added in the *Note* field during the *Software License Request* step.

The validity of the license starts from its creation. Once the validity period has expired, it will no longer be possible to reuse this Demo license. A new license will be thus required.

License State			
Status:	Demo mode	Demo:	5 Days
		Demo expiration:	2021-03-28 10:44:39
		<input type="button" value="Read License"/>	
License ID:	1616492679	Date:	2021-03-23 10:44:39
Request License ID:	1616492648	Date:	2021-03-23 10:44:08
		<input type="button" value="Remove License"/>	

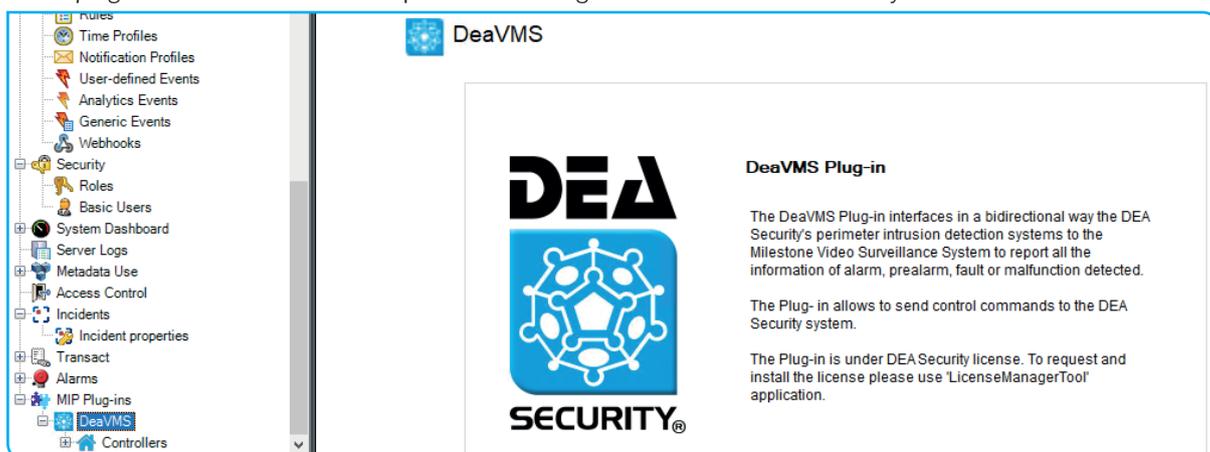
2.4. SERVICE RESTART

To guarantee the identification of the DeaVMS plug-in in the Milestone VMS system, a “**XProtect Event Service**” service restart is needed.

The restart can be executed using the restart command on XProtect Event Service’s IconTray or directly from the windows service panel by restarting the “XProtect Event Server” service (Shell direct command to open the services panel: *Services.msc*)

3. MANAGEMENT CLIENT

After the plug-in installation, you can access the *XProtect Management Client* interface and find the DeaVMS in the *MIP plug-in* section where it will be possible to configure one or more DEA Security servers.



3.1. CONFIGURING DEA MAP CONNECTION

The DeaVMS plug-in, through DEA-Map library, aims to provide services for communication with remote DEA Security devices using the encrypted protocol by DEA-Security.

3.1.1 DEA MAP

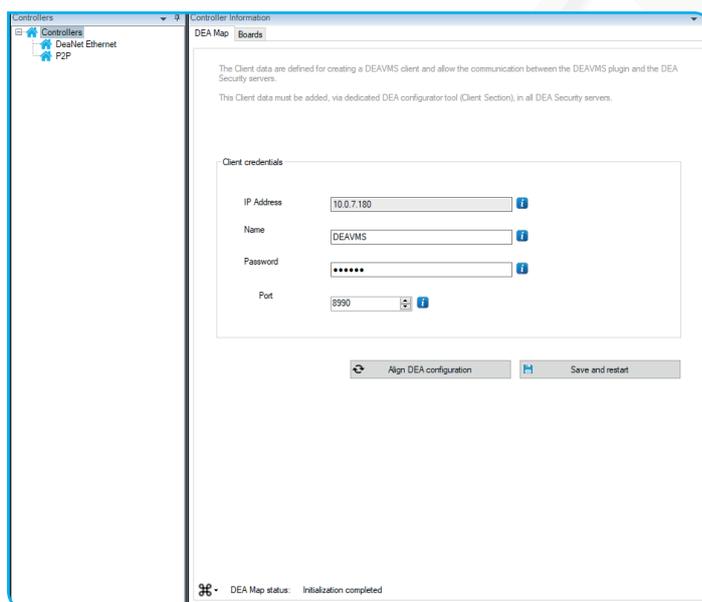
The data compiled in this section are necessary to all DEA Security Servers to recognize the DeaVMS plug-in and establish a connection with it.

