

SGSE

Soluciones Globales de Seguridad Electrónica

TECNOALARM MONITOR

Installation guide and user manual

Contents

1. Document history.....	2
2. Introduction.....	3
Integration panel details	3
Milestone XProtect Versions	3
3. Solution architecture.....	4
4. Installation.....	5
5. Licensing.....	8
6. Configuration.....	10
Registration of a Tecnoalarm device	10
Configuration of the elements:	12
Milestone Xprotect TecnoAlarm virtual zones	13
Alarms in Milestone	14
Rules in XProtect	16
User roles.....	17
7. Operation	18
Milestone Smart Client.....	18
Status Detail	20
Event and alarm viewer.....	21
Maps.....	21
8. Troubleshooting	26
Integrated Systems.....	26
Equipment Needed.....	26
Other problems:	26
Learn more	26

1. Document history

Version	Date	Author	Changeset
1.0	11/2024	IXR	First version
1.1	11/2024	JCR	Including new comments (license & outputs)

2. Introduction

The objective of this document is to explain the installation, operation and use of the software solution called "**Tecnoalarm Monitor**".

This solution consists of a plugin that allows monitoring and interacting with Tecnoalarm Alarm Panel systems from the user interface and the Milestone XProtect® platform work environment.

In this way, the monitoring of the Tecnoalarm system can benefit from the advantages integrated in the XProtect® VMS platform for the management of video and CCTV and intrusion alarms in a single interface.

This solution is available in the following languages:

- Italian
- English
- French
- Spanish

Integration panel details

Communication protocol between the Tecnoalarm control panel and any Plugin "TecnoAlarm Monitor". This release of the document is aligned with the following firmware releases:

TecnoAlarm Panel	Firmware version
TP8-88 Plus	Release 2.1.06 and following
TP20-440	Release 2.1.06 and following
EV 10-50	Release 1.2.04 and following

Milestone XProtect Versions

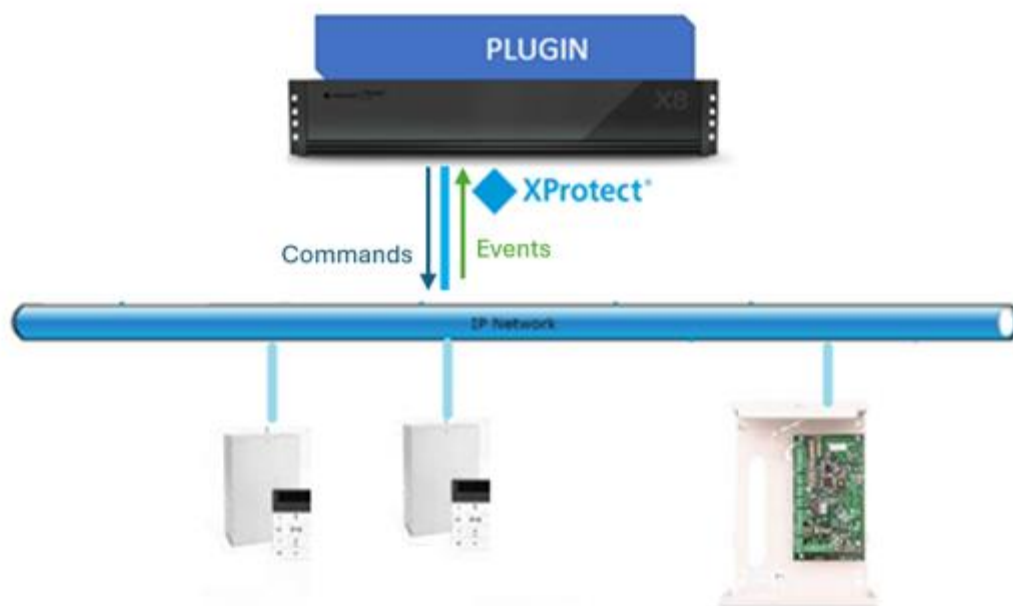
Tested on the following Milestone versions

Versiones	Essential+	Express+	Professional+	Expert	Corporate
2022 R1	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2022 R2	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2022 R3	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2023 R1	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2023 R2	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2023 R3	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2024 R1	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

3. Solution architecture

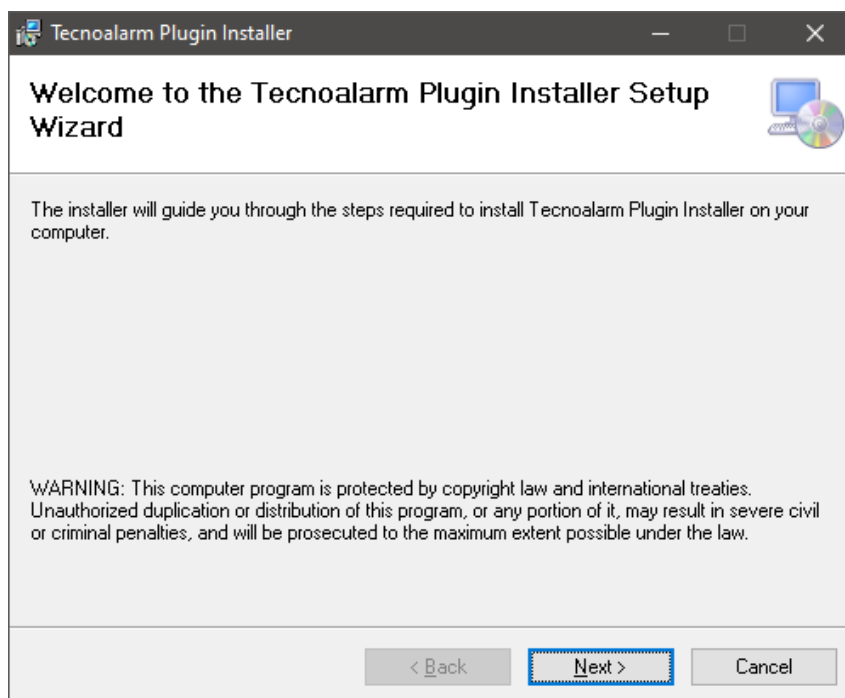
Through the Ethernet network, the plugin connects to the different Tecnoalarm panels to transfer the state changes of each of the panel records to the Milestone event server.

