

BIDEye v2.1

User Manual

Revision History

Date	Revision	Description
03/12/2019	InitialRevision	
06/05/2020	2	Add User management and icons
10/07/2020	3	Axians Brand id logo

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1. Introduction

BIDEye is a product composed of a series of plugin MIP for Milestone that allow the integrated management of SATEL Integra stations. This document describes the software installation and configuration procedure.

2. Requirements

BIDEye has the following Hardware and software requirements:

2.1 Hardware

BIDEye works in the Milestone Event Server application context. It means that BIDEye is a function of host Milestone hardware configuration. The impact on the performance of the event server depends on the number of Satel Stations that simultaneously work on the same host, and even depends on the number of contemporarily managed events. In general, particular configurations which differ from sizing considerations done for Milestone are not required.

2.2 Software

BIDEye versione 2.1

- Milestone: Milestone professional version 2019 R1 and later.
- Firmware SATEL version: 2.05 2018-09-07 and later

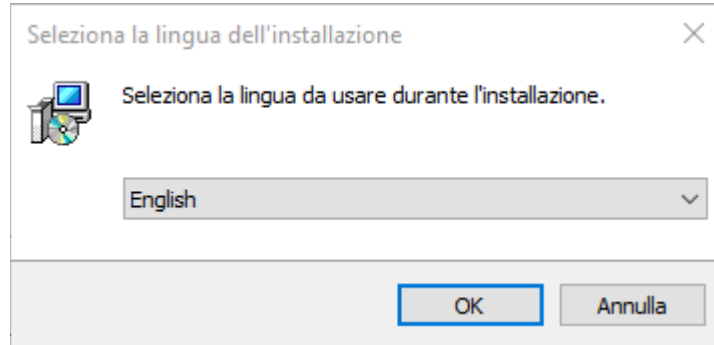
3. Installation

When you have obtained the installation kit, you will have to run it by starting the installation procedure.

The kit allows the installation of all necessary files, both in the scope of Event Server (with initialization of basic data specific to BIDEye) and also in the context of Smart Client to be used at the client workspace, which is separate from the context of Event Server. If there is only one installation in your scenario in which the Smart Client is present on the same machine of the Event Server, only the one installation server is necessary.

The first screen contains the choice of language: the languages currently supported are Italian and

English.



After selecting the language, you are asked to accept the license agreement:

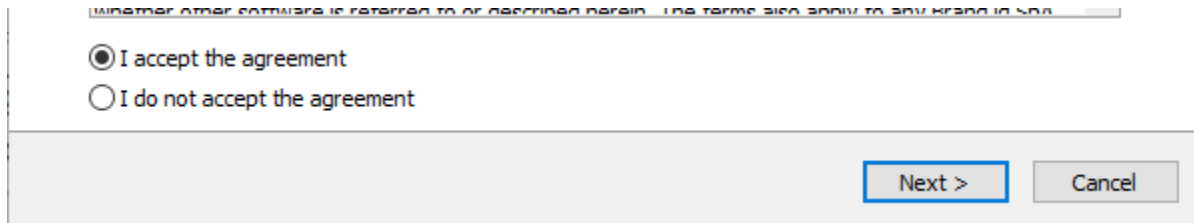


Image1 – License agreement acceptance

Select the folder where the Milestone plugins are. It will propose Milestone standard installation path. Using the browse button, you can change the path.

For a Server side installation, it is necessary to provide the path where the plugins are present in the context of the event server.

In a typical server installation, the plugins are located in the folder:

- **C:\Program Files\Milestone\MIPPlugins**

While in typical client installation, the plugins are located in the SmartClient folder:

- **C:\Program Files\Milestone\XProtect Smart Client\MIPPlugins**

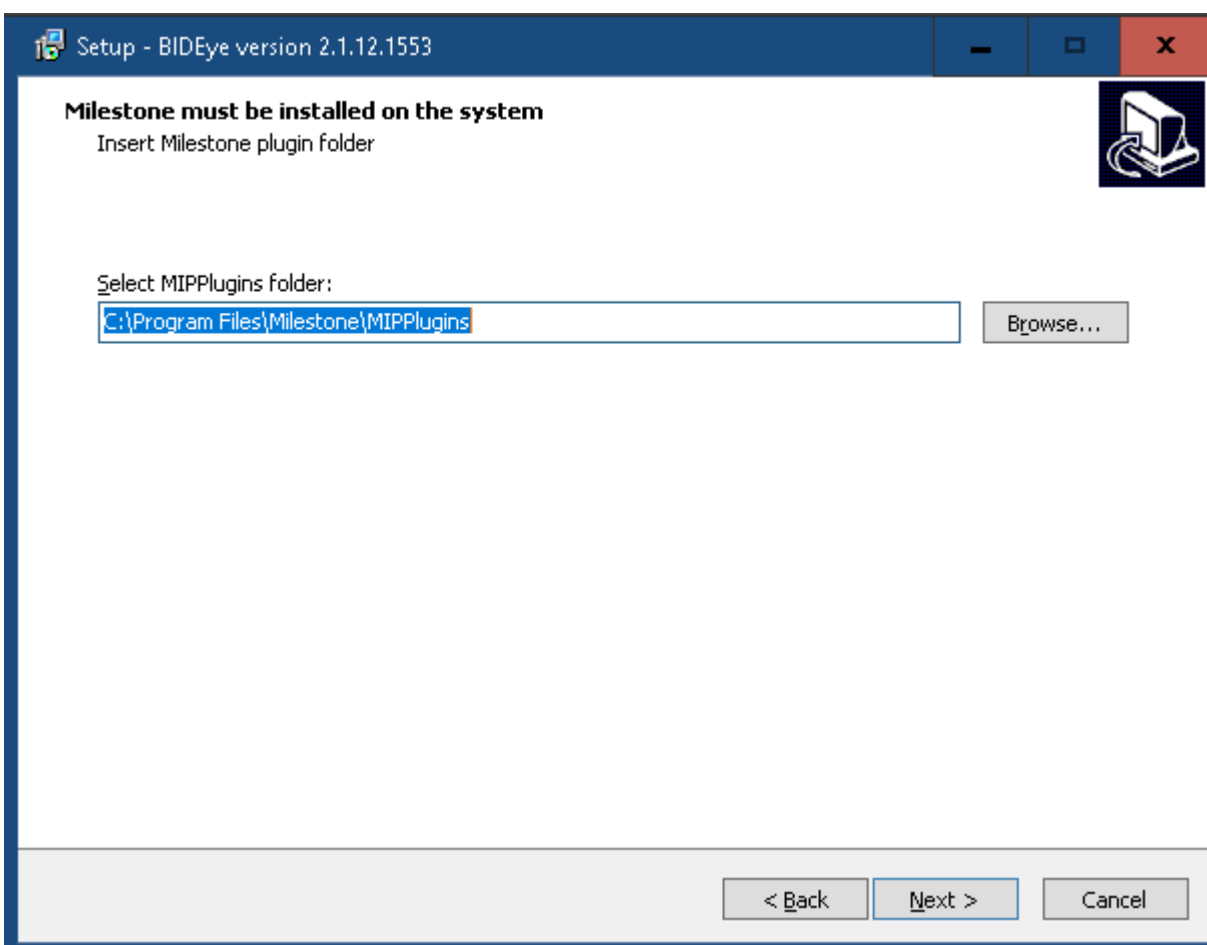


Image2 – Folder path selection Milestone Plugin

BIDEye requires the use of a database in order to maintain applied configurations and references to the areas of Satel centers. The installation procedure automatically creates a new database in the same Milestone SQLServer context/instance.

The screen keeps the "initializes database" field preselected. If the flag is removed, the installation kit will copy just the plugin and configuration files.

Pay attention:

Milestone database does not change, instead a new autonomous database is added.

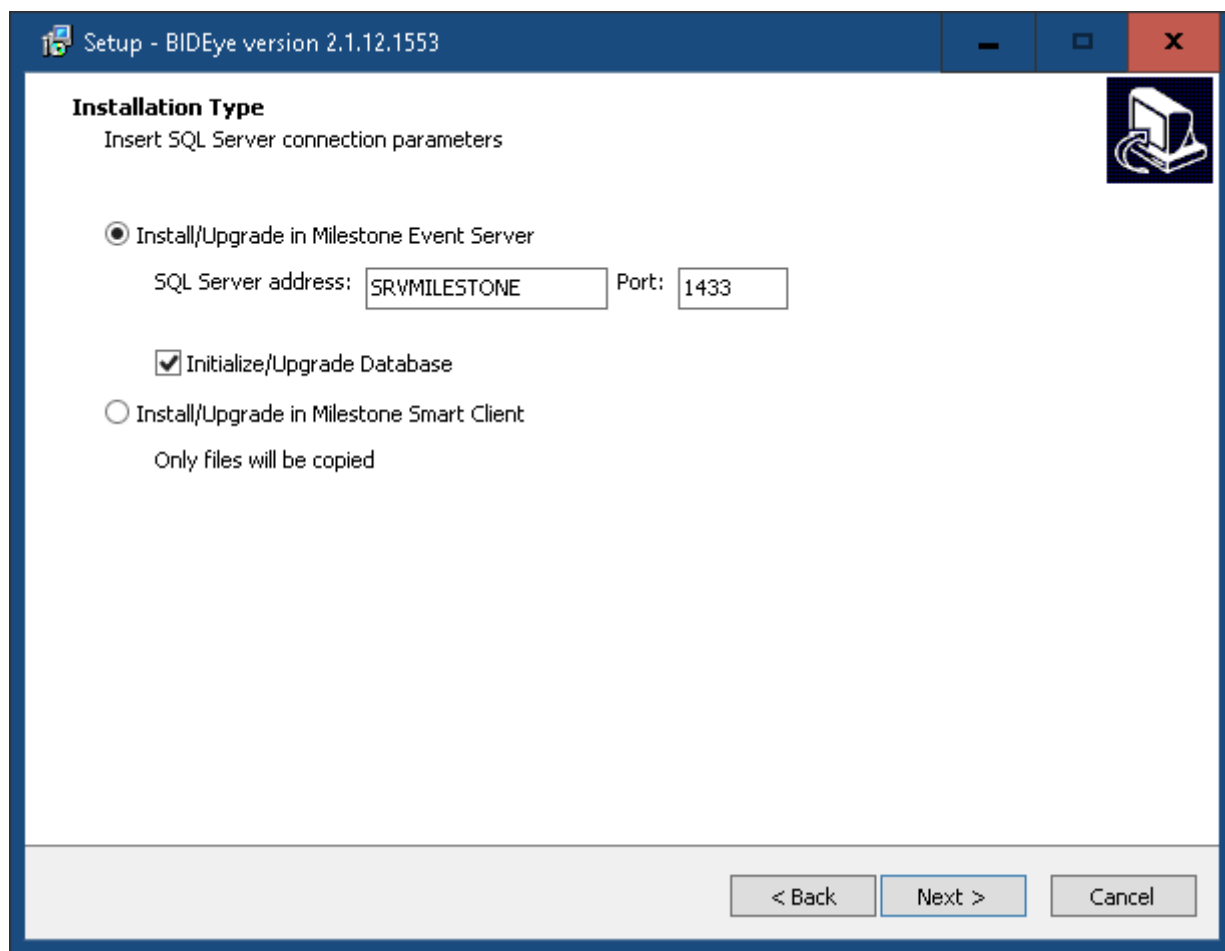


Image 3 – Initialization of the BIDEYE database

If you only want to install the plugins, select "Installation in Smart Client".

Click Next and insert the BIDEYE installation folder, which by default is C:\BIDEYE. This folder contains log files, language files and possible generated reports (if the installed reports module is present).

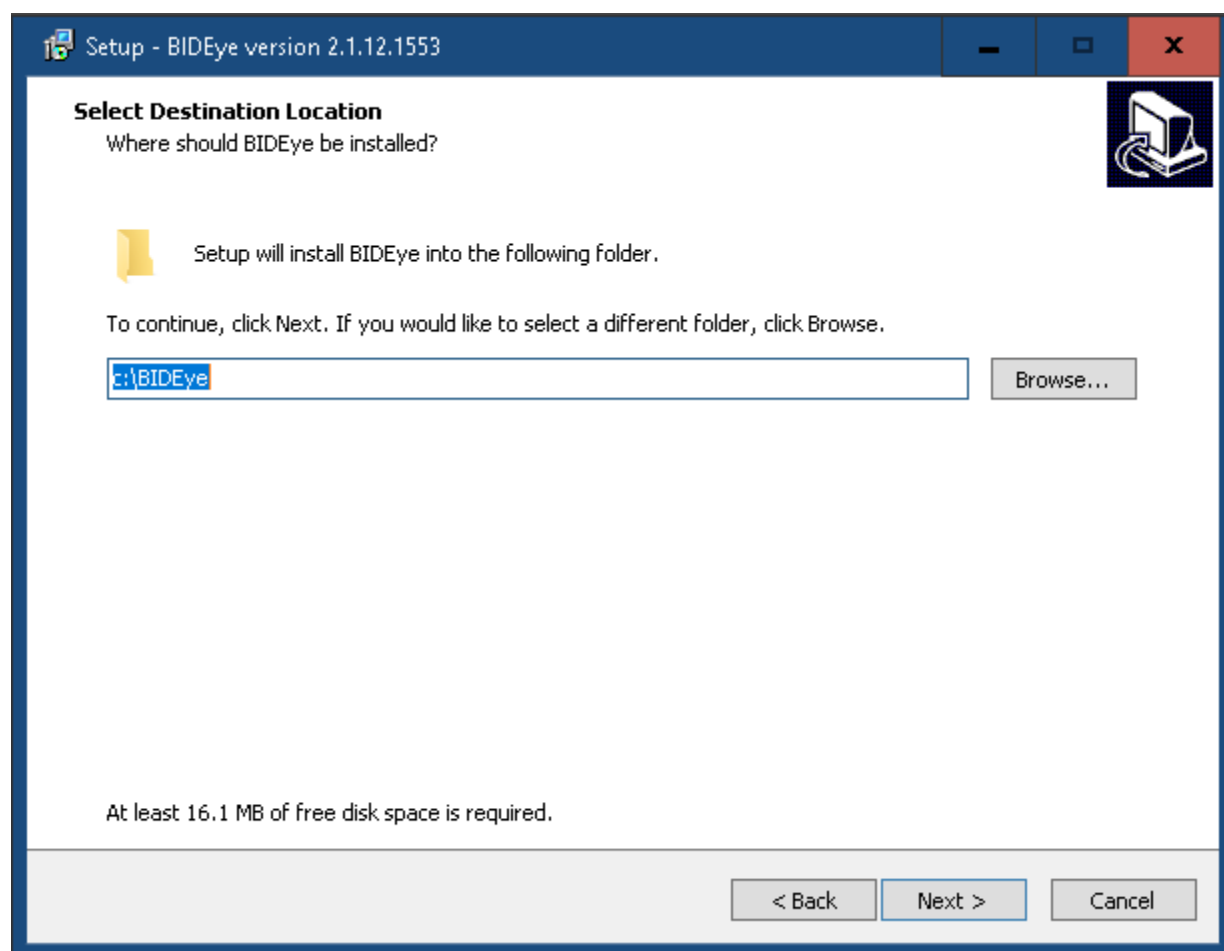


Image 4 – Inserting theBIDEye folder

Click "Next" to end the data collection phase:

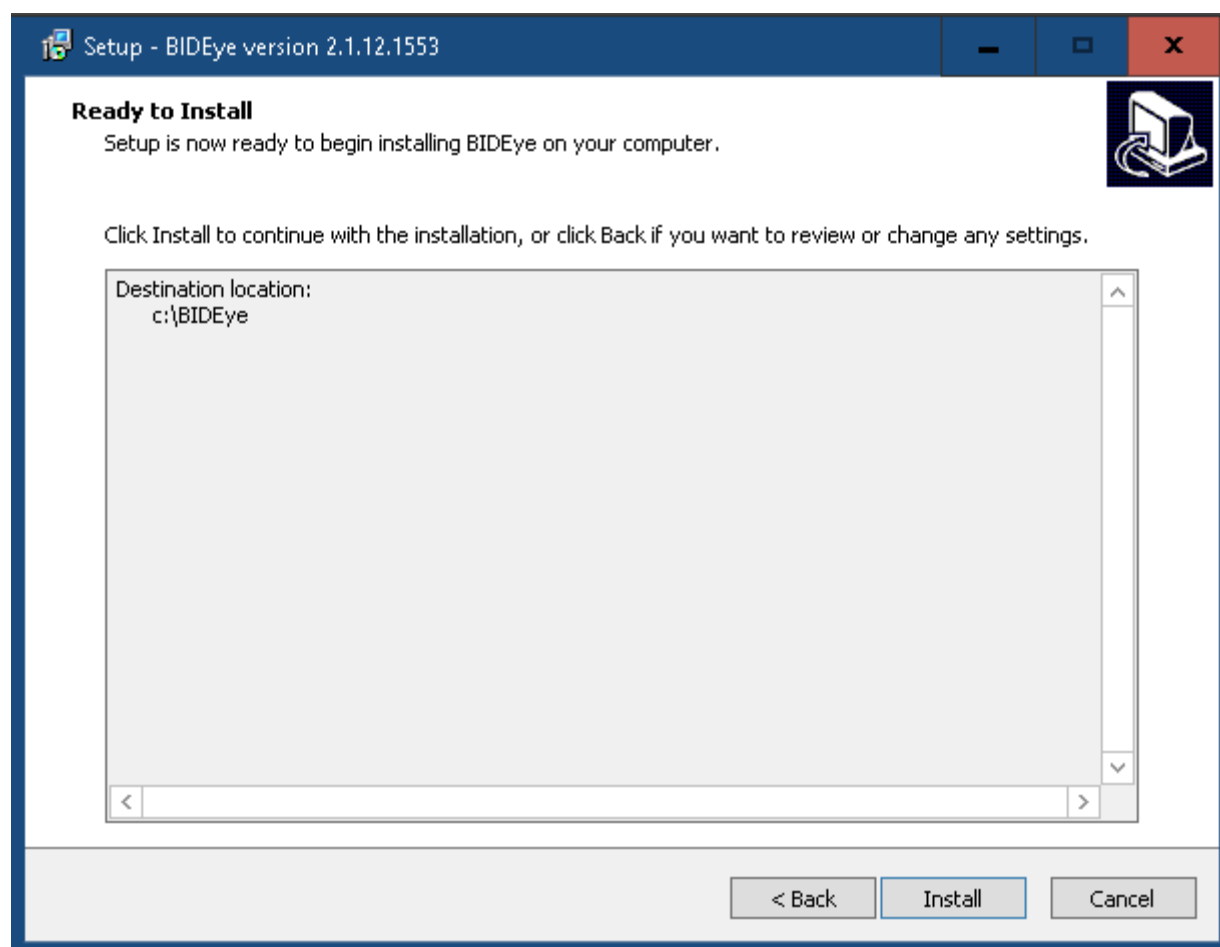


Image5 – End of data collection

By clicking the button "install" the system will create the database and copy all necessary files.

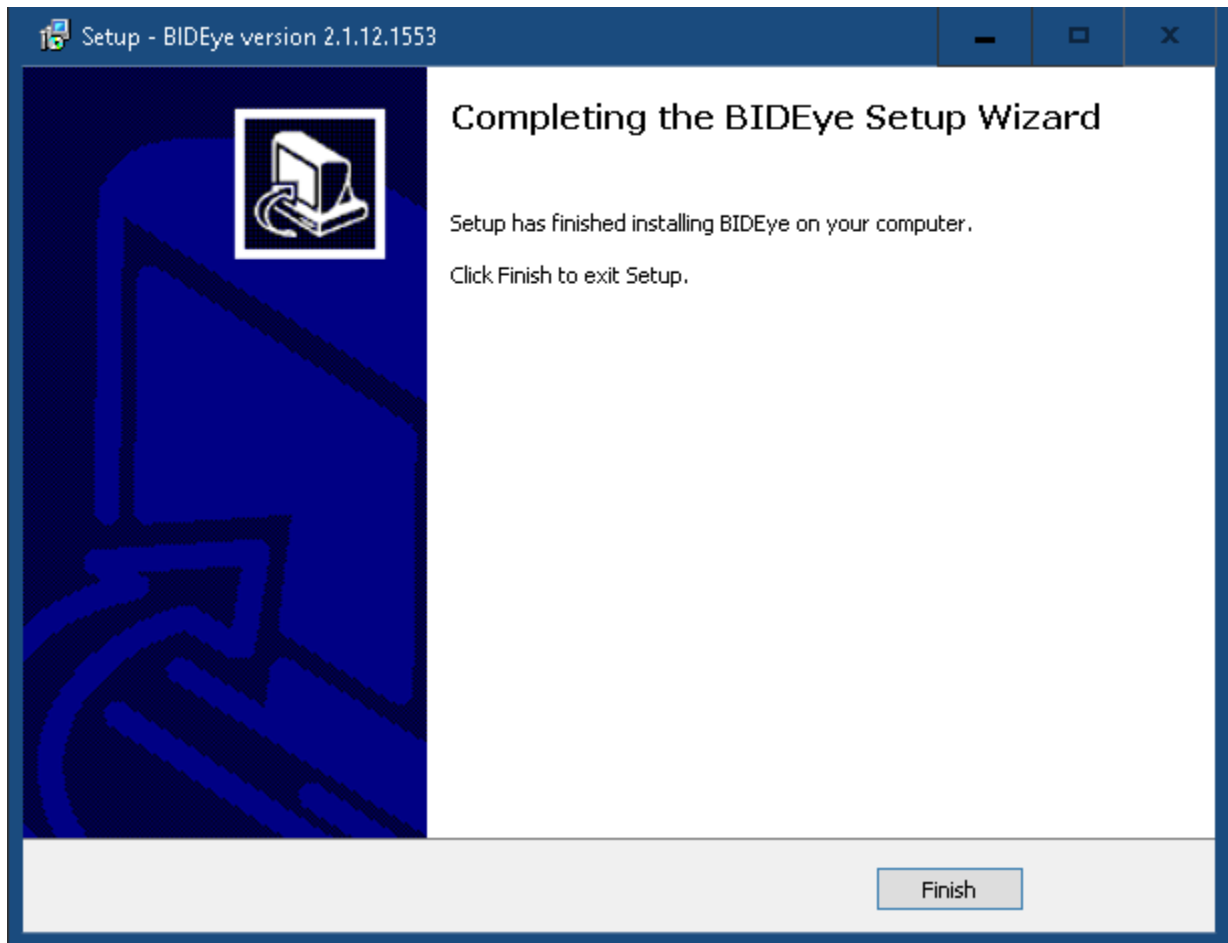


Image6 – Installation completed

At the end of the installation, items installed will be:

- The BIDEye service folder (typically present in c:/BIDEye)

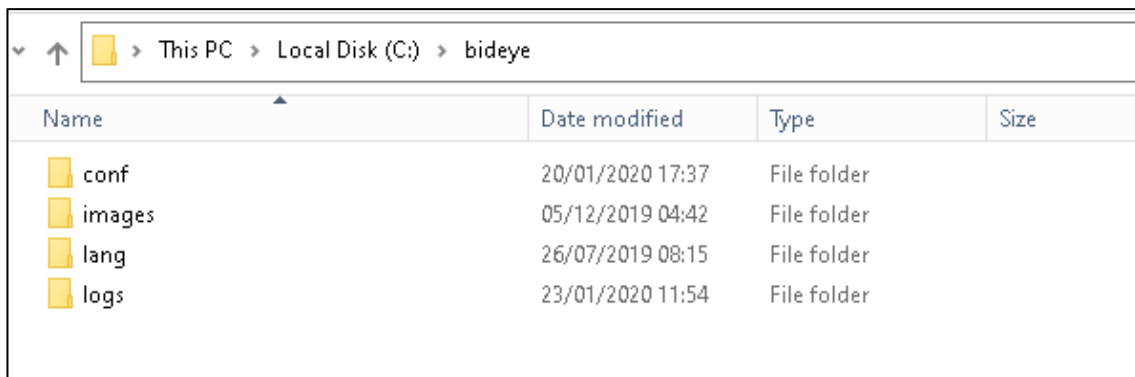


Image 7 – BIDEye folder content

- Image 9 lists Milestone plugins (BidsatelAI, AlarmPreview and eventually BIDEyeReport)

typically present in folder: C:/Program Files/Milestone/MIPPlugins

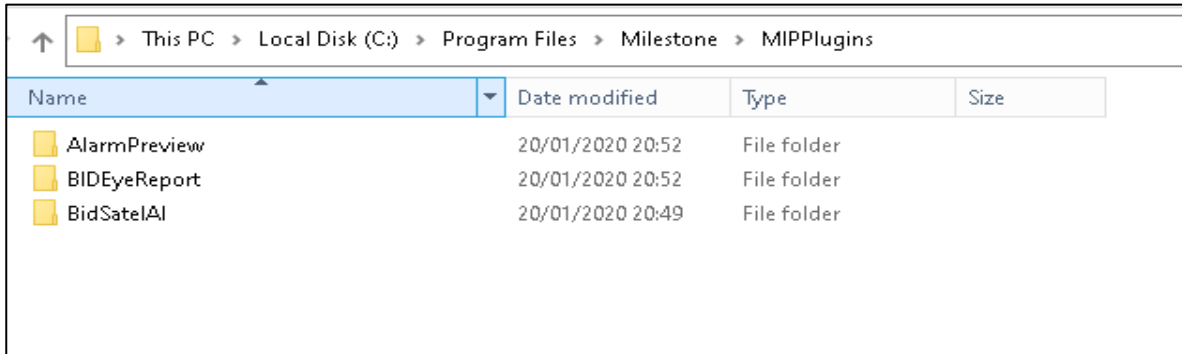


Image 8 –MIPPlugins folder content

4. BIDEye CONFIGURATION

When the installation phase ends, system configuration must be completed. This phase requires the inclusion of general configuration parameters, and specific parameters for every added center.

4.1 General configuration

Firstly, restart Milestone EventServer. Secondly, load the Management Client to carry out the configurations. Load the " options" of Milestone and scroll the list of tabs to the end:

Options

Analytics Events Customer Dashboard Alarms and Events Generic Events BIDEYE Configuration

DBMS & Report Events License

SQL Address

SQL Server instance name Authentication

LAPTOP-D2ALFCQR Windows Test

Jasper Report server

JasperServer base Url Admin Username Admin password

http://localhost:8083/jasperserver/rest_v2/ jasperadmin xxxxxxxx Test

Help OK Cancel

Image9 – Tab option BIDEye: DBMS &Reprots

In the first TAB "DBMS & Report" do the following:

- Insert the instance name of SQL Server.
Normally, the instance name is the same as the hostname. In order to recover the hostname, you have to open a cdm session and execute the command **hostname**.
- Keep the setting "Windows Authentication"
- If the BIDEyeReport plugin is present, insert the JasperServer url and login credentials.