That client credentials configured in XProtect must be added to all DEA Security servers that are to be configured, via the specific DEA Security tools, this activity is used to enable the communication between the DeaVMS plug-in and the DEA Security servers.

Once you have filled in the form with your credentials, you must save and start the communication through the 'Save and Restart' button.

The 'Align DEA configuration' button requires all configured DEA servers to transmit their current configuration so that the DeaVMS can align the new configuration in the XProtect system.

You must press this button whenever the DEA configuration changes (for example: added/removed/renamed of the zone/sectors). If changes are made in DEA configuration and this button is not pressed, XProtect won't be able to align with the new configuration.



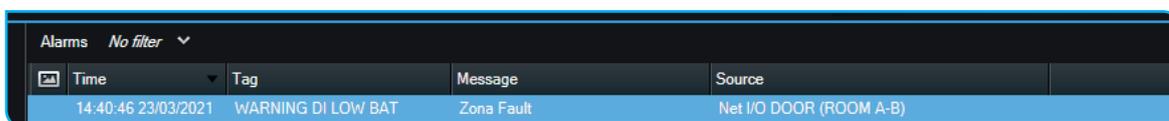
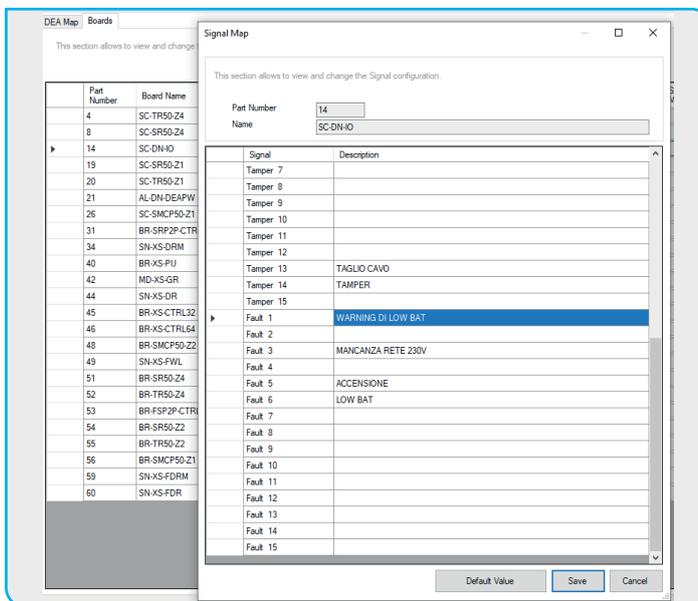
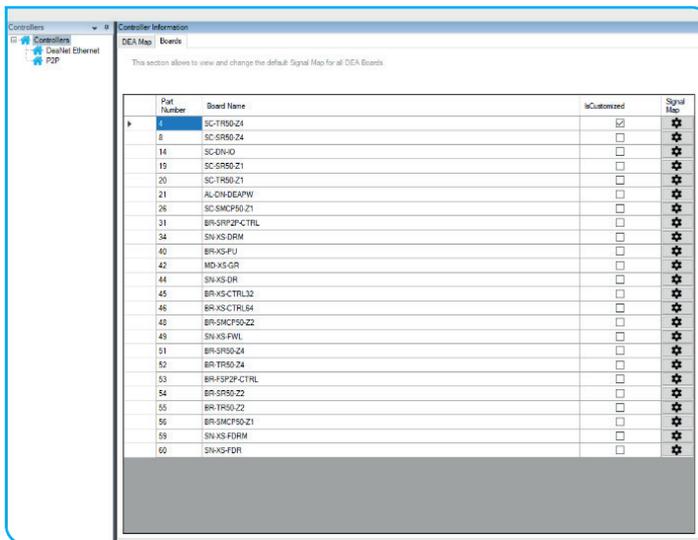
3.1.2 BOARDS

In this section it is possible to view a list of DEA boards and view/edit their signal map. Each signal map defines the list of all possible signals managed by a specific board. The signal is categorized as: alarm, fault, tamper and has a level from 1 to 15 which identifies its severity.

The 'IsCustomized' column identifies if the signal map is different from the template.

The Signal Map column allows to view the signal map for a specific board.

In the XProtect Smart Client, a description of the signal is shown in the 'Tag' column of the Alarm List and in the detail popup for all Zone objects.