The system architecture is underpinned by Milestone's development kit (SDK), integrating elements and events on both the server and client sides. The plugin establishes an active TCP/IP connection with the panel using the Tecno Out Protocol, checking events every few seconds.

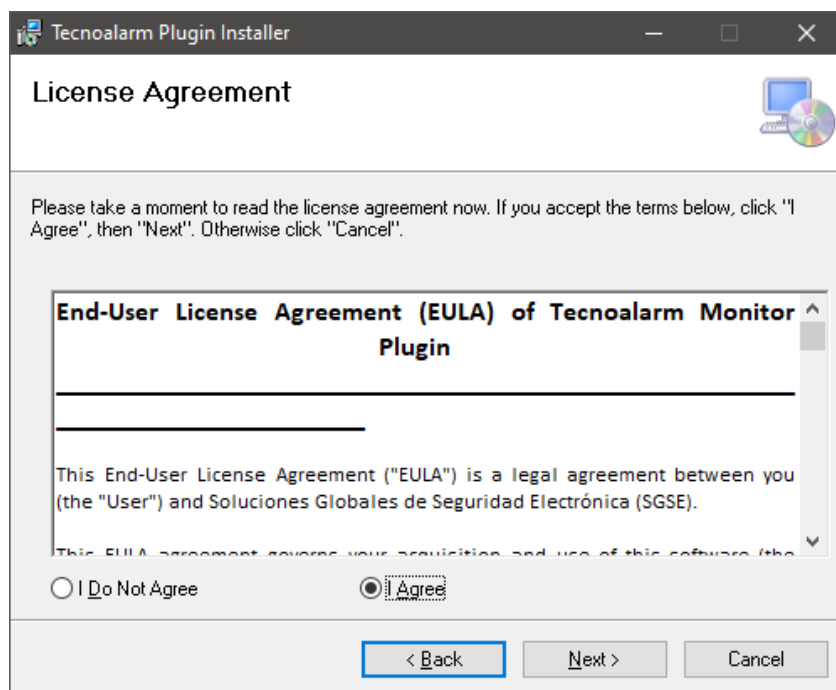


4. Installation

To install the plugin, simply run with administrator permissions the installer "Tecnoalarm Plugin Installer.msi" provided by SGSE. The process is automatic. Through the different screens of the installer, we will only have to accept the End User License Agreement, a necessary condition to be able to use the plugin.

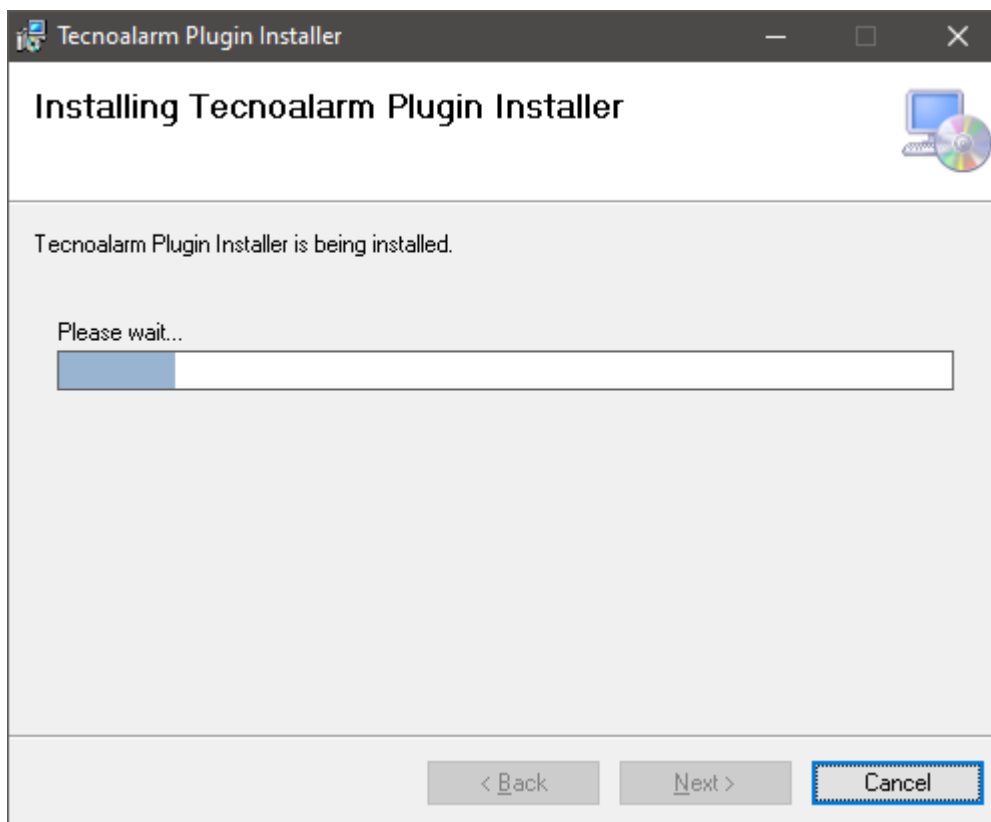


Click "Next >" to start the installation process.