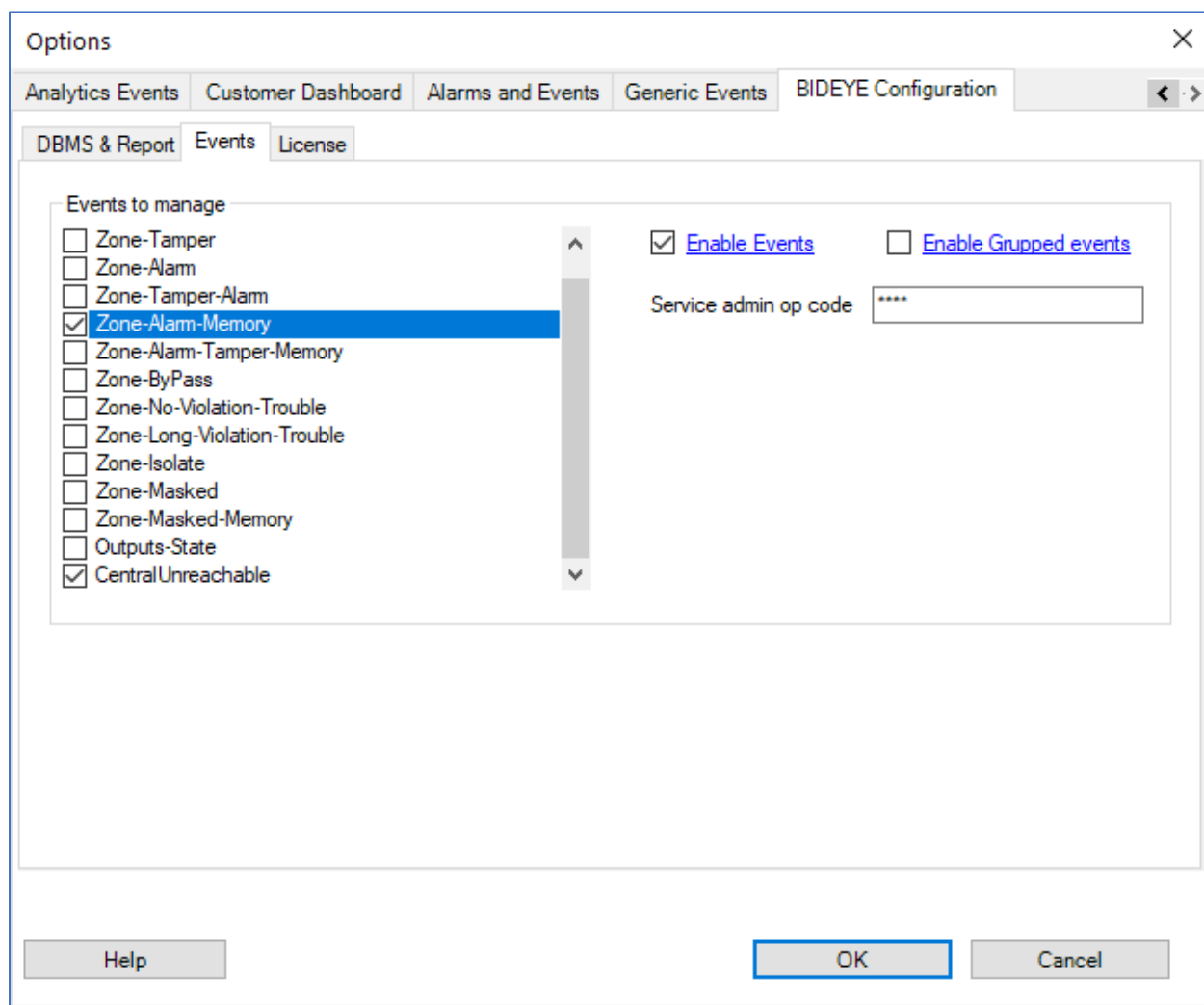


Image10 – Tab option BIDEye: Events

In the second tab "Events" do the following:

- Keep all settled values.
- By default only Zone-Alarm-Memory event is set (CentralUnreachable is mandatory). If you want to manage some other alarms, check the selection and restart the event server. Reconfiguring the alarms will be necessary.
- If you want to manage the activation / deactivation of the outputs directly through the Milestone rules, insert a SATEL operator pin with permission to activate and deactivate the outputs. See below for details of the functionality.

- Event Group Events is reserved for future use.

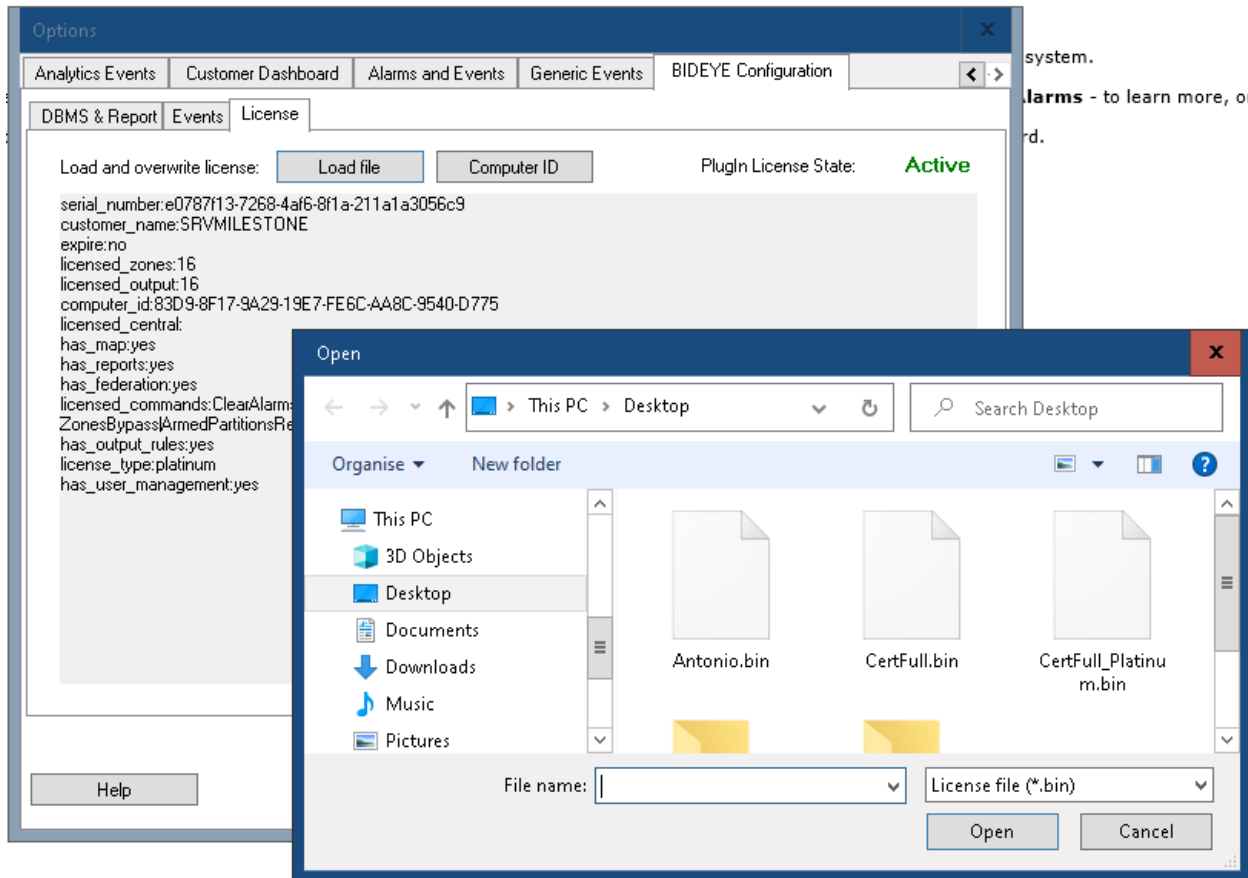


Image11 – Tab License: load license file

In the third and last tab "License" load the license file.

To receive the license file it is necessary to provide the computer id obtainable through the appropriate key

After uploading the license file, you can check the correct matches.

Attention:

If the license is updated, it will be necessary to restart the event server to read it.

4.2 Configuration of centers

The configuration of the centers is done in "Controllers". This field is in "plug-in MIP":

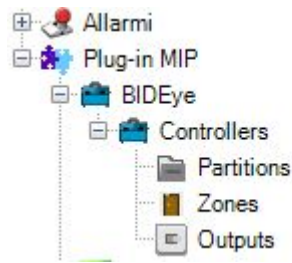


Image12 - Tree graph of the Satel Center items configurable in BIDEye

By selecting controllers, the window of configured centers appears.

During the first installation, this list appears empty. For this reason, it is necessary to add a new one:

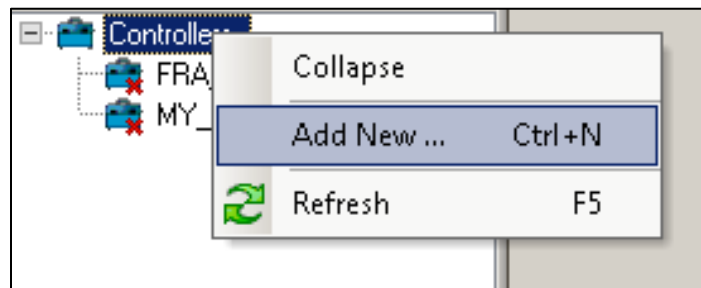


Image13 – New SATEL Center added

Give a name to the center.

Attention:

A center's name must be composed of a custom part followed by "_" and the host name of Event Server. This operation is necessary for identification on the network.

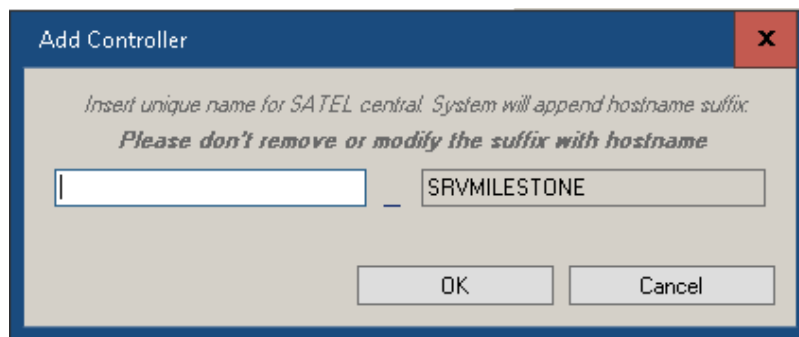


Image14 –Naming the new Center

After the center has been added, complete the configuration by adding the various parameters:

The screenshot displays the 'Controller Information' configuration window. It includes fields for 'Enabled' (checkbox), 'ID' (1), 'Central name' (test_WIN-U608V5010TV), 'IP Address' (158.246.25.154), and 'Central State' (Connected). There are also sections for 'Authorization (username)', 'Closing reason', 'Synchronization SATEL Station', and 'Admin tools'. At the bottom, there is a table with columns for Controller Id, Partition Number, Partition name, Creation date, and Last modified date.

Controller Id	Partition Number	Partition name	Creation date	Last modified date
1	1	Office	09/12/2020 22:26	09/12/2020 22:26
1	2	Parking	09/12/2020 22:26	09/12/2020 22:26
1	3	Store	09/12/2020 22:26	09/12/2020 22:26
1	4	Tecnica	09/12/2020 22:26	09/12/2020 22:26
1	5	Porte visitatori	09/12/2020 22:26	09/12/2020 22:26

Image15 – Centerl configuration

- Enabled: Yes/No. Yes/No. If yes, the center is managed by event server.
- ID: unique identifier. Automatically managed by system. Not modifiable.
- Name of the center: The center's name **MUSTALWAYS** be something like:
<CUSTOM NAME>_<EVENT SERVER MACHINE NAME>
- IP Address: IP Address/Center's name.

Attention: the system supports many centers, but each center must have a different IP address. If you need to have more than one center on the same IP address but on different doors, you have to insert in this field a unique network name (for example inserting many aliases in host files or in a dns).

- Integration port: insert center's port. This is the integration port of the INTEGRA Center, through which the Center communicates on Integra protocol. The default port is 7094 (remember to enable the integration port on SATEL center).
- Test: connectivity check button with the center. It only works if the flag " Enable" is not selected. If the test is successful, the firmware version of the center is displayed.
- Polling: Enter the number of milliseconds for polling towards the center. **Attention:** in a context with many centers on the same event server, to avoid increasing the workload, we recommend not dropping below one second.

- Control and Command: select both the flags. To disable the integration between Milestone and SATEL Center, remove “Control” flag. To disable sending commands remove “Command” flag.
- Authorizations: **Attention: by default authorization list is empty. Insert some authorization.** The authorizations refer to Milestone users. The operator connected in Milestone can be profiled based on the following commands (the commands that can actually be used are specified in the purchased license):

<i>User name</i>	<i>Commands</i>	<i>Description</i>
Milestone User	ClearAlarms	Clear alarms
Milestone User	CmdArmInMode0	Arm Partition mode 0
Milestone User	CmdArmInMode1	Arm Partition mode 1
Milestone User	CmdArmInMode2	Arm Partition mode 2
Milestone User	CmdArmInMode3	Arm Partition mode 3
Milestone User	CmdDisarm	Disarm Partition
Milestone User	ReadEvent	Read events register
Milestone User	CmdZonesByPass	Bypass temporary
Milestone User	CmdZonesUnbypass	Unbypass zone
Milestone User	ZonesBypass	Read zone bypassed
Milestone User	ArmedPartitionsReally	Read partitions status
Milestone User	CmdZonesIsolate	Bypass permanente
Milestone User	CmdOutputsOn, CmdOutputsOff, OutputsState	Outputs command

The configuration is very simple and is based on the rule:

- <username>=<command>[,<command>]...
 - User can execute listed commands
- *=<comando>[,<comando>]...
 - All users can execute listed commands

- <username>=*
 - User can execute all commands
- *=*
 - All users can execute all commands

Example:

Operator1=ClearAlarms,CmdArmInMode0,CmdDisarm

Operator2=CmdZonesByPass,CmdZonesUnbypass,ZonesBypass,ArmedPartitionsReally,CmdZonesIsolate

Operator3=CmdOutputsOn,CmdOutputsOff,OutputsState

In this example:

Operator1 can delete alarms, arm and disarm partitions.

Operator2 can ban and restore areas and read map's status.

Operator3 can only read output statuses, activate and deactivate them.

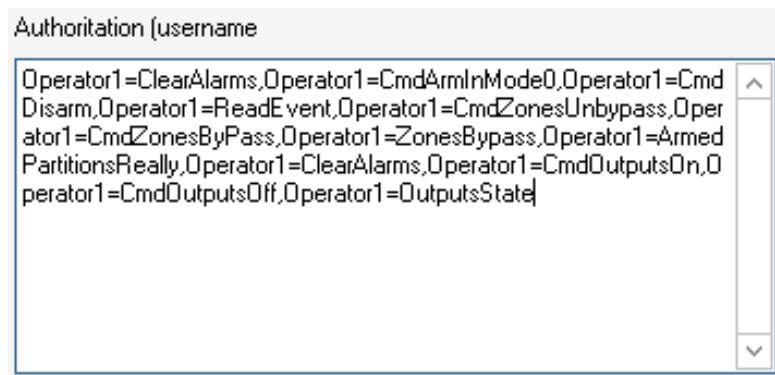


Image16 – Authorization example

- Reasons: insert a simple list of reasons to be displayed in the client during the alarm closing phase.
- Save the configuration and update to refresh visualization
 - Attention: the first SAVE must be done with flag Enabled not selected.

Attention: by default authorization list is empty. Insert some authorization

4.2.1 Synchronization with the SATEL Center

To activate synchronization with the SATEL center, press the SyncSatelZones/Partitions/Outputs button. This operation reads the partitions, zones, and events group to create a local

representation to the plugin. Synchronization is always possible. **Attention:** when zones are deleted on the SATEL Center, synchronization will also remove them locally to the plugin. This implies, however, that all alarms configured on Milestone that refer to the removed zones will be invalidated and will need to be updated on Milestone. **The button is activated only after saving the configuration.**

After entering the IP and the port, and after checking reachability through the test button, you must synchronize the zones/partitions/outputs, reading by the SATEL Center. **Attention:** this operation is quite long and can take a few minutes (usually an integra 256 takes 2-3 minutes). At the end of the operation, an outcome message will appear.