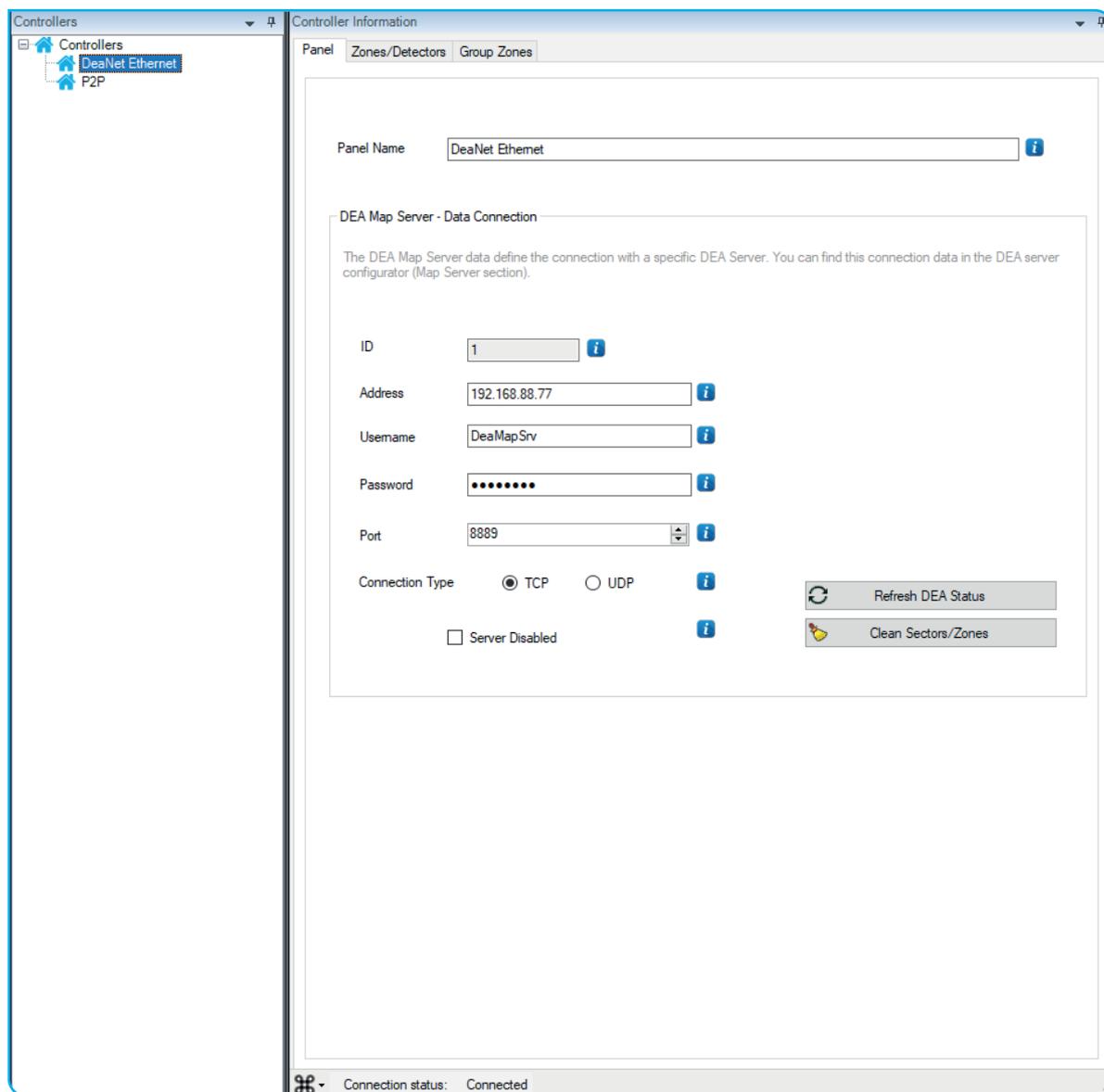


3.2. CONFIGURING A NEW DEA SECURITY SERVER

The plug-in allows you to communicate with multiple DEA servers. Please note that each DEA Server must be enabled to communicate with the DeaVMS plug-in (DEA Map).

3.2.1 DEA MAP SERVER – DATA CONNECTION

To integrate a new DEA Security server, it is necessary to open the Controller panel within the XProtect Management Client and create a new server using the right mouse button.