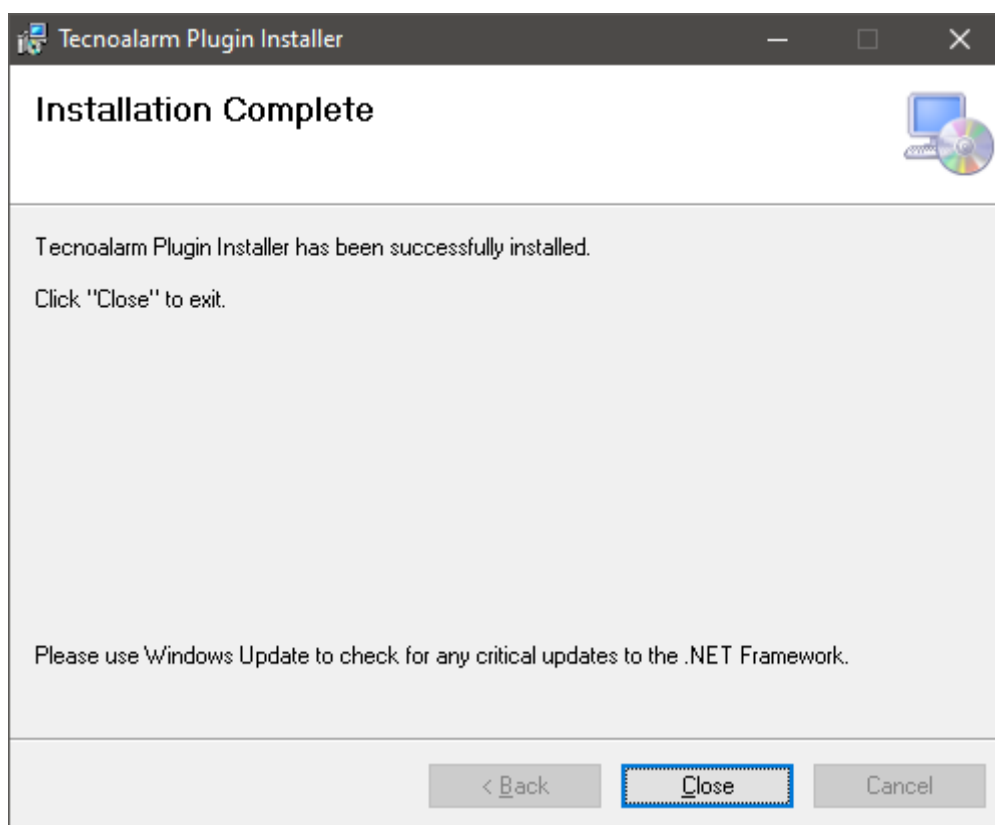


Please read and accept the End User License Agreement to install the plugin.

Click "Next >" to continue and install the plugin files.



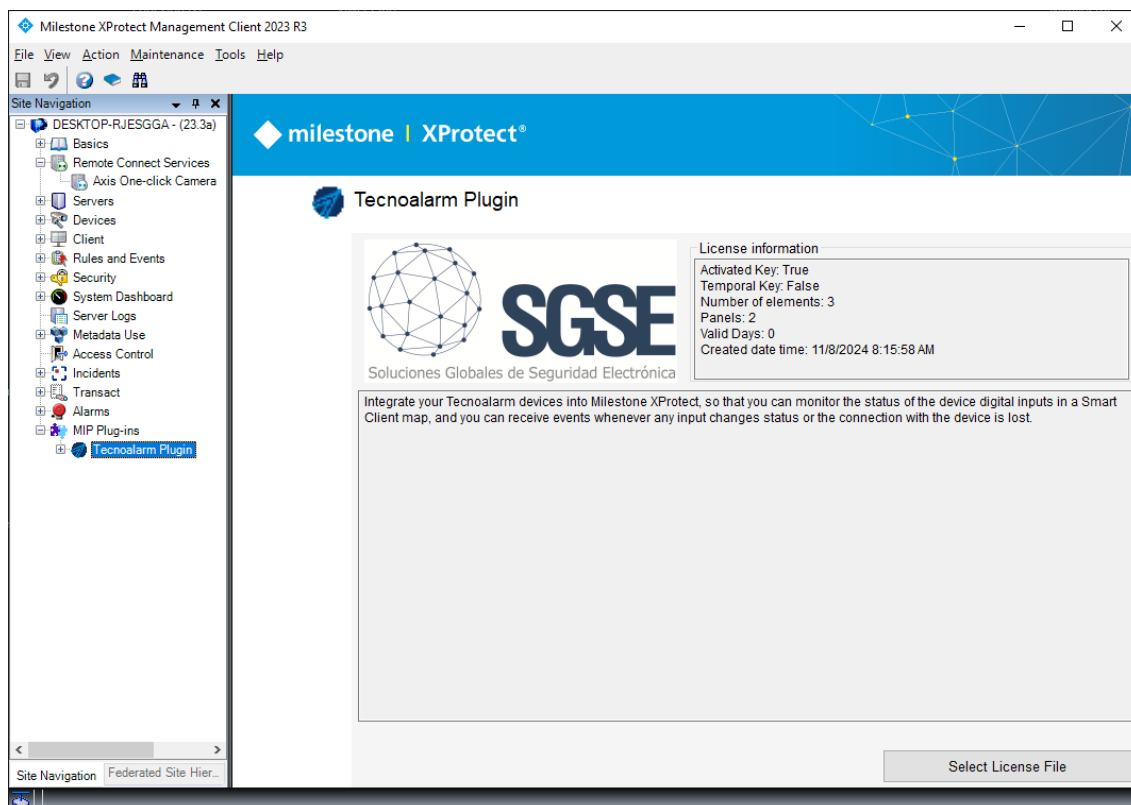
If *Windows User Account Control* is enabled, allow the installer to proceed with the installation.