Once the operation is complete, you can immediately check the synchronization by clicking the button "Load". This button is situated at the bottom of the table that reads the zones/partitions/outputs synchronized. It is possible to make changes directly from the application for most of the data, but it must be considered that this functionality is advanced and should never be directly used.

The operation takes care of preparing the zones read by the Center to be displayed on the map (if the BIDEyeMap component is licensed).

At the end of the action, check that the zones have been correctly associated with the icons, browsing the zones, partitions and outputs sin the treeview Plug-in MIP -->BIDEye-->Controllers--> Zones/Partitions/Outputs

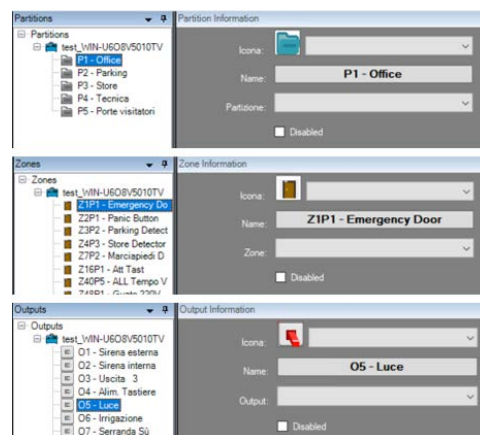


Image17 - List of icons created in BIDEyeMap

If you have already done previous installations of the same SATEL Center, like commodity actions, you can delete the items previously installed. Normally they should not be executed:

- Button "Remove Sensor Map"
 - This commodity button gives you the possibility to delete all the references to icons created by previous button. Normally it should not be used. **Attention:** Deletion of all map items, INVALIDATES all configured Milestone alarms. It will therefore be necessary to re-synchronize the Center and modify any alarms by re-associating the appropriate zones.
- Button "Remove Item by GUID"
 - This commodity button allows you to delete Milestone configuration objects by using his GUID. This should be never used.

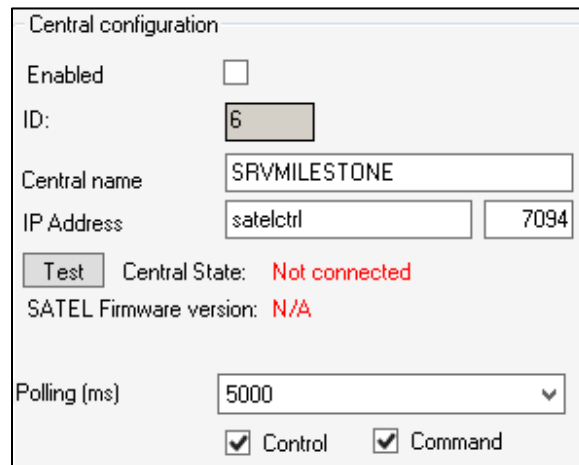
Generally, if you do configuration changes it is always possible to push the Milestone button "Save" (disk icon top left in the command bar) to save the changes to the Center.

Attention:

You can repeat this operation to add more centers.

5. Start of Center instances

When you have completed the configuration of the center, it will be necessary to activate it through the flag " Activate" to initiate it in the Event Server.



Central configuration

Enabled ☐

ID: 6

Central name SRVMILESTONE

IP Address satelctrl 7094

Test Central State: Not connected

SATEL Firmware version: N/A

Polling (ms) 5000

☒ Control ☒ Command

Image18 – Center activation

After saving the changes, if the event server is active, it will receive the notification of configuration change, and the event server itself will restart automatically and will load new configuration.

Attention:

To verify that the center has been correctly configured and activated, show the event server log “Show MIP Log”:

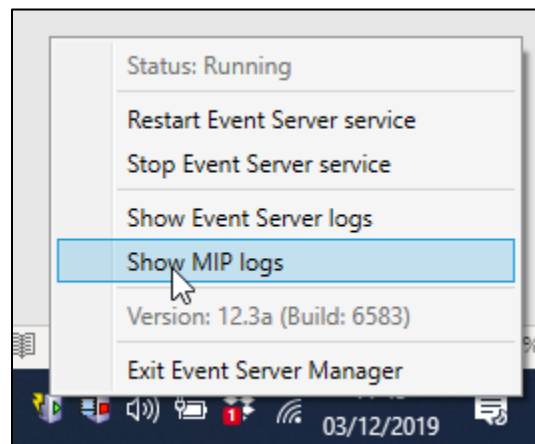


Image19 – Visualization of MIP Log

Visualization MIP Log

```

2019-12-03 11:45:34.733 UTC+01:00 Info BidSateIAItemManager-getEventsToBeRegistered _allEventsEnabled: 12
2019-12-03 11:45:34.733 UTC+01:00 Info BidSateIAItemManager-getEventsToBeRegistered _gruppEventEnable: True
2019-12-03 11:45:34.733 UTC+01:00 Info BidSateIAItemManager-getEventsToBeRegistered _gruppEventEnable: 4
2019-12-03 11:45:34.733 UTC+01:00 Info BidSateIAItemManager-getEventsToBeRegistered ENO
2019-12-03 11:45:34.733 UTC+01:00 Info GetKnownEventTypes Load all events - Fine
2019-12-03 11:45:40.849 UTC+01:00 Info LicenseManager Reading license from milestone...
2019-12-03 11:45:40.922 UTC+01:00 Info BidEyeLicenseManager Found license information to validate
2019-12-03 11:45:40.928 UTC+01:00 Info BidEyeLicenseManager License type: platinum with s/n: 20a652dc-e047-4d2f-8f90-86a4c5e7698f loaded and sign verified with: 11 items with LicenseManager v.1.0.13.514
2019-12-03 11:45:44.321 UTC+01:00 Info SA_LAPTOP-D2ALFCQR TI:11 ms - CE: 47 - AS:0 - AM: 0
2019-12-03 11:45:44.400 UTC+01:00 Info SA_LAPTOP-D2ALFCQR Esecuzione Comando Refresh All Map ICONS START.
2019-12-03 11:45:44.402 UTC+01:00 Info SA_LAPTOP-D2ALFCQR Esecuzione Comando Refresh All Map ICONS END.
2019-12-03 11:45:46.516 UTC+01:00 Info SA_LAPTOP-D2ALFCQR TI:602 ms - CE: 24 - AS:0 - AM: 0
2019-12-03 11:45:49.572 UTC+01:00 Info SA_LAPTOP-D2ALFCQR TI:348 ms - CE: 24 - AS:0 - AM: 0
2019-12-03 11:45:51.848 UTC+01:00 Info SA_LAPTOP-D2ALFCQR TI:582 ms - CE: 24 - AS:0 - AM: 0
2019-12-03 11:45:53.962 UTC+01:00 Info SA_LAPTOP-D2ALFCQR TI:534 ms - CE: 24 - AS:0 - AM: 0

```

Image20 – License successfully loaded and reading states

In the log file you will see a message like this:

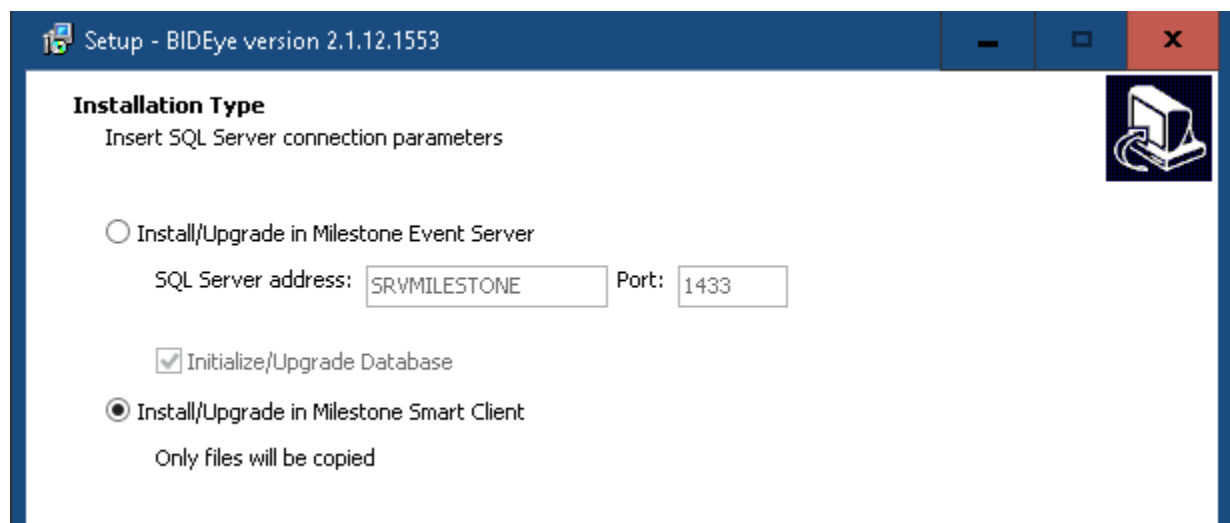
BIDEyeLicenseManager License type: platinum with s/n: 20a652dc-e047-4d2f-8f90-86a4c5e7698f loaded and sign verified with: 11 items with LicenseManager v. xxx

The system after activating the Center, issues a message such as the following:

- <CENTER_NAME> TI:602 ms - CE: 24 - AS:0 - AM: 0
- With information that reminds:
- TI: time spent in milliseconds to update SATELCenter status
- CE: number of commands executed to update the status
- AS: alarms present inSATELCenter
- AM: alarmspresent inMilestone.

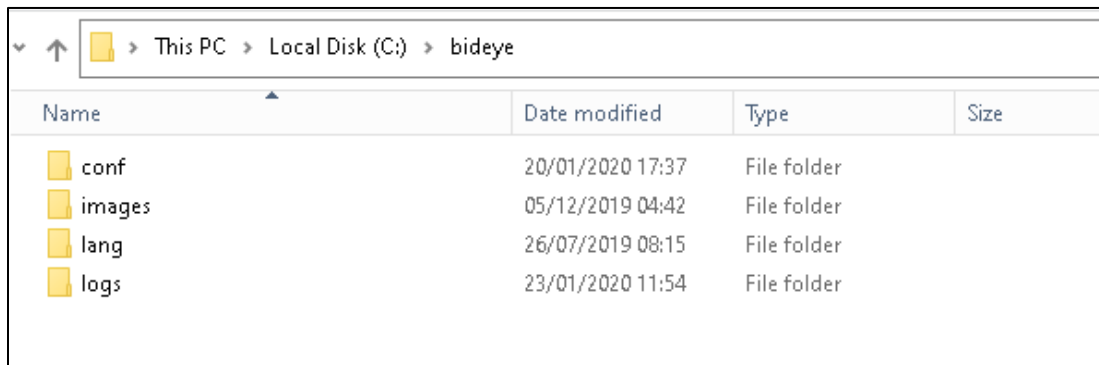
6. Install BIDEye in the Smart Client

If there are multiple seats, different from Milestone seat, you can install the plugins in the smart client by simplyexecuting the installation programand selecting “Installation in the Smart Client” as described in the installation chapter.



At the end of the installation:

- The BIDEye service folder (typically present in c:\BIDEye) or the one chosen during installation:



- The files related to the plugins in the smart client folder:

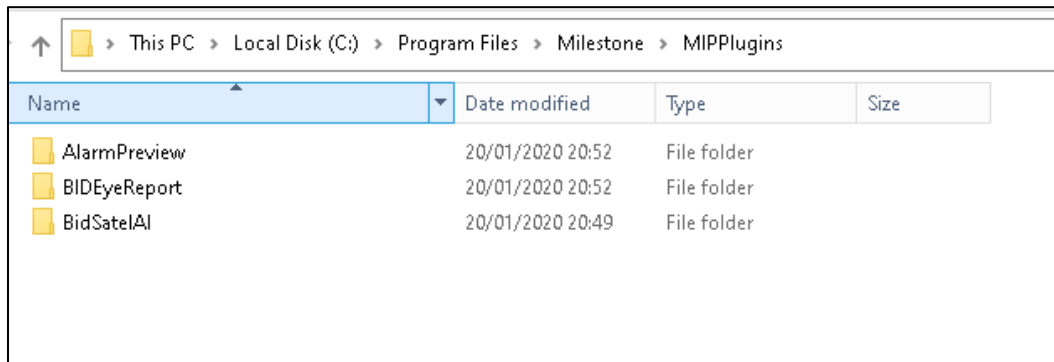


Image21 – Smart Client Plugin folder contents after copying from BIDEye

At this point, simply launch the Milestone smart client.

7. User management

The User Management platinum functionality allows you to replicate the functionality of the DLOADX software directly in the Milestone management console. In addition, the operator code can be changed in the smart client.

To access the functionality, select a control panel and open the "User management" tab:

The screenshot displays the 'Controller Information' window. The 'Fill by' section includes fields for ID (1), Central name (VALIGIA9094_WIN-AJ/KH0IGKSL), IP Address (wb-47s9dgdvwwda.myfritz.net), and Central State (Not connected). The 'Admin tools' section has buttons for 'Remove item by GUID' and 'Remove all map items'. The 'Information' section shows tabs for 'Partitions', 'Zones', 'Outputs', 'Groups', 'Manage Users', and 'Read Events Scheduler'. The 'Partitions' tab is active, showing a table with columns: Number, Name, Type, Duration, and Code. The table lists 8 partitions, with the 8th partition 'Paxton' selected. A dropdown menu is open for the 'Type' column of the selected partition, showing options: 0: Normal, 1: Single, 2: Time renewable, 3: Time not renewable, 4: Dueses, 5: More outputs, 6: Bi outputs, 7: Partition temporary blocking, 8: Access to cash machine, 9: Access to, and 10: Schedule. On the right, there is a 'Partitions / User Rights / Locks' section with a list of permissions and checkboxes.

Note: the functionality can only be used if the control panel is deactivated. If it is in use by the event server, the communication port cannot be used. For this reason, the control panel must be disabled.