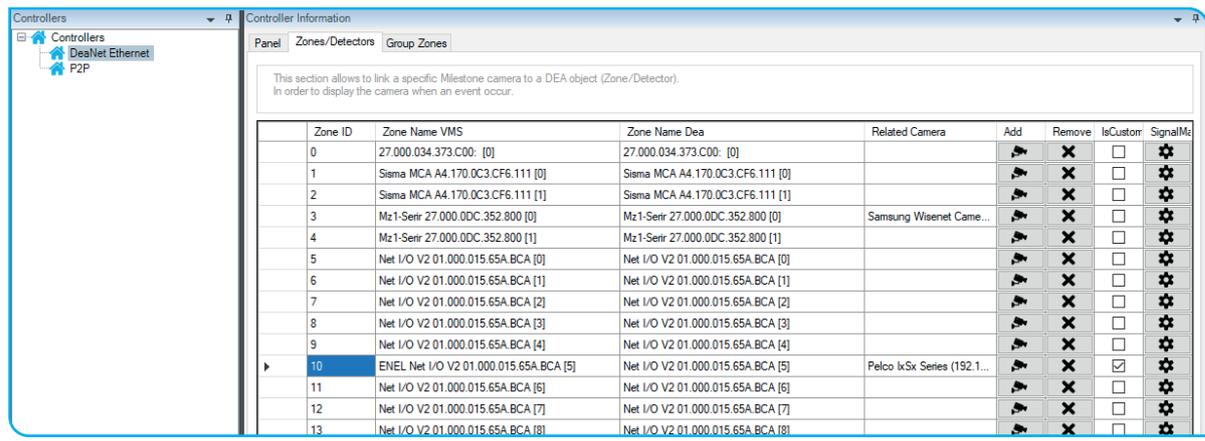
If you want to configure a new DEA Security server, it is necessary to fill all the required fields.

The 'Refresh DEA Status' button sends to the DEA system the refresh request, and then the DEA MAP sends the current status for each DEA object.

The 'Clean Sectors / Zones' button unregisters all the DEA objects from the XProtect system. Once you have pressed the button, wait a few seconds and then refresh the XProtect page so that XProtect can reload the objects registered.

3.2.2 ZONES/DETECTORS

This section lists all the zones / detectors read by DEA.



It is possible to link a camera for each zone that will be displayed in the Alarm Preview section of the XProtect Smart Client when a XProtect alarm is created for this zone.

It is also possible to customize the signal map for each single zone.

3.2.3 GROUP ZONES

In this section you can create a XProtect object that allows you to group multiple zones.

It is possible to link a camera for each group zone that will be displayed in the Alarm Preview section of the XProtect Smart Client when a Milestone alarm is created for this zone.

The group has a status that varies according to the states of its zones:

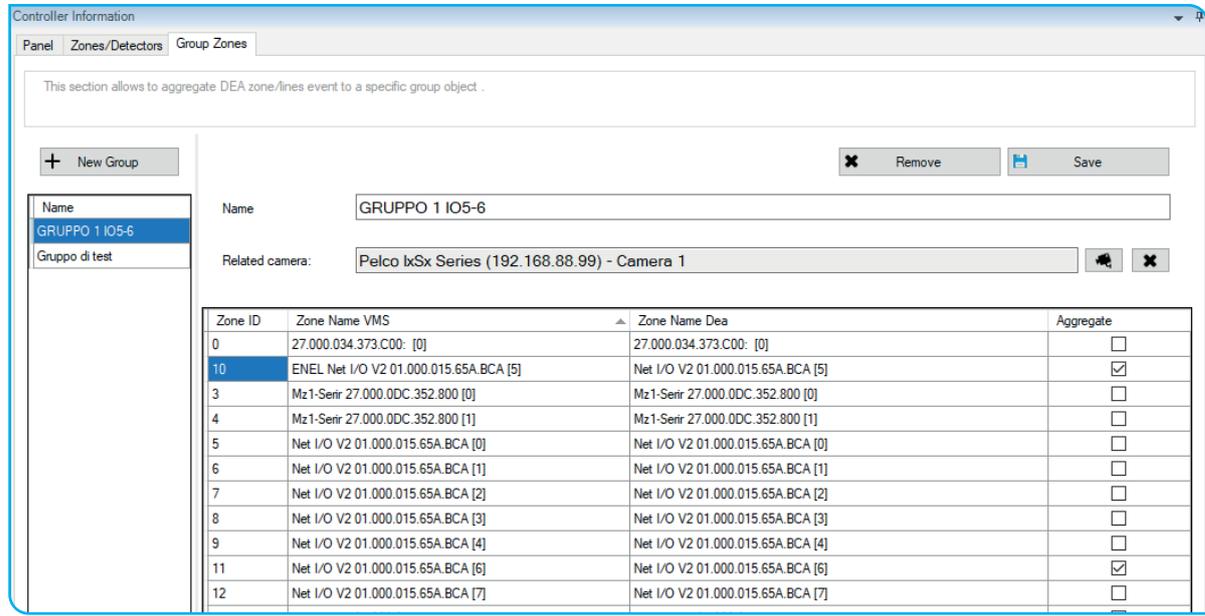
- **Normal:** all zones are Normal;
- **Prealarm:** at least one zone is prealarmed and the others are Normal;
- **Alarm:** at least one zone is alarmed and the others are Normal or Prealarm;
- **Tamper:** at least one zone is tampered and the others are Normal or Prealarm or Alarm;
- **Fault:** at least one zone is faulted and the others are Normal or Prealarm or Alarm or Tamper;
- **Disable:** at least one zone is disabled and the others are Normal or Prealarm or Alarm or Tamper or Fault;
- **Stand-by:** at least one zone is Stand-by status and the others are Normal or Prealarm or Alarm or Tamper or Fault or Disable;