Once the process is finished, you can press "Close". The plugin is already installed.

5. Licensing

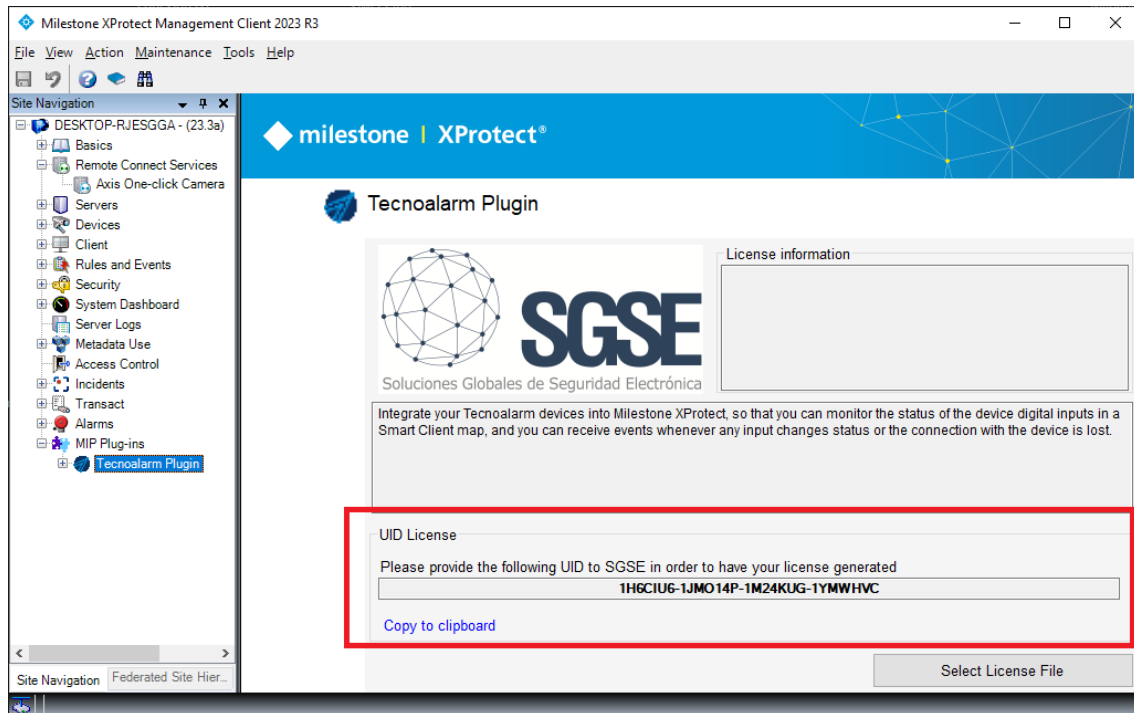
The plugin will appear in the bottom tree of the Milestone XProtect Management Client browser, under the root node "MIP Plug-ins" with the name "Tecnoalarm Plugin".



In order to add Tecnoalarm devices you must have an active license, which will be generated exclusively for installation by the SGSE installer. To obtain the license file, you must provide the corresponding UID. This UID is a unique identifier that the license is associated with.

On the screen of the Tecnoalarm Monitor node when the plugin is not licensed, the corresponding UID will appear at the bottom.

License controls the number of panels and number of zones. You can distributed the number of panels and the number of zones as you need. If you have 20 zones but your license is for 3 zones you cand select 3 of the 20 zones , 17 of 20 will be disabled.



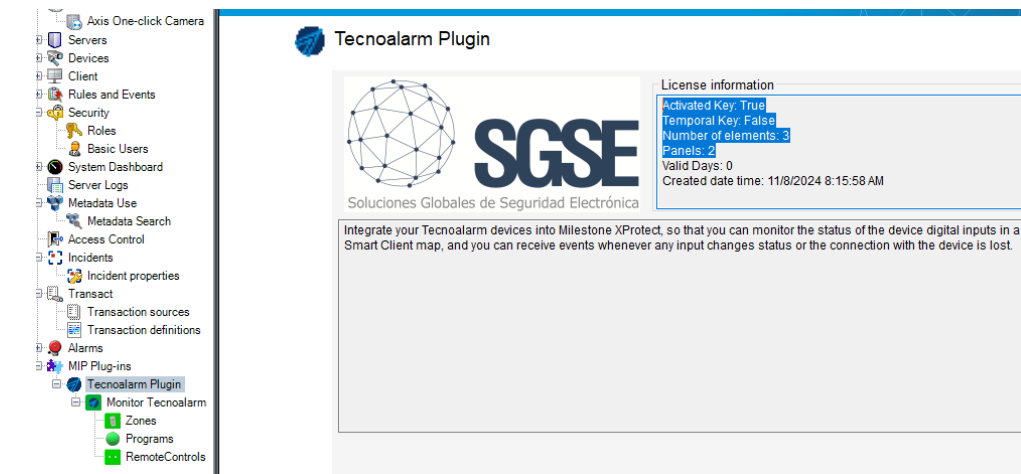
Please provide this UID to SGSE for them to generate your license file.

Once you receive the "License.lic" file, click on the 'Select License File' button and choose your license.lic file and refresh the screen using the F5 key (keyboard button).

You will then need to restart the Event Server for the changes to take effect and you can use the plugin.

If you are only going to use the plugin in the Smart Client interface, and you do not have the XProtect® Management Client on that machine, to obtain the UID on a machine where the configuration application is not located it will be necessary to use the "UID Generator" tool from SGSE. Check with SGSE for such a tool.