Through this mask it is possible to:

- Enter the operator code with authorizations on user management
- View and edit current users (Load button)
- View and edit the partitions enabled for the user, the permissions and the associated keyboard partitions
- Delete a user (select one or more users and press the DEL key)
- Change the type of user
- Change the operator code

8. Use BDEye in the Smart Client

8.1 Configuration of alarms

To configure milestone alarms generated in the case of specific events coming from satel centers, you must:

- Open management client and go to "Alarms" section

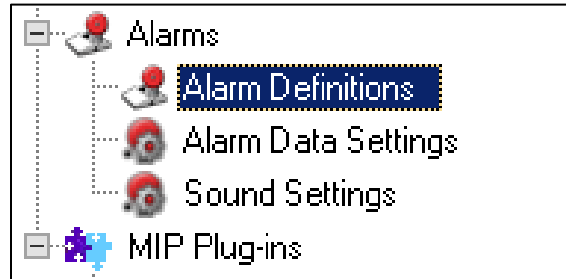


Image22 – Defining alarms

- When the configure alarms appears, create a new one (right click on "Alarms definition") and fill in the form as follows:

Alarm definition	
Enable:	<input checked="" type="checkbox"/>
Name:	Alarm Definition
Instructions:	Instructions for the operator
Trigger	
Triggering event:	Satel-Milestone Events Monitor
	Zone-Alarm-Memory
Sources:	All Zones
Activation period	
<input checked="" type="radio"/> Time profile:	Always
<input type="radio"/> Event based:	Start: <input type="text"/> Stop: <input type="text"/>
Operator action required	
Time limit:	1 minute
Events triggered:	<input type="text"/>
Other	
Related cameras:	<input type="text"/>
Related map:	<input type="text"/>
Initial alarm owner:	<input type="text"/>

Image23 – Example of Zone Alarm Memory

Notable elements are the activation of the derived event from the selection of Satel-MilestoneEvent Monitor. Select an alarm type from the list. Usually, at least one Zone-Alarm-Memory alarm is associated.

Insert alarm sources. In the case of BIDEye, the sources are always the zones, then select at least one:

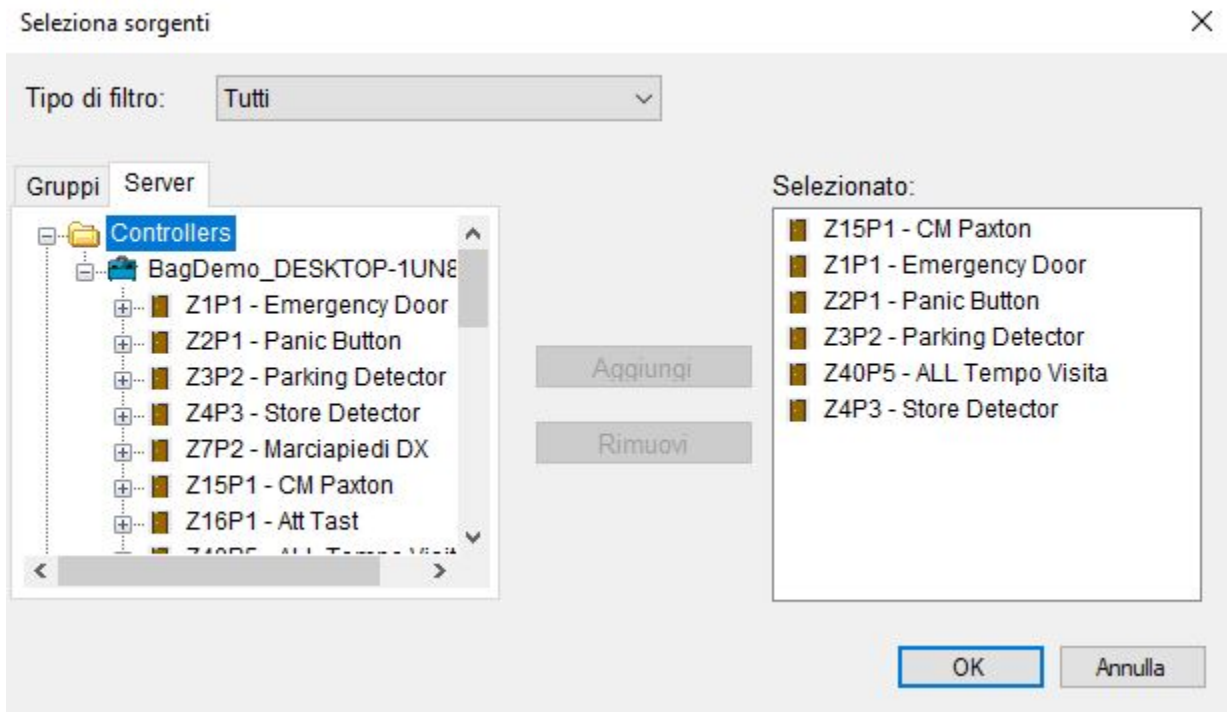


Image24 – Alarm zone association

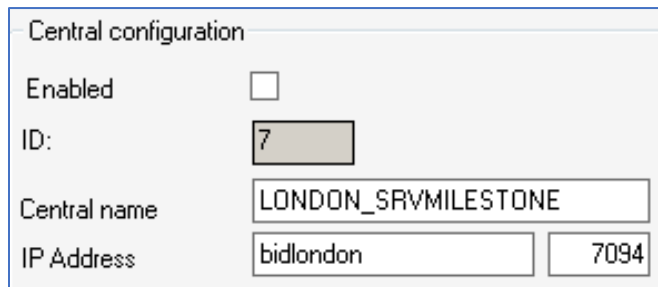
As you can see from the image, under server tab you have the list that contains all active Centers at that time. Here you can associate one or more Center's zones to the alarm.

8.2 Creation rule with activation / deactivation of outputs

If you have a regular license with the "has_outputs_rules" functionality, you can insert a milestone rule to control the activation and deactivation of one or more outputs. To do this it is necessary to:

1. Create one or more User Events according to this nomenclature which must be respected:
 - a. <BIDEYE_CMD_OUTPUT>_<CONTROLLER ID>_<ON|OFF>_<OUTPUTS ID>
 - b. Example:
 - i. BIDEYE_CMD_OUTPUT_7_OFF_5_7_8
 1. BIDEYE_CMD_OUTPUT: static prefix recognized by the application logic of the plugin
 2. 7: CONTROLLER_ID: This ID can be retrieved from the control panel

configuration form:

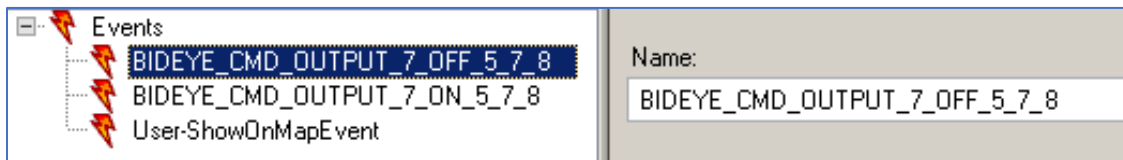


The form is titled "Central configuration" and contains the following fields:

- Enabled:** A checkbox that is currently unchecked.
- ID:** A text box containing the value "7".
- Central name:** A text box containing the value "LONDON_SRV_MILESTONE".
- IP Address:** Two text boxes, the first containing "bidlondon" and the second containing "7094".

Image25 – Reading id controller

3. ON or OFF they will activate or deactivate the outputs
 4. OUTPUTS ID: list of id outputs separated by _. In the example, the outputs with id SATEL 5, 7 e 8, will be disabled.
2. To test the event, just press "Test event"



The form is titled "Events" and contains a list of events on the left and a "Name:" field on the right.

- Events List:**
 - BIDEYE_CMD_OUTPUT_7_OFF_5_7_8 (highlighted)
 - BIDEYE_CMD_OUTPUT_7_ON_5_7_8
 - User-ShowOnMapEvent
- Name:** A text box containing the value "BIDEYE_CMD_OUTPUT_7_OFF_5_7_8".

Image26 – User event for activating / deactivating outputs

3. Authorize the execution of the command to the internal user "user.events" to execute the commands by entering `user.events=CmdOutputsOn,CmdOutputsOff` in the authorization mask seen previously.
4. Create a rule, sending the event to the desired site. For example:

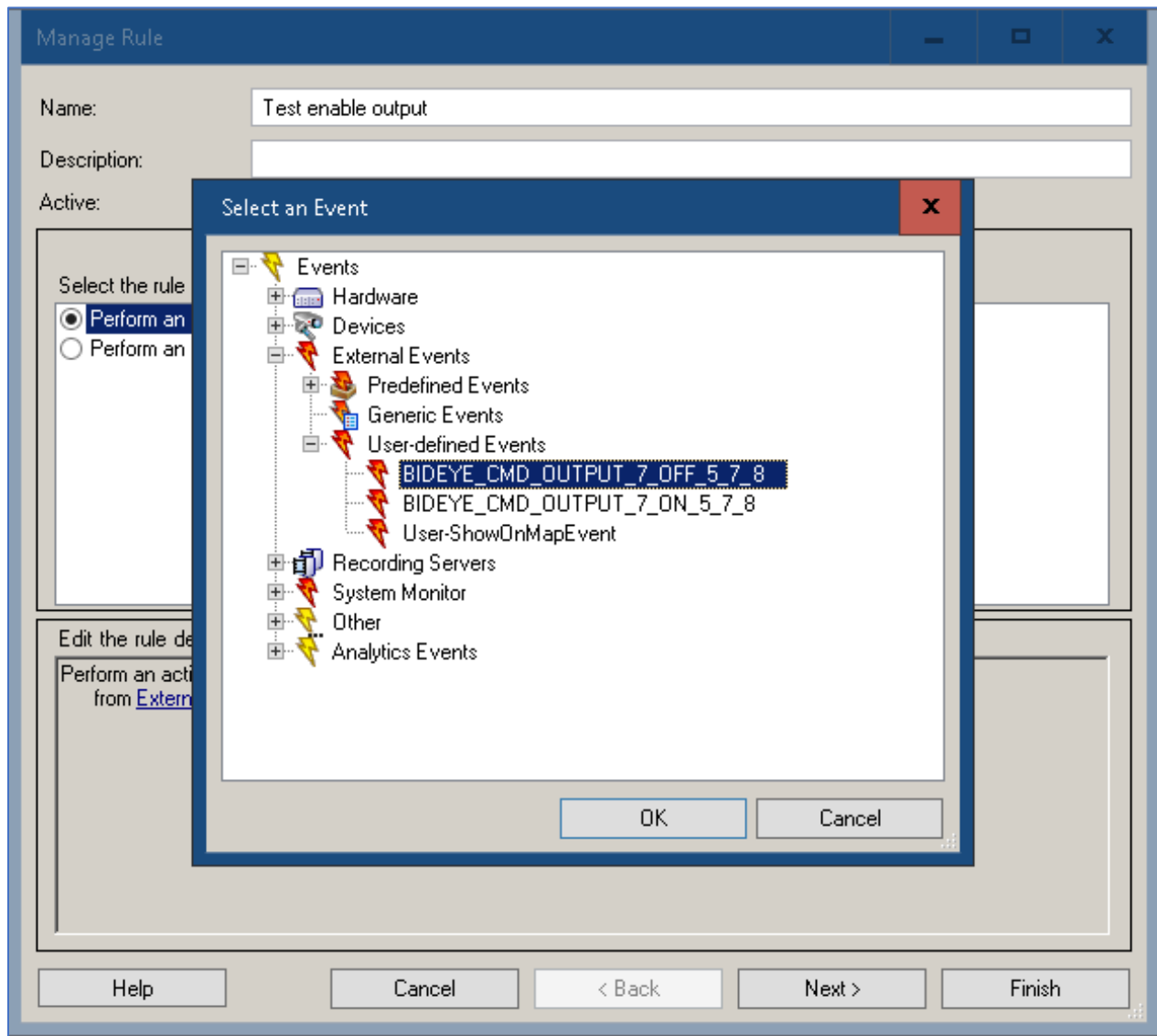


Image27 – Rule example for activating / deactivating outputs

8.3 Map management

BIDEye gives you the possibility to manage Satel zones/partitions/outputs Center completely and directly from Milestone map. At the time of writing this document only the standard Milestone map is supported and **not** the SmartMap (Gisbased). We will implement it in later versions.

Important: to use the activation feature of the map update you need to insert a user Satel code authorized to execute commands to read the zones/partitions/outputs status. The code is inserted

only when the client is powered on by the following screen:

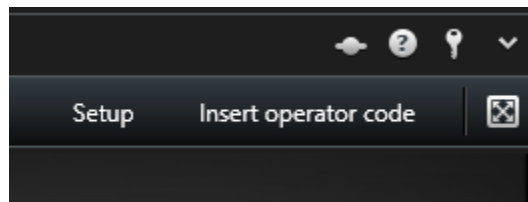


Image28 – Smart client: enter operator code for Map

If you click on it, the following screen will appear:

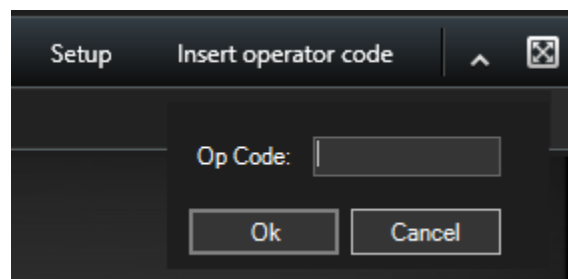


Image29 – Smart client: entering operator code for Map

Insert user code and click OK. After this operation, the writing of the button in the toolbar of Milestone Alarms List becomes:



Image30 – Smart client: after entering operator code

8.3.1 New map creation

To use Satel map with sensors/partitions/outputs, first you need to create a map as is provided in the Milestone manual. Then you can insert Satel elements that you want to manage:

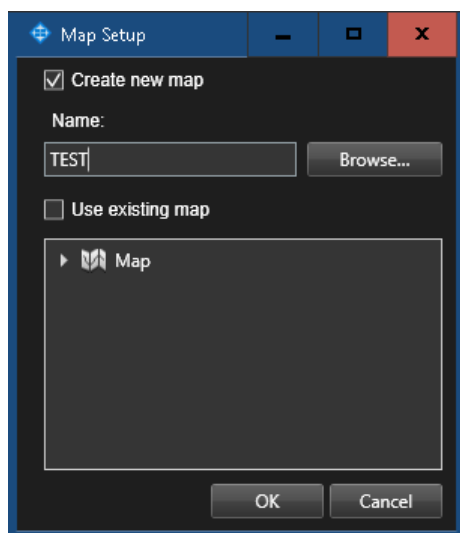


Image31 – Smart client: new map

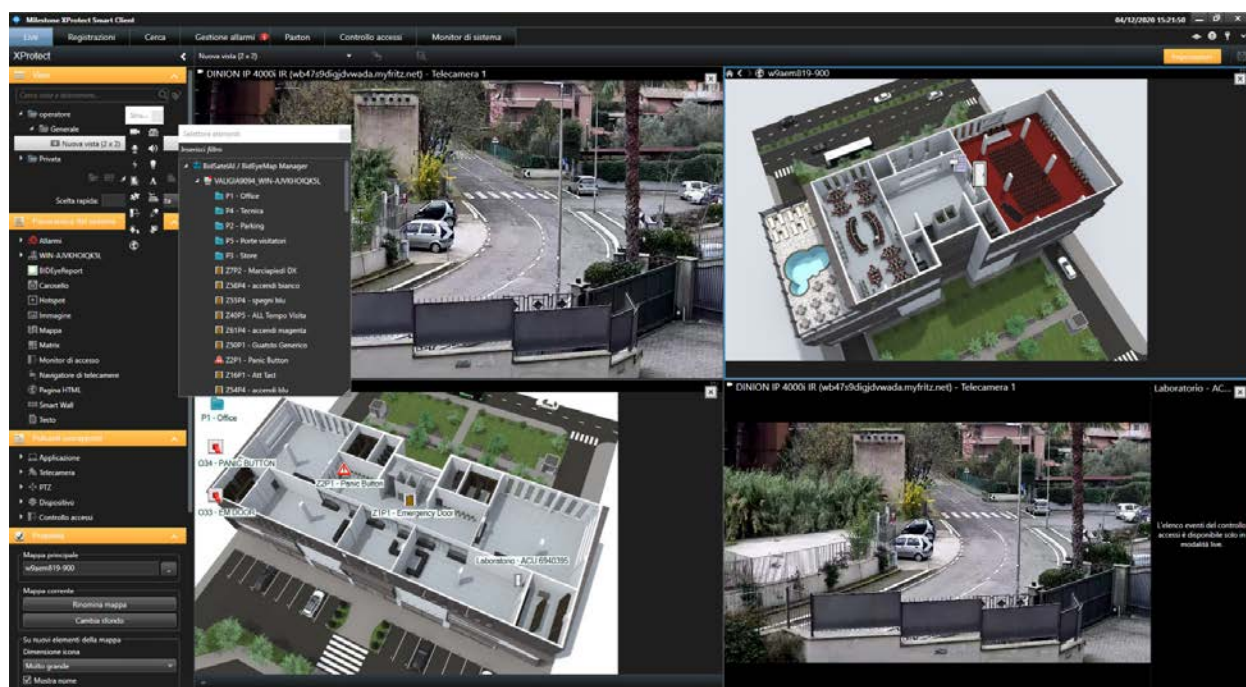


Image32 – Smart client: addition of zones/partitions/outputs

You can add all the zones, partitions and outputs of every Center by using Milestone standard tool for the management of the objects that can be inserted on the map.

At the end of this process, click settings and save the changes.

After the creation and design of the map, you can use the map in the normal Milestone management of the maps.

8.3.2 HotZone Configuration

BIDeEye also supports the hotzones. To activate a hot zone, just draw one above Controller object where the heart of the Center is. For example:



Image33 – Smart client: addition of a hotzone

- Drag the Center icon on the map
- Draw a hotzone to cover the Center
- Associate the hotzone to one detail map.

When one of Milestone alarms present in that center is be activated, the hotzone will begin to flash until the Center alarms are closed.

8.3.3 Send commands

Using the map, you can send the following commands:

Important: to be able to use the sending of commands you have to insert an Satel user code authorized to execute the specific command.

<i>Command</i>	<i>Authorization</i>
Clear Alarms	ClearAlarms
Arm Partition mode 0	CmdArmlnMode0
Arm Partition mode 1	CmdArmlnMode1
Arm Partition mode 2	CmdArmlnMode2
Arm Partition mode 3	CmdArmlnMode3
Disarm Partition	CmdDisarm
exclude zonetemporarily	CmdZonesByPass
exclude zonepermanently	CmdZonesIsolate
Include zone	CmdZonesUnbypass
Output ON	CmdOutputsOn
Output OFF	CmdOutputsOff

All the commands are executable by selecting the zone/partition/output and right clicking on the related command in the contextual menu.

For example, to disarm a partition, select the partition:

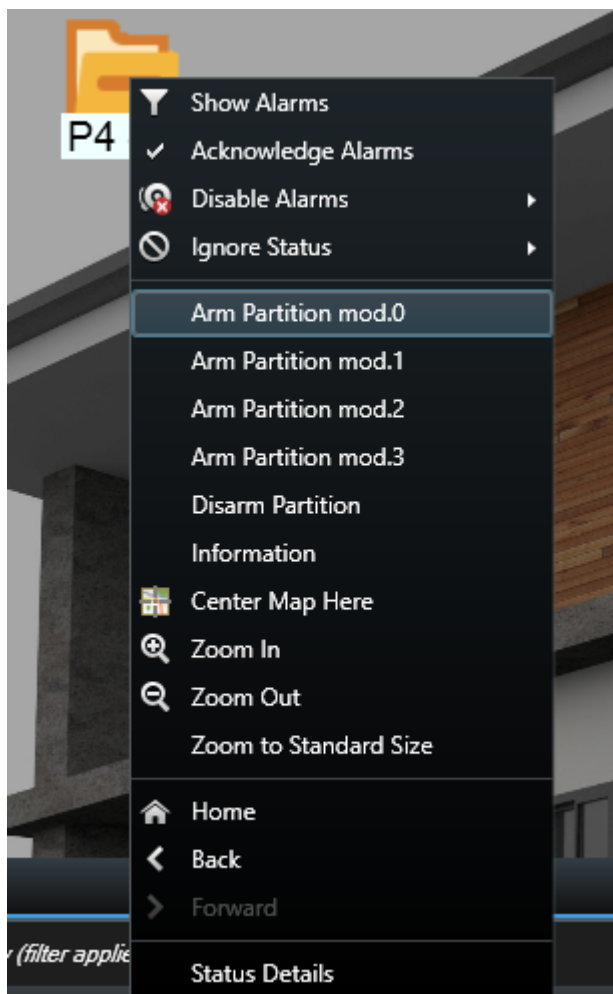


Image34 – Smart client: Disarm partition

In the example, the partition "P2-parking" will change colour from green (armed) to grey (disarmed).

If you want to temporarily exclude a zone:

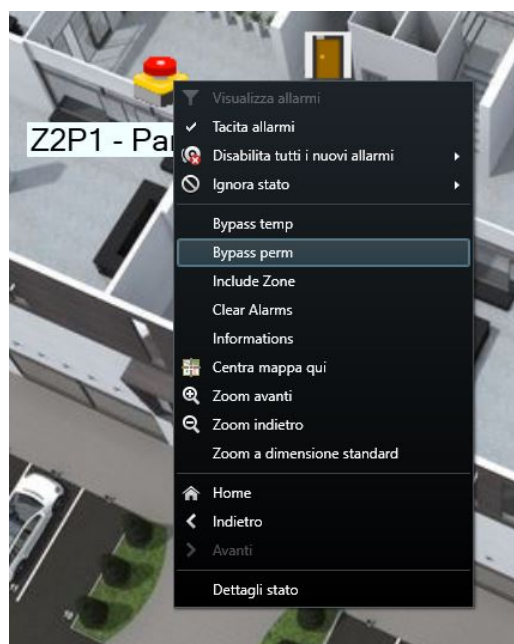


Image35 – Smart client: temporary zone exclusion

After the execution of command, the zone will be excluded:

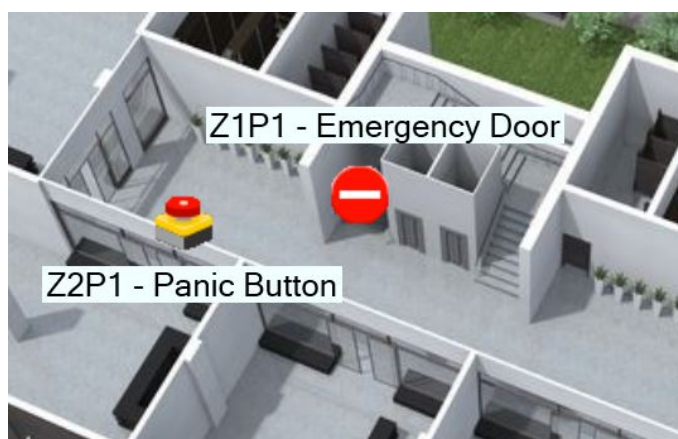

















Image36 – Smart client: zone temporarily excluded

In general, the icons and the related status that are currently managed are:

	Unknown exit status
	Exit status OFF
	Exit status ON
	Unknow partition status
	Armed status partition
	Disarmed status partition
	Non In Alarm status Center
	In Alarm status Center
	Zone: Loading bay
	Zone: Door
	Zone: Inertial
	Zone: murena
	Zone: Emergency button
	Zone: Detector
	Zone: Sismic









	Alarm Zone
	ByPassed Zone permanent
	ByPassed Zone temporary
	Memory Alarm Zone
	Memory Tamperalarm Zone
	Tamper Zone
	Tamperalarm Zone
	Violation Zone

Image37 – Smart client: legend of icon states

8.3.4 Customization icons

You can customize the Center icons, zones partitions and outputs by copying the icons images from the configuration folder of BIDEye to subfolder “Images”. For the system to overwrite the default icon of BIDEye with the customized one you have to use images in ICOformat and you have to respect nomenclature shown in image 39:

File Name	Description(Icon Description)
SensorController.ico	MapItem Controller Icon(Default)
SensorControllerAlarm.ico	MapItem Controller Icon in Allarm status

Partition.ico	MapItem Partition Icon(Default)
PartitionArmed.ico	MapItem Partition Icon in Armed status
PartitionDisarmed.ico	MapItem Partition Icon in Disarmed status
Zone_Door.ico	MapItem Zone Icon(Default)
ZoneMemoryAlarm.ico	MapItem Zone Icon in ZoneMemoryAlarm status
ZoneAlarm.ico	MapItem Zone Icon in MemoryAlarm status
ZoneByPass.ico	MapItem Zone Icon in ZoneByPass status temporary
ZoneByPass1.ico	MapItem Zone Icon in ZoneByPass status permanent
ZoneTamper.ico	MapItem Zone Icon in ZoneTamper status
ZoneTamperAlarm.ico	MapItem Zone Icon in ZoneTamperAlarm status
ZoneMemoryTamperAlarm.ico	MapItem Zone Icon in ZoneMemoryTamperAlarm status
ZoneViolation.ico	MapItem Zone Icon in ZoneViolation status
Zone_BaiaDiCarico.ico	MapItem Zone Icon (Loading Bay sensor)
Zone_FinestraInerziale.ico	MapItem Zone Icon (Inertial Window sensor)
Zone_Murena.ico	MapItem Zone Icon (Murena sens)
Zone_PulsanteDiEmergenza.ico	MapItem Zone Icon (Emergency Button sensor)
Zone_RilevatoriEmergenza.ico	MapItem Zone Icon(Emergency Detectoresensor)
Zone_SismicoCaveau.ico	MapItem Zone Icon(Caveausensor)
Output_OFF.ico	MapItem Output Icon(IconOutput OFF and Default)
Output_ON.ico	MapItem Output Icon(IconOutput ON)

Image38 - Filename to be assigned to custom icons

8.4 Clearing alarms

Opening the smart client, position yourself on the main screen of the alarms. If the Milestone “Alarm manager” component does not appear, you can create a specific view in which you can insert “Alarm Manager” and “Alarm Preview” from settings → Plugin and MIP Plugin.

If any alarm is activated, select it from the list. A screen to close the alarm will appear:

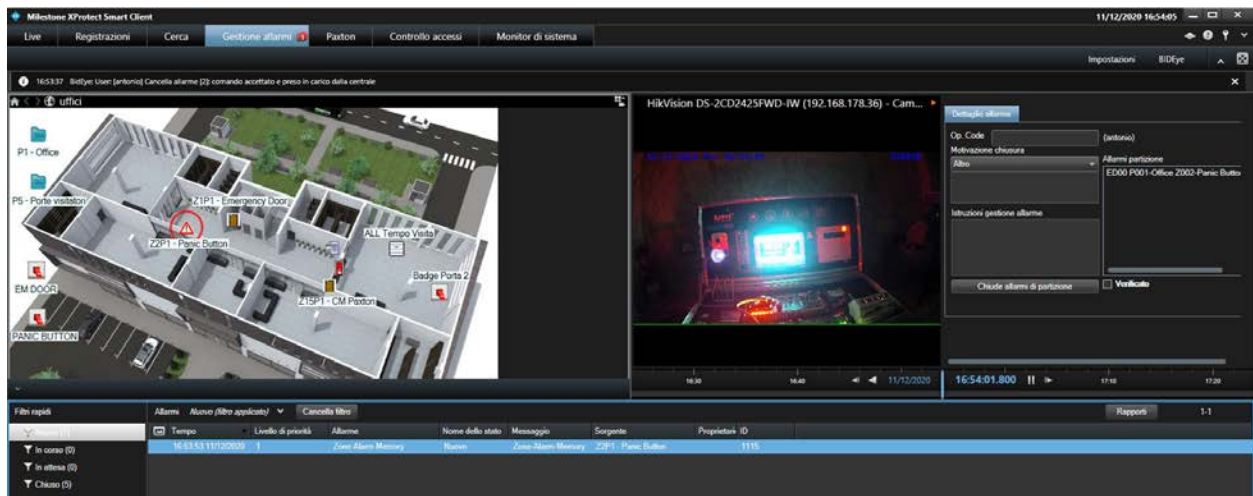


Image39 – Smart client: Clearing alarms

This screen is the customized Milestone alarms list screen that gives you the possibility to close the Satel alarm. If it is licensed, it's possible to configure a map for the zones partitions and outputs integrated management.