The group also has the ability to send some commands to all its zones. The possible commands are:

- **Inclusion, Disable, Stand-by**

3.2.4 SECTOR

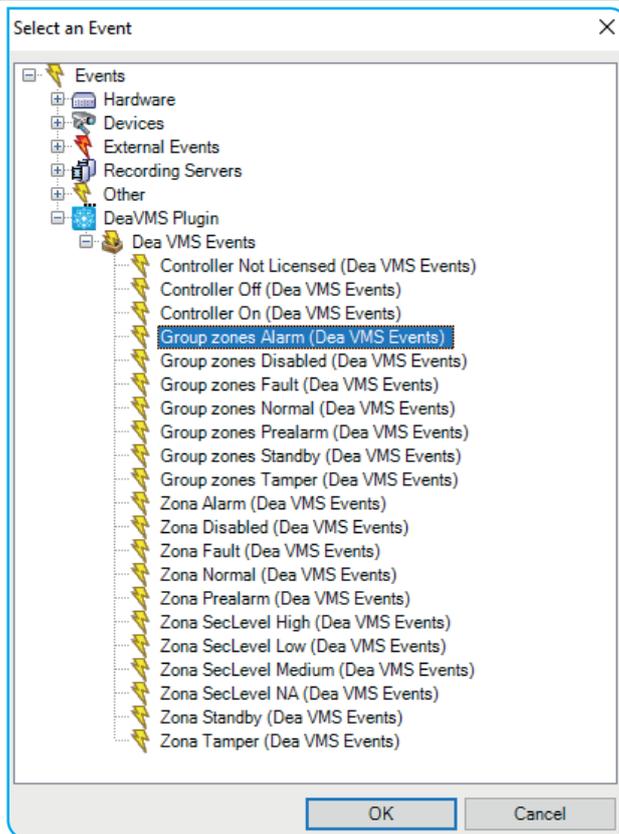
When communicating with a server, the plug-in is able to recognize the sectors configured on that DEA server. A sector is a logical object that groups zones to facilitate the sending of commands



3.3. CONFIGURING EVENTS AND ALARMS

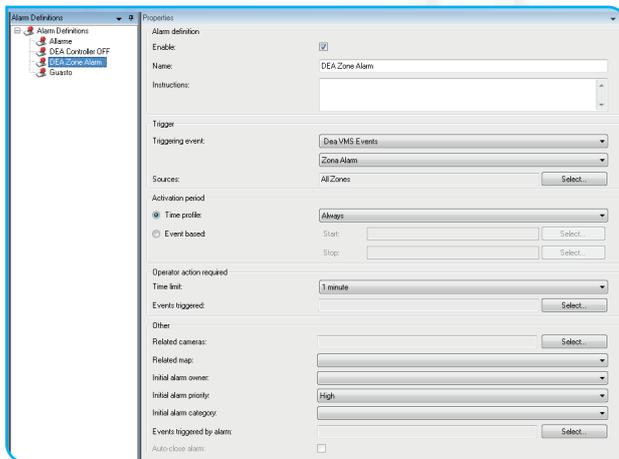
The DeaVMS plug-in provides a new category of events called Dea 'VMS Events' composed by:

- Controller Not Licensed
- Controller Off
- Controller On
- Group zones Alarm
- Group zones Disabled
- Group zones Stanbay
- Group zones Fault
- Group zones Normal
- Group zones Prealarm
- Group zones Tamper
- Zona Alarm
- Zona Disabled
- Zona Stanbay
- Zona SecLevel High
- Zona SecLevel Medium
- Zona SecLevel Low
- Zona SecLevel NA (Not Available)
- Zona Fault
- Zona Normal
- Zona Prealarm
- Zona Tamper

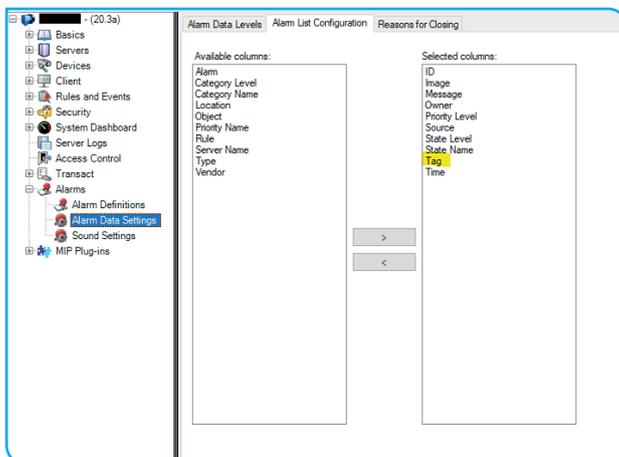


Each event can be associated with an alarm. In this way, the event is managed according to the rules defined by the configured alarm of XProtect System.