After entering the license, the license request will disappear and in the License Information box (to the right of the SGSE logo) the license data will appear.



6. Configuration

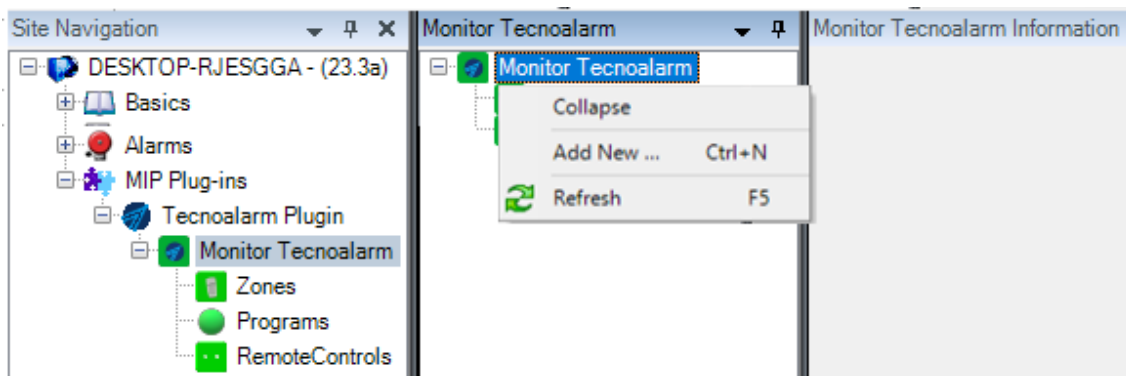
The plugin is designed to simplify the setup process as much as possible, making getting up and running as simple as possible.

The connection is actively established by the plugin with the Tecnoalarm panel using the compatibility tecnoOut protocol, so you will need to provide the IP, port and pass, on which the panel serves incoming connections.

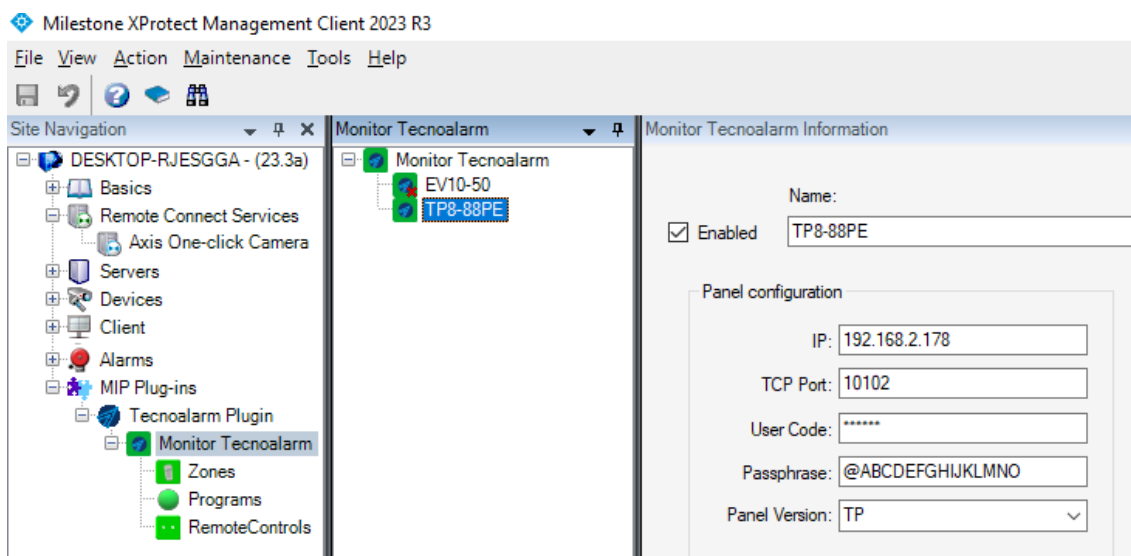
Outputs, Tecnoalarm controls the outputs via the remote control option, i.e. you must consider parameterizing the panel to create a relationship between the remote control and the output. For example, remote control 1 relationship with output1 and so on.

Registration of a Tecnoalarm device

When you click on the main group Tecnoalarm devices, a menu of actions appears, among which we have the option "Add new"



When you add a new device, it simply asks you for the name of the device, then it will appear under this node and by clicking on it you can access the main configuration screen of the device.



If it is successful, the available records that correspond to each subtype of device connected to the panel will be retrieved.

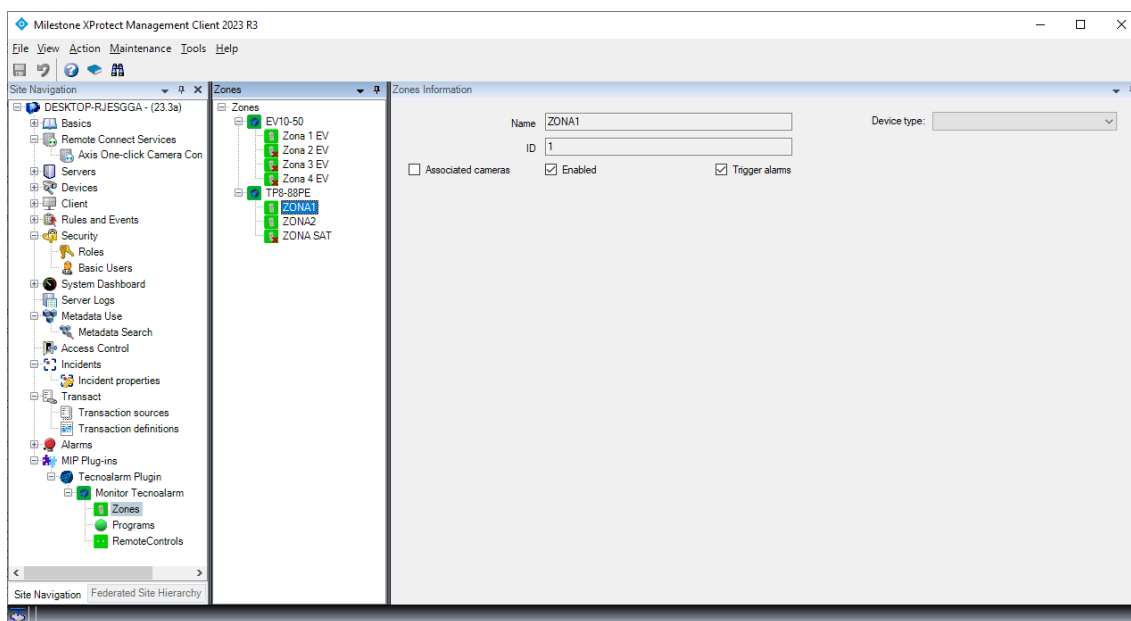
If we want the plugin not to collect information from the panel, we can uncheck the "Enabled" box.