Enlarging the view for the BIDEye AlarmPreview component only:

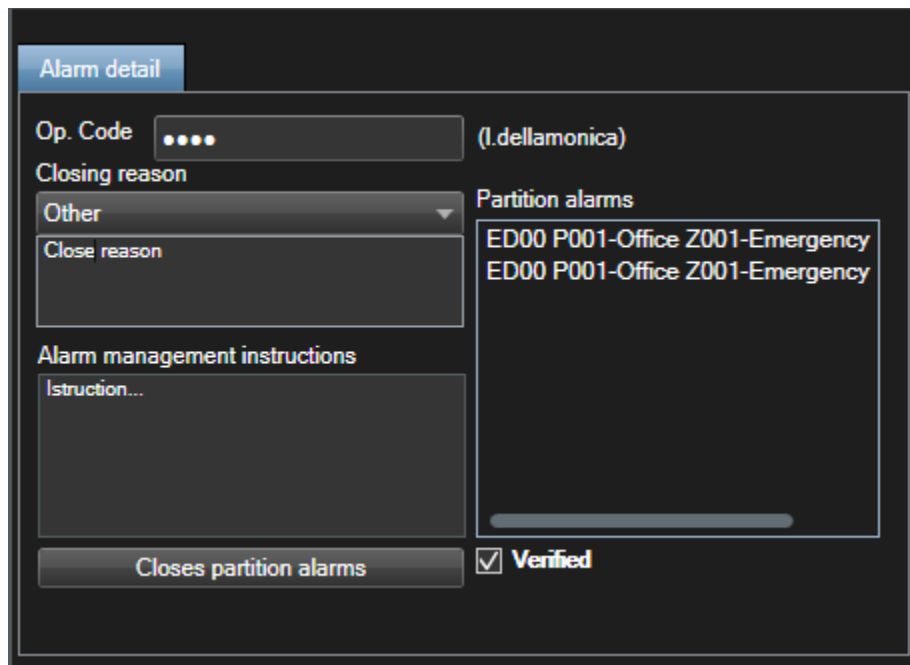


Image40 – Smart client: Clearing alarms - AlarmPreview

In the screen there are the following fields:

- Op. Code: Operator SATEL codeto insert. This code is kept until the logout operation.

- Closure Reasons: Preset list of closure alarm reasons(read by administrative configuration component of the Center that we have seen in previous chapters). By selecting “Other” you can insert a customized reason.
- Alarm management instructions: Alarm management instructions list read by Milestone alarm configuration (see the section related to new alarm configuration in Milestone).
- Partition Alarms: Anytime you clear an alarm, all the alarms on the partitions are cleared(if the partition is not disarmed). For that reason, the operator must visualize all these alarms in compact mode.
- Verified: flag acknowledging of all alarms by the operator. Mandatory.

When you have filled in the screen with the requested data, you can click the button “Clear Alarm” (If the operator is not authorized, the button will be disabled). The client sends a message to Event Server which manages that specific SATEL Center, and BIDSatelAI plugin will command the alarm closure. The client will display a diagnostic message.

Once the cancellation request has been sent, the seconds that pass from the moment of sending are displayed. After a wait of ten seconds, a warning message will appear on the video. Usually the execution time of the command is, at the most, twice the configured polling time. Response time may increase for loading reasons or network traffic (If the command is sent on Milestone Federation).

If the command ends successfully, the following message will be displayed: “command correctly executed” and at the same time the alarm is closed. The alarm disappears from the active alarms list and appears in the closed alarm list.

Each alarm is closed by entering correct data.

8. BIDEye Reports

The BIDEyeReports plugin allows you to generate pre-set reports or model new reports to be generated directly within the Smart Client.

BIDEyeReports uses the Jasper Server Report open source software downloadable from <https://community.jaspersoft.com/project/jasperreports-server/releases>. Version 7.5.0 is supported at the time of writing this document.

In order to create new reports/edit existing reports, you must use a graphical report modeling tool, also open source called Jasper Studio, which can be downloaded at the url:

<https://community.jaspersoft.com/project/jaspersoft-studio/releases>

Version 6.11.0 is supported at the time of writing this document.

Download and install the two softwares (run with administrative rights). Once you have finished, you will need to do the following:

- Configure BIDEyeReports
- Configure JasperServer
- Set up JasperStudio
- Report in Milestone

8.1 BIDEye Reports Setup

Once you have installed the JSR (Jasper Server Report) software and verified that it is working correctly, you must configure the endpoint, a username and a password in the BIDEye options: open the Milestone management console and go to the options panel. Open the BIDEye bat. Then enter the data as shown in the image:

Image41 – JasperServer: url, username and password

Enter the address of the v2 API rest in the JasperServer base Url field. As a rule it is:

http://localhost:8083/jasperserver/rest_v2/

Enter your username and password to sign in to JSR. In the example, the user **jasperadmin** (default password: **jasperadmin**) is entered, but you can create a new user in the JSR admin panel.

To test the connection, press the test button. If all is ok, a success message will be displayed.

8.2 Jasper Server Setup

8.2.1 Creating data sources to access SqlServer

BIDEye, like Milestone, uses the Integrated Windows authentication mode to access the SQLServer. To enable this type of access with JSR, you must follow the following instructions (JSR assumes to be installed in C:-Jaspersoft-jasperreports-server-cp-7.5.0, possibly replace with your own path):

1. Copy the <PATH-INSTALLATION-BIDEYE>-setup-sqljdbc_auth.dll file to C:-Jaspersoft-jasperreports-server-cp-7.5.0-apache-tomcat-bin
2. Restart service jasperreportsTomcat
3. Using the web console, after logon with jasperadmin, add a new datasource

- a. Tipo: JDBC Data Source
- b. In the JDBC driver leader, select:

JDBC Driver:

NOT INSTALLED: MS SQL Server 2005 (com.microsoft.sqlserver.jdbc.SQLServerDriver) ▼

Add Driver...

- i. Install the driver by pressing the "Add Driver..." button and press browse to select the driver directly from theBIDEye/setup installation folder as shown in the image (choose the file: sqljdbc42.jar)

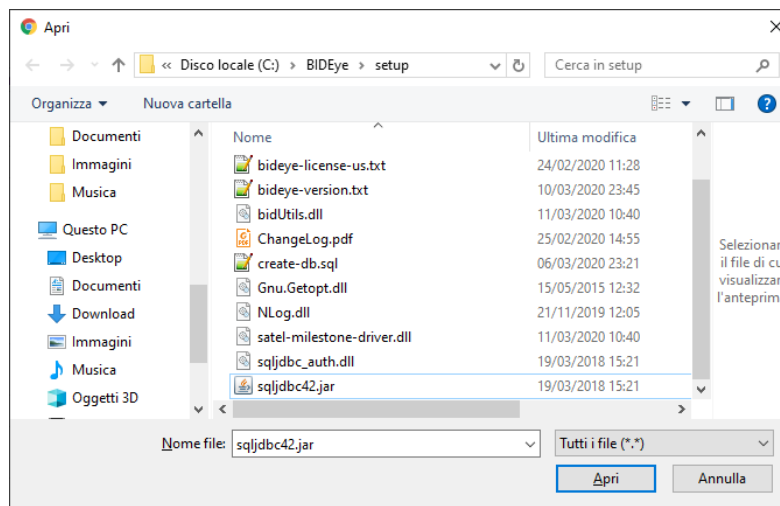


Image42 – JasperServer: SQL Server jdbc driver

- c. Then confirm that the driver is loading.
- d. In the URL field, enter:
`jdbc:sqlserver://localhost:1433;databaseName=bidSatelIntegration;integratedSecurity=true`
- e. In the username: **none** field
- f. In the field: password: **none**
- g. Edit TimeZone fields appropriately
- h. Press Test to test the connection.
- i. Press Save to save the data source
 - i. Name: **BIDEYE**
 - ii. Resource Id: **BIDEYE**

iii. Description: BIDEYE datasource

TIBCO JasperSoft | Library | View | Manage

BIDEYE

[Edit Data Source Properties](#)

Type:

JDBC Driver: [Select Driver...](#)

Host (required):

Port (required):

Database (required):

URL (required):
Hint: jdbc:postgresql://localhost:5432/mydb

User Name:

Password:

Time Zone:
Hint: Do not change the time zone setting unless you know the database timestamp data is incorrect.

[Test Connection](#) ✔ Connection passed

Image43 – JasperServer: Test ok datasource BIDEye

If you want to manage also Milestone Reports, you have to add another DataSource for Milestone database. The Url is:

`jdbc:sqlserver://localhost:1433;databaseName=Surveillance;integratedSecurity=true`

8.3 Jasper Studio Setup

Before you can run JasperStudio, you must enable the driver that will be loaded to Integrated Windows authentication as well as the JasperServer component. Then copy the file:

- <INSTALLATION-PATH-BIDEYE>\setup\sqljdbc_auth.dll in <INSTALLATION-PATH-JASPESTUDIO>\features\jre.win32.win32.x86_64.feature_1.8.0.u151\jre\bin
- <INSTALLATION-PATH -BIDEYE>\setup\sqljdbc42.jar in <INSTALLATION-PATH-JASPESTUDIO>\features\jre.win32.win32.x86_64.feature_1.8.0.u151\jre\lib\ext

Run JasperStudio and create a new local data adapter to join SqlServer:

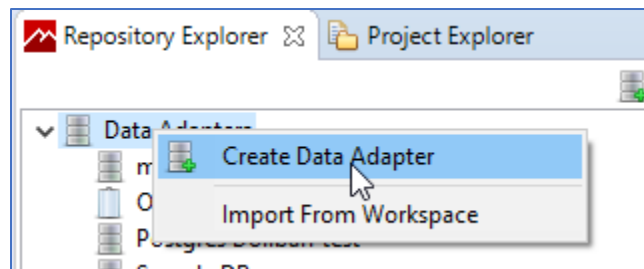


Image 44– JasperStudio: Creating New Data Adapter

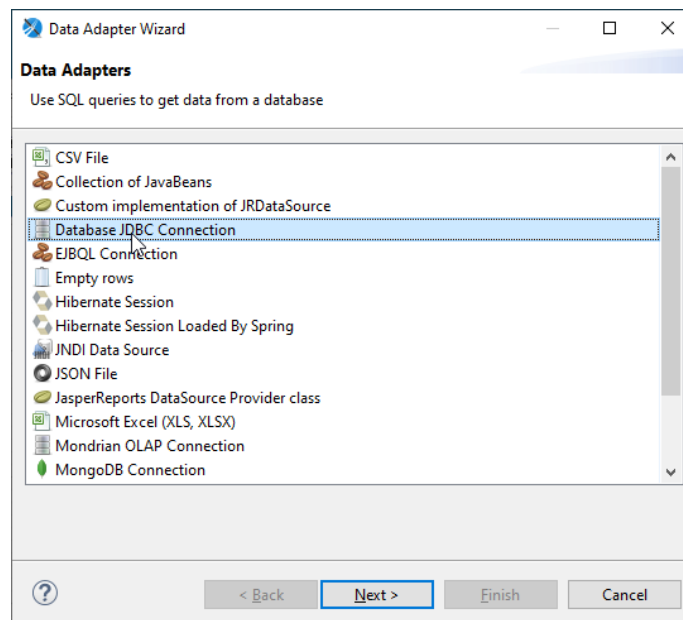


Image45 – JasperStudio: Creatingnew data adapter: JDBC

Select "Connect to a JDBC database" and press Next.

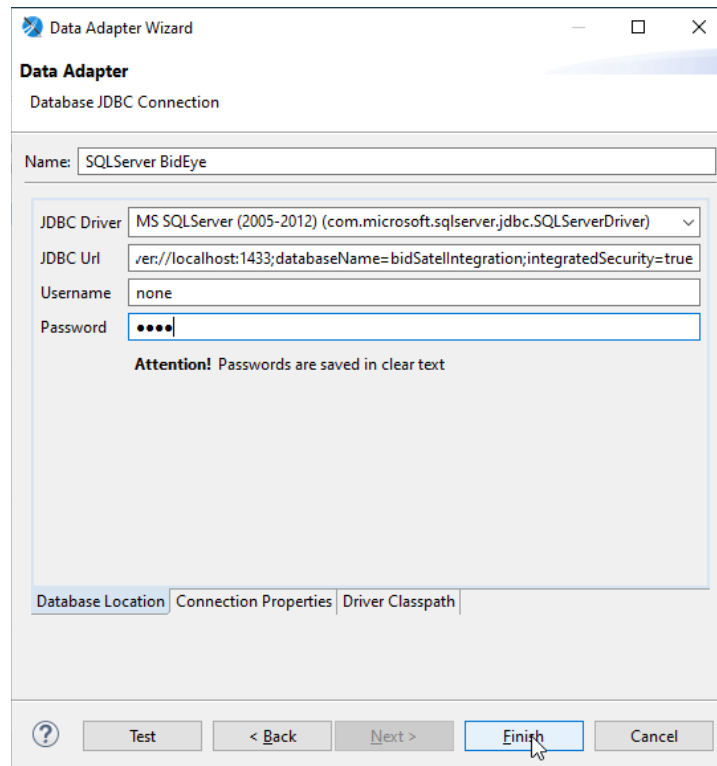


Image 46– JasperStudio: Creating New Data Adapter: Database

How to insert JDBC Url:

`jdbc:sqlserver://localhost:1433;databaseName=bidSatellIntegration;integratedSecurity=true`

8.3.1 Connectto Jasper Server

Jasper Studio allows you to create reports and store them in Jasper Server so that they can then be read in the Milestone Smart Client.