By default, it is necessary to create a new alarm in the Milestone VMS to be associated with the "Alarm" category, so that the DEA alarm events are managed as XProtect alarms. The following is how the default alarm should be configured to activate the DEA events handled as an alarm.



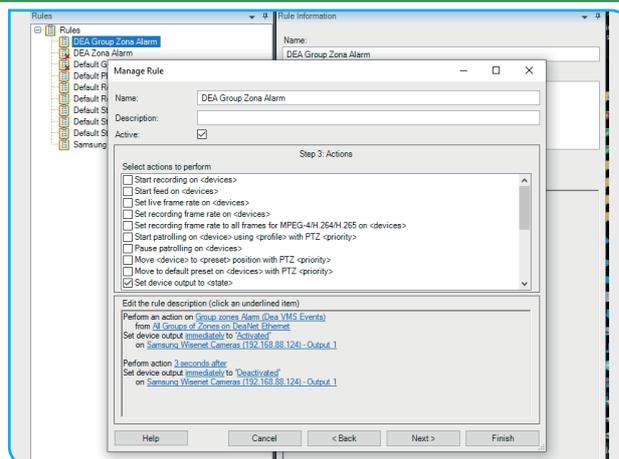
To view the details of the signal level of an event, it is necessary to import the 'Tag' column into the columns visible in the list of alarms.



3.4. CONFIGURING RULES

The DeaVMS plug-in allows XProtect to use its events to generate rules.

An example to better understand the function of the rules is shown below. This rule is activated when any DEA group of zones is alarmed. It activates the output of a camera and deactivates it after 3 seconds.

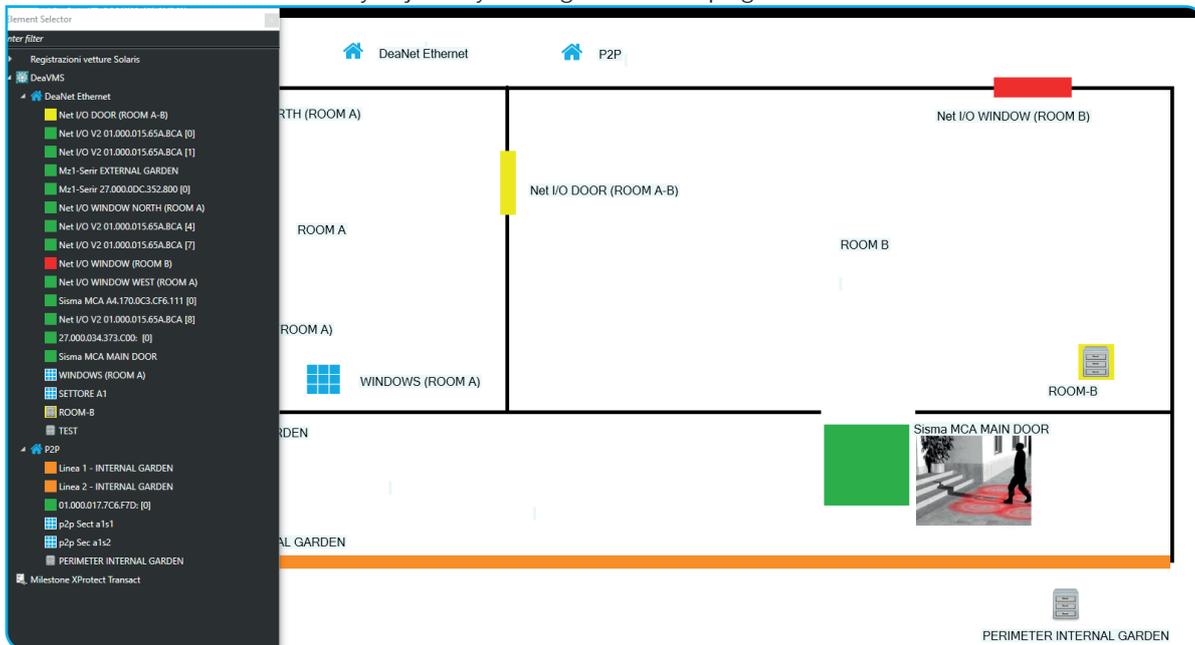


4. VIDEO CLIENT

4.1. INTEGRATION

Every object of the DeaVMS system can be visualized on a graphic map in the XProtect Smart Client.