Once the names and/or descriptions of the elements have been they will appear grouped by types (inputs, outputs, ...) under the browser's "MIP Plug-ins" sub-node

Configuration of the elements:

If the connection has been successful, we can continue with our configuration, we will see that a tree has been created with the groups of elements obtained when the plugin connects with the system.

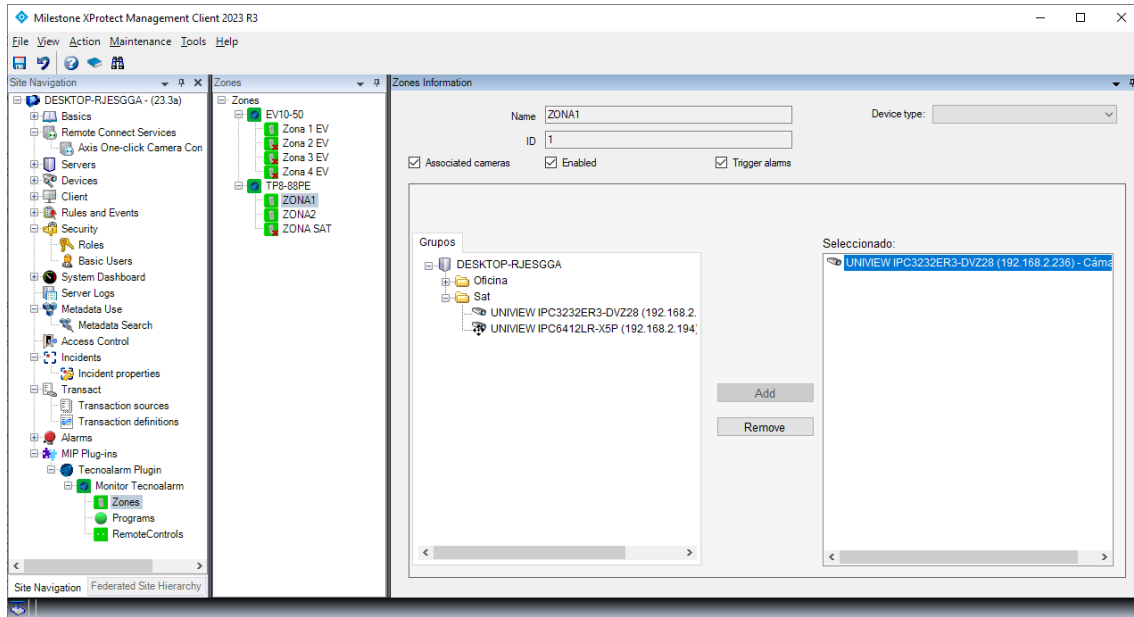
By clicking on each of the groups that group the elements that compose it, they will be shown in the same way in a new tree. When we click on the chosen element, a form will be displayed with the available options.



The different groups have the possibility of changing the name, enabling its management and/or sending an alarm. This last functionality allows that when an event occurs related to the element that is being parameterized, an alarm will occur in Milestone without the need to be configured in the alarm parameterization panel. See section on alarm management.

Finally, the zones have a new management parameter that allows one or more cameras to be associated in the event of an alarm, one or more cameras existing in XProtect. In a simple way and through the menu you can navigate and select the desired camera(s). You also can enable or disable this feature using the Associate Cameras tab.

We can also if we want the specific events and alarms of the device connected to the panel to be notified. In addition, the cameras associated with notifications can be added to facilitate the management of incidents.



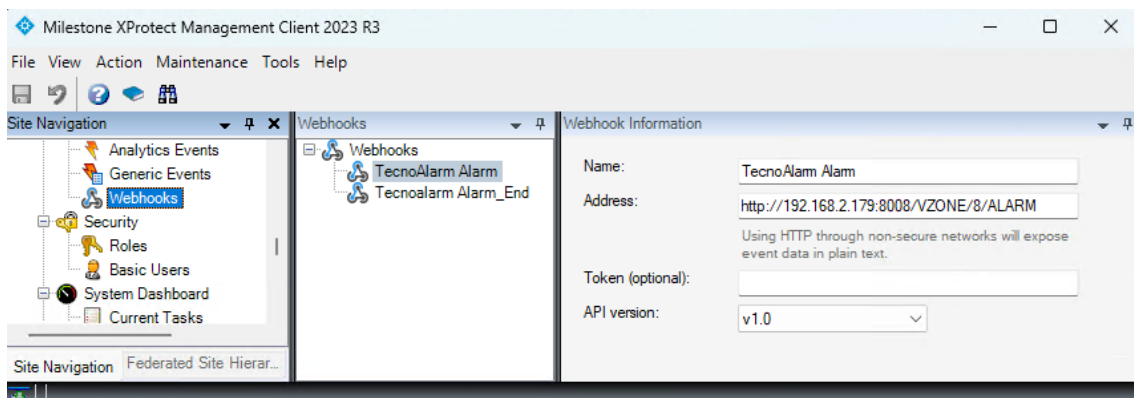
Milestone Xprotect TecnoAlarm virtual zones