To configure Jasper Server, follow these steps:

1. Run Jasper Studio
2. Create a new Server connection

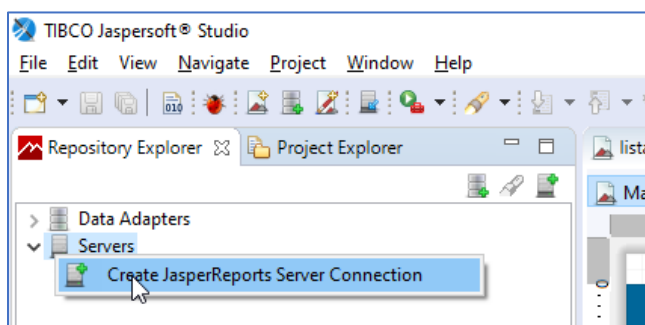


Image 47– JasperStudio: Server Connection Creation

3. Enter the connection parameters and press "Check Connection":

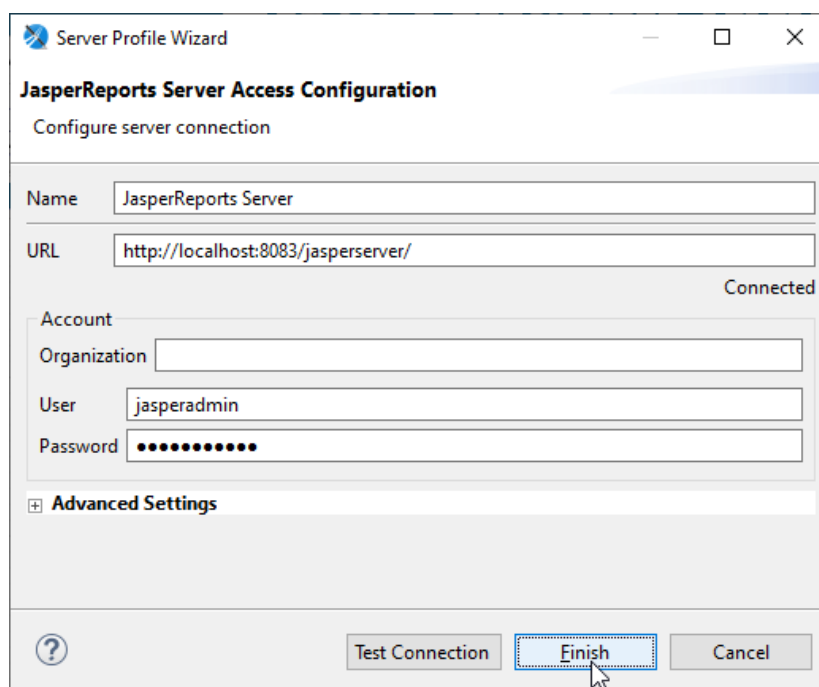


Image 48– JasperStudio: Server Connection Configuration

4. After verifying, press Finish
5. After the connection, the contents of the linked Jasper Server are displayed

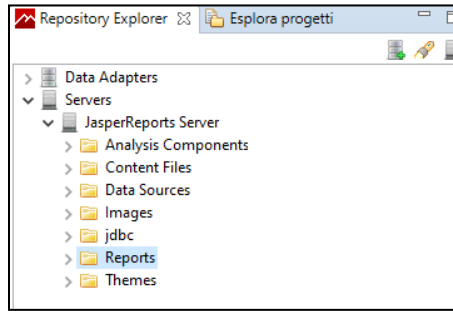


Image 49– JasperStudio: jasper server content

8.3.2 Deploying reports on Jasper Server

To add a report on Jasper Server, simply model it and deploy it to servers. For example, you can upload a sample report in your BIDEye deployment. Follow these steps:

1. Open the "configuration-central.jrxml" report located in the <PATH-INSTALLATION-BIDEYE-Reports folder

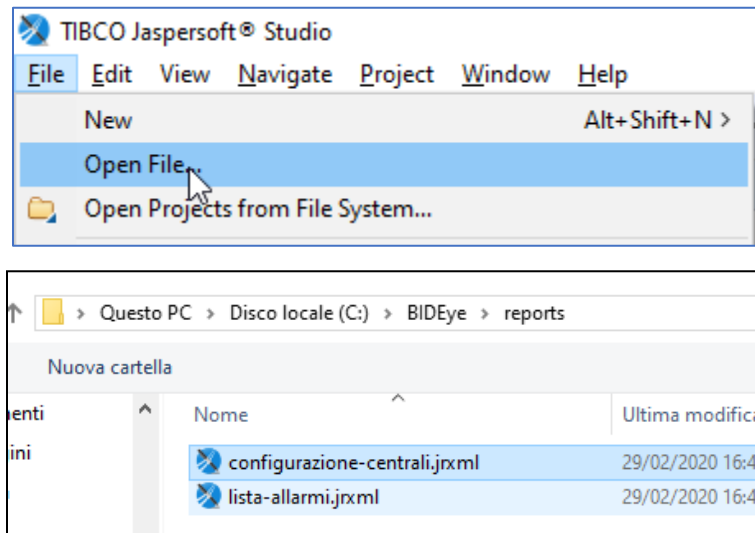


Image 50– JasperStudio: Publishing Sample Report

2. The report appears in the editor:

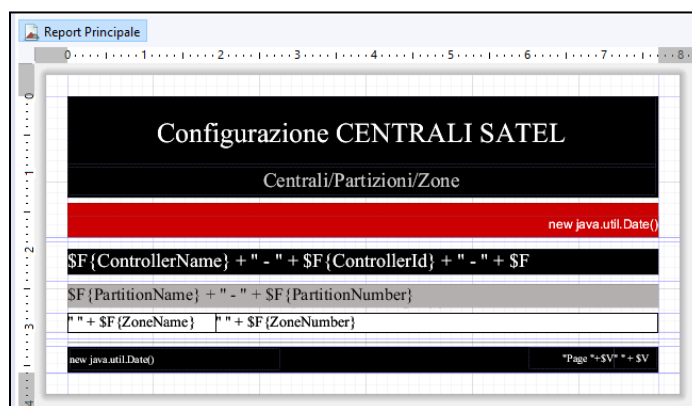


Image 51– JasperStudio: Sample Report

3. Publish the report to Jasper Server:

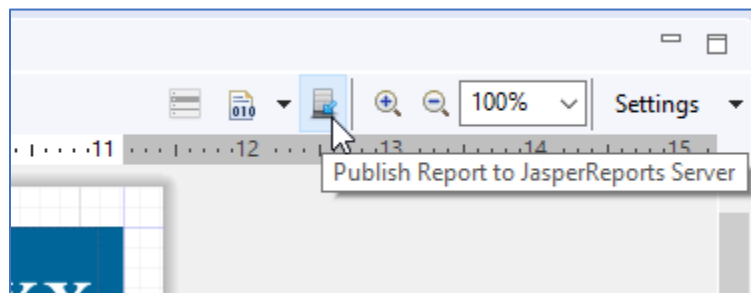


Image 52– JasperStudio: Publishing Report on Jasper Server

4. Fill in the fields for publishing:

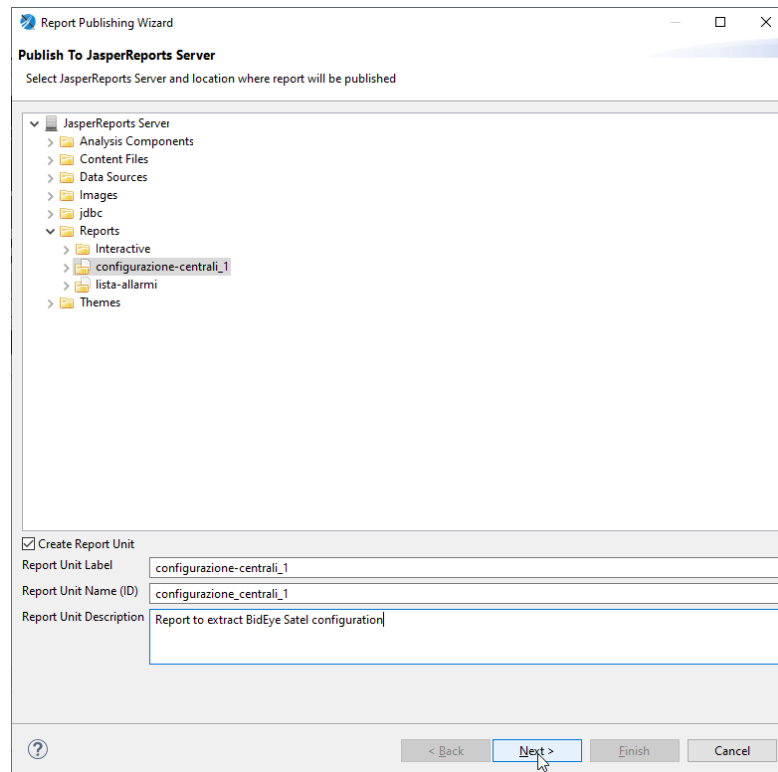


Image 53– JasperStudio: Publishing: Data Entry

5. Press Next until you choose the data source you want to use. Choose BIDEYE, the data source that you configured earlier.

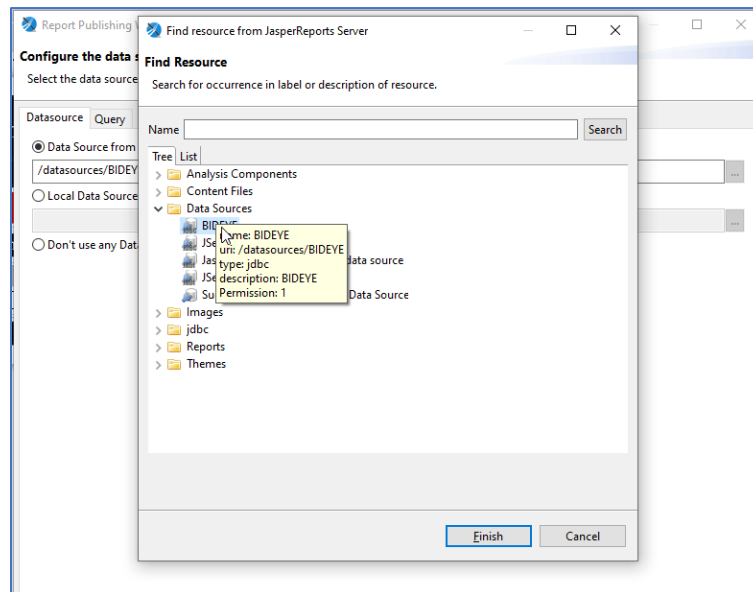


Image 54– JasperStudio: Publication: data sourcechoice

6. At the end of the procedure, the report will be published on Jasper Server and will be ready to be used in Milestone

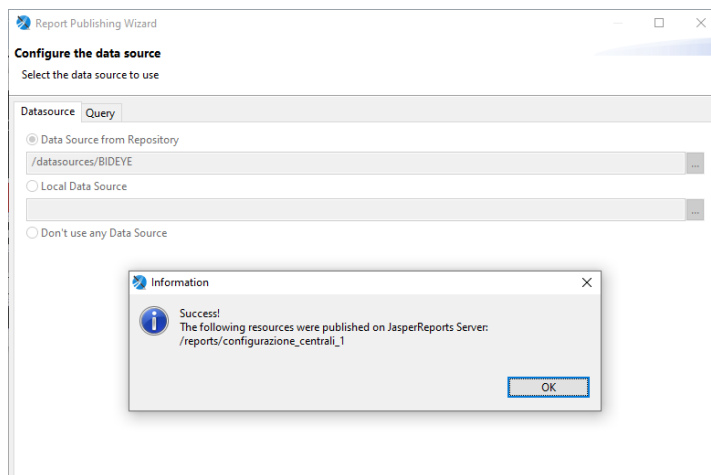


Image 55– JasperStudio: Published successfully

8.4 Utilizing BIDEye Reports in the Smart Client

After you configure Jasper Server and publish some reports, you can use it directly within the Smart Client. To do this, follow these steps:

1. Open the Milestone Smart Client
2. Create a new row view for 1 column and call it Reports
3. Go to Edit mode and add the BIDEye Report plugin

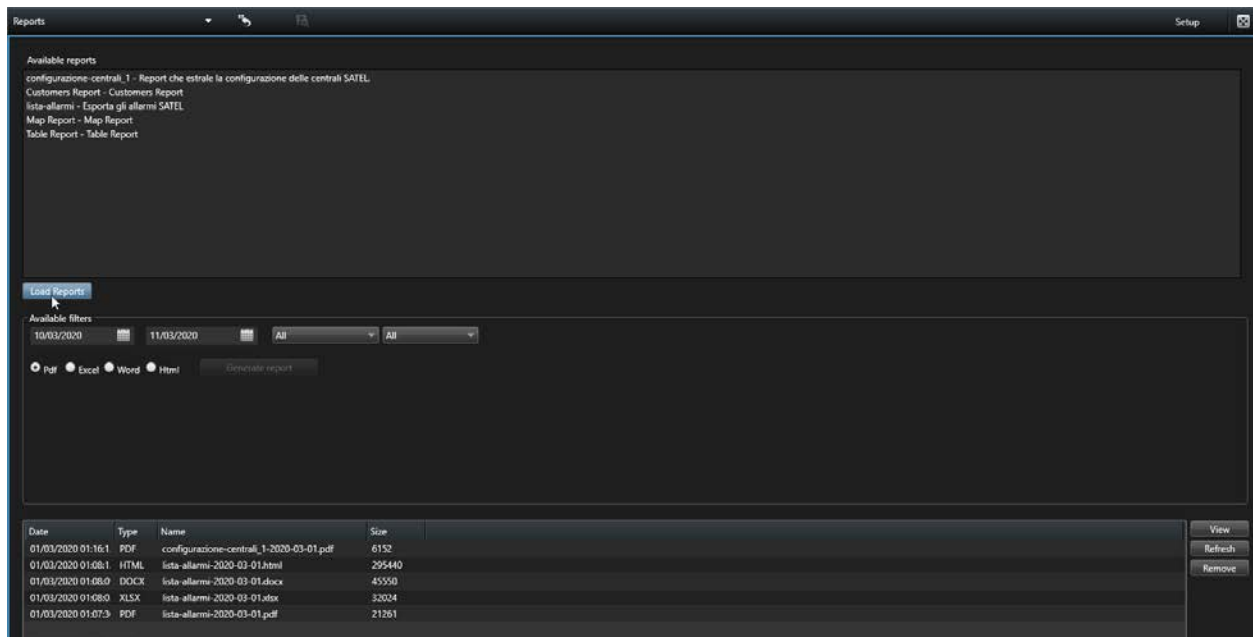


Image 56– BIDEye Report: Viewing Reports in Milestone Smart Client

The plugin is structured in three sections:

1. Reports list: All reports found on Jasper Server are displayed here. To load the list, press the "Load Reports" button
2. Filters Sections: Here are the possible filters available:
 - a. Start date: query start date
 - b. End date: End date of the query
 - c. Central: Drop-down list: Select the desired power station or All for all power plants
 - d. Partition: Drop-down list from which to select the desired partition or "All" for all partitions
 - e. Export format: Pdf, Excel, Word, Html
 - f. "Generate Report" button to generate the report in the specified format according to the selected filters.
3. Generated Reports section – All reports generated over time and stored on the local disk are displayed here.
 - a. View: Displays the selected report (uses the system viewer)
 - b. Update: updates the list of reports generated over time

- c. Delete: Removes the selected report from the disk