To add these objects to the map, it is necessary to switch into the configuration mode using the “Setup” button and then add the various DEA Security objects by clicking on the “Add plugin Element” button.



4.2. FEATURES

The object icons identify the status. When an object changes its status, the icon instantly changes its colour.

The status of the object can also be monitored by clicking with the right mouse button the object itself and then clicking the status detail.

It is also possible to send commands directly to the DEA Security system just by clicking with the right mouse button on the object concerned and successively selecting the desired command.

The following are all the commands associated with the DEA Security objects.

Commands available for the Zone/Detector object:

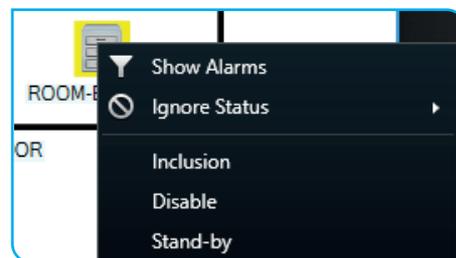
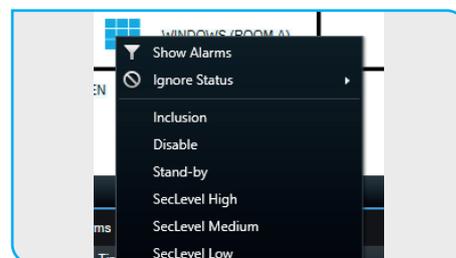
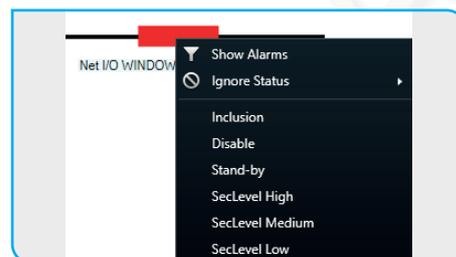
- Inclusion
- Disable
- Stand-by
- SecLevel High
- SecLevel Medium
- SecLevel Low

Commands available for the Sector object:

- Inclusion
- Disable
- Stand-by
- SecLevel High
- SecLevel Medium
- SecLevel Low

Commands available for the Group zones object:

- Inclusion
- Disable
- Stand-by

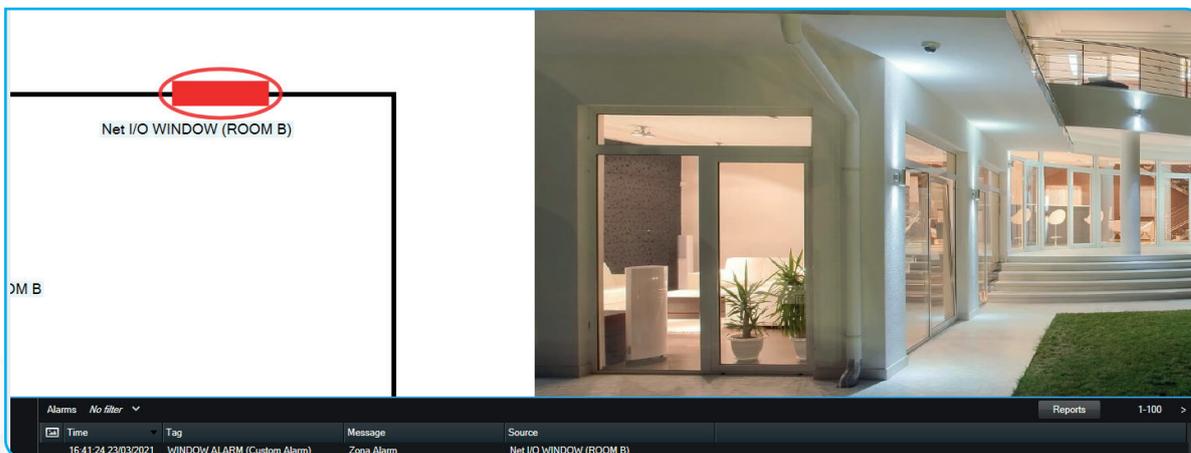


4.3. ALARM

In case of alarm, the alarmed object will automatically be highlighted with a red circle.

By selecting the element and clicking the right button of the mouse, it will be possible to manage the alarm with the commands provided by XProtect.

All the alarms will appear in the dedicated "Alarm Manager" tab where you can view the list of alarms, alarmed objects, their position on the map and the associated cameras.



In the Tag column is reported the detail of the signal received from DEA system.

In this case the event is an alarm with level 10. In the signal map there is a description of this event for this specific board (SC-DN-IO).