The **Tecnoalarm EVO 50** intrusion system offers an advanced and flexible solution through the management of virtual zones. This functionality allows real-time reflection of specific system states via HTTP commands sent directly to the intrusion panel. This simplifies the integration of states from various devices or events without the need for additional physical components, streamlining installation and enhancing operational capacity.

Thanks to this technology, advanced features such as tamper detection, which alerts to unauthorized manipulations, and antimasking, which protects against sabotage attempts or simply alarms, can be seamlessly incorporated. All these states can be integrated into virtual zones, ensuring immediate response to critical situations.

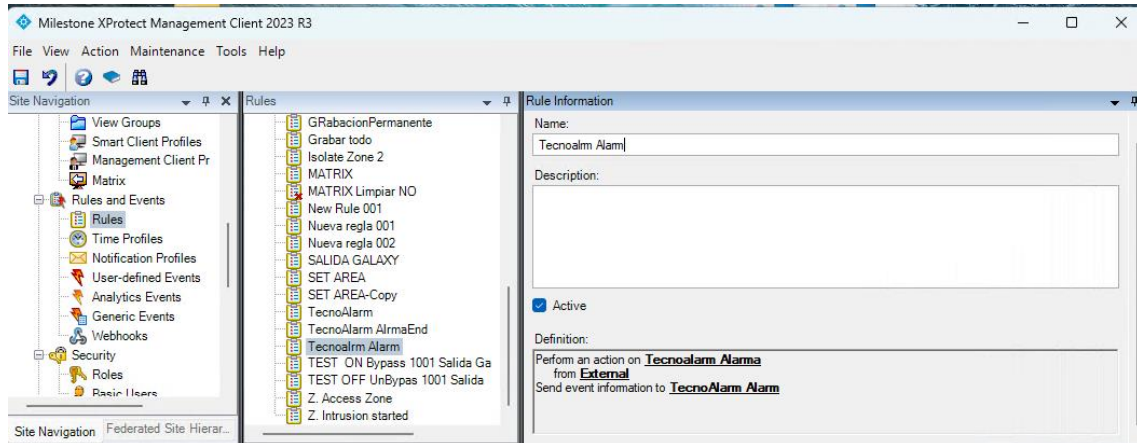
Remote management of virtual zones enables the system to quickly adapt to diverse needs, optimizing security without interruptions or physical changes. This makes the **Tecnoalarm EVO 50** an effective, versatile, and reliable tool for protecting any environment.

With **XProtect**, it is possible to configure custom actions triggered by rules or alarms through the **webhooks** section. This allows advanced event management and automated responses tailored to the system's specific needs.



For example, alarms such as "active alarm" or "inactive alarm" can be created and then integrated into actions configured through rules or alarm events. This is particularly useful in scenarios like video analytics that emulate the behavior of an intrusion sensor, enabling detection of critical events such as tamper or antimasking.

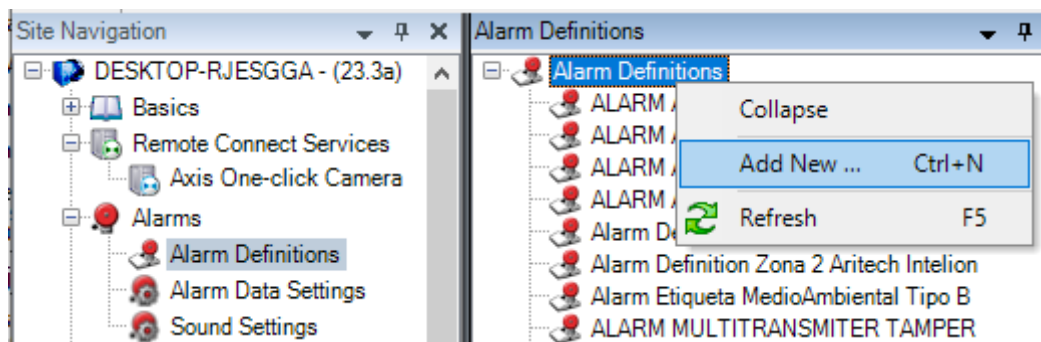
Once configured, it can be easily integrated into any action within your rule or alarm designs.



Thanks to this flexibility, **XProtect** provides a powerful solution for implementing intelligent automation that enhances the security and management of video surveillance systems.