Panel Zones/Detectors Group Zones

This section allows to link a specific Milestone camera to a DEA object (Zone/Detector).
In order to display the camera when an event occur.

Zone ID	Zone Name VMS	Zone Name Dea	Related Camera
10	Net I/O DOOR (ROOM A-B)	Net I/O V2 01.000.015.65A.BCA [5]	
5	Net I/O V2 01.000.015.65A.BCA [0]	Net I/O V2 01.000.015.65A.BCA [0]	
6	Net I/O V2 01.000.015.65A.BCA [1]	Net I/O V2 01.000.015.65A.BCA [1]	
4	Mz1-Serr EXTERNAL GARDEN	Mz1-Serr 27.000.0DC.352.800 [1]	
3	Mz1-Serr 27.000.0DC.352.800 [0]	Mz1-Serr 27.000.0DC.352.800 [0]	
8	Net I/O WINDOW NORTH (ROOM A)	Net I/O V2 01.000.015.65A.BCA [3]	
9	Net I/O V2 01.000.015.65A.BCA [4]	Net I/O V2 01.000.015.65A.BCA [4]	
12	Net I/O V2 01.000.015.65A.BCA [7]	Net I/O V2 01.000.015.65A.BCA [7]	
▶ 11	Net I/O WINDOW (ROOM B)	Net I/O V2 01.000.015.65A.BCA [6]	Pelco IxSx Series (192.168.1.10)
7	Net I/O WINDOW WEST (ROOM A)	Net I/O V2 01.000.015.65A.BCA [2]	
1	Sisma MCA A4.170.0C3.CF6.111 [0]	Sisma MCA A4.170.0C3.CF6.111 [0]	
13	Net I/O V2 01.000.015.65A.BCA [8]	Net I/O V2 01.000.015.65A.BCA [8]	
0	27.000.034.373.C00: [0]	27.000.034.373.C00: [0]	
2	Sisma MCA MAIN DOOR	Sisma MCA A4.170.0C3.CF6.111 [1]	

Signal Map

This section allows to view and change the Signal configuration.

Part Number: 14
Name: SC-DN-IO

Signal	Description
Alarm 1	
Alarm 2	
Alarm 3	
Alarm 4	
Alarm 5	PREALLARME
Alarm 6	
Alarm 7	
Alarm 8	
Alarm 9	
▶ Alarm 10	WINDOW ALARM (Custom Alarm)
Alarm 11	
Alarm 12	
Alarm 13	
Alarm 14	
Alarm 15	
Tamper 1	
Tamper 2	MANOMISSIONE DEA NET
Tamper 3	
Tamper 4	

Default Value Save Cancel

4.4. STATUS AND COMMANDS

This section defines the states and commands associated with the DEA objects.

4.4.1 DEA SECURITY SERVER

Status:

On	
Off	
Not Licensed	

4.4.2 ZONE/DETECTOR

Status:

Normal	
Prealarm	
Alarm	
Tamper	
Disable	
Standby	
Not Defined	

Security level:

High	
Medium	
Low	
Not Defined	

Commands:

- Inclusion
- Exclusion
- Stand-by

Commands:

- SecLevel High
- SecLevel Medium
- SecLevel Low

4.4.3 SECTOR

The sector is a DEA logical object that groups zones. It is configured directly in the DEA system. The sector does not have a state but can propagate commands to all the zones associated with it.

Commands:

- Inclusion
- Disable
- Stand-by
- SecLevel High
- SecLevel Medium
- SecLevel Low

4.4.4 GROUP ZONES

The group of zones is a DEAVMS object. It is configured directly in the DEAVMS plugin. The group of zones has a state and it's possible to propagate commands to all the zones associated with it.

Status:

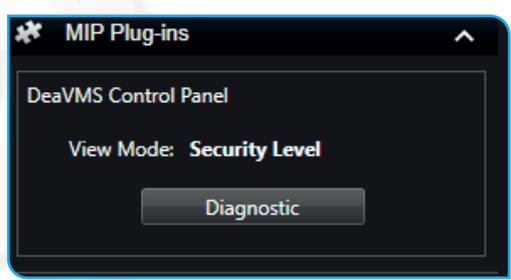
Normal	
Prealarm	
Alarm	
Tamper	
Disable	
Standby	
Not Defined	

Commands:

- Inclusion
- Exclusion
- Stand-by

4.5. DIAGNOSTIC/SECURITY LEVEL VIEW

In the XProtect Smart Client, it is possible to change the display of the zone states in diagnostic or security level. To manually change the display, use the following button:



The diagnostic view is the default view. When the view is changed to security level, the diagnostic view is automatically shown after 30 seconds.

The security level view is automatically shown whenever a security level command is sent.

DEA



SECURITY®



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