Alarms in Milestone

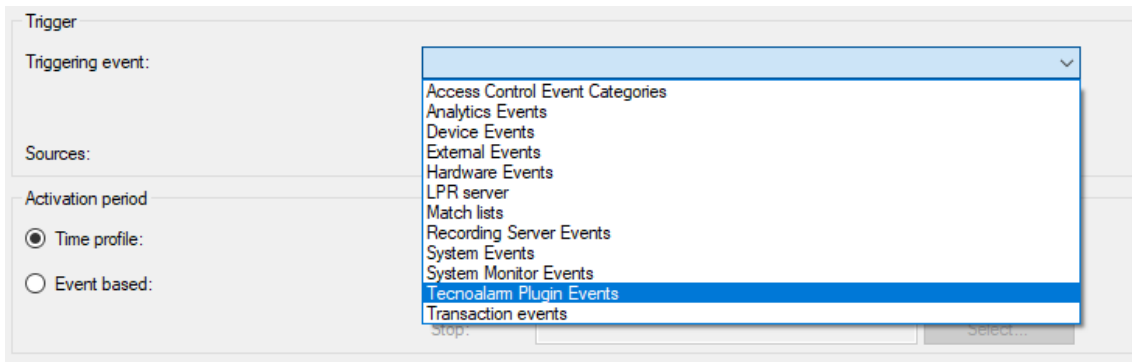
Once the installation is complete, the configurator will be able to see additional events in the XProtect Management Client. It is a list of events from Tecnoalarm panels that are read by the plugin and sent to XProtect. Alarms associated with these events can be configured. Click Alarms > Alarm Definitions, right click and add new



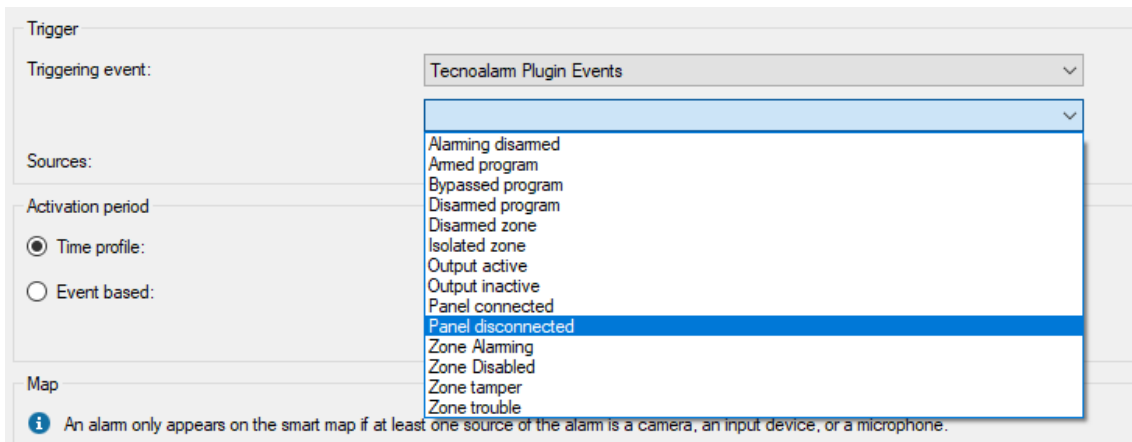
Fill in name and instructions

Alarm definition	
Enable:	<input checked="" type="checkbox"/>
Name:	Alarm Definition
Instructions:	<input type="text"/>

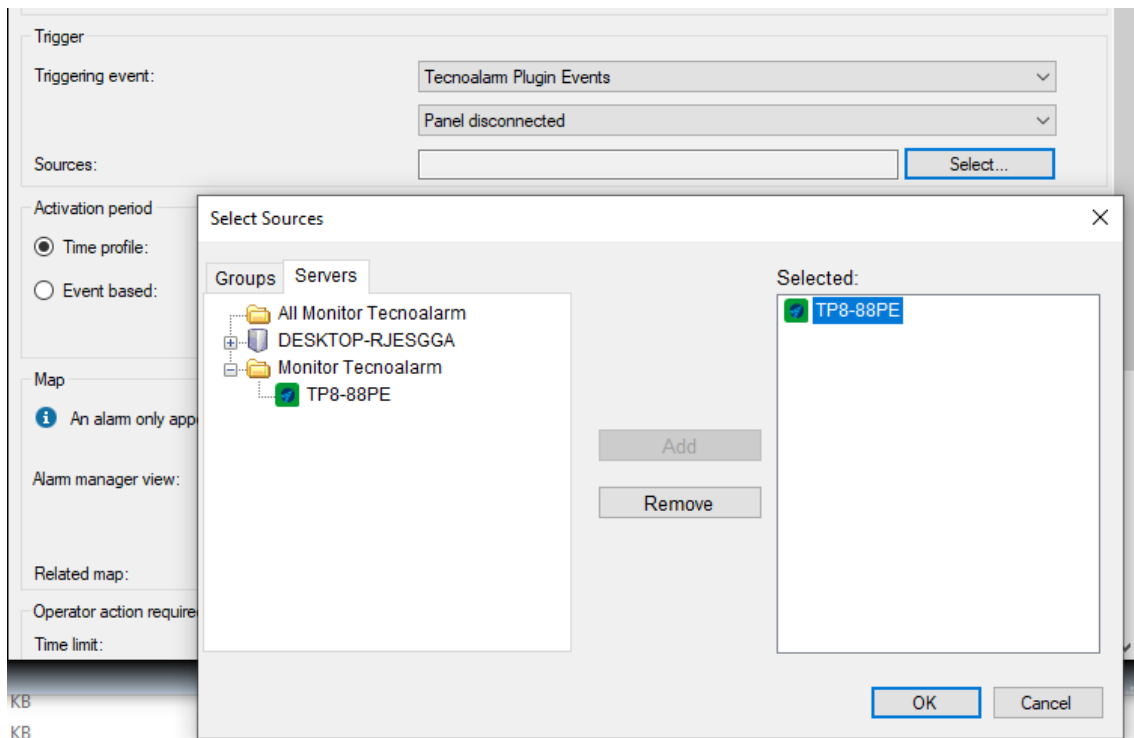
After going to the Trigger Event in the section Trigger and Select Tecnoalarm Plugin Events.



Under the trigger event, select one of the event options, e.g. Panel disconnected.



Now select the source of the event by clicking on the Select button and a new menu will appear. Find the source and choose it.



Fill in the rest of the sections as needed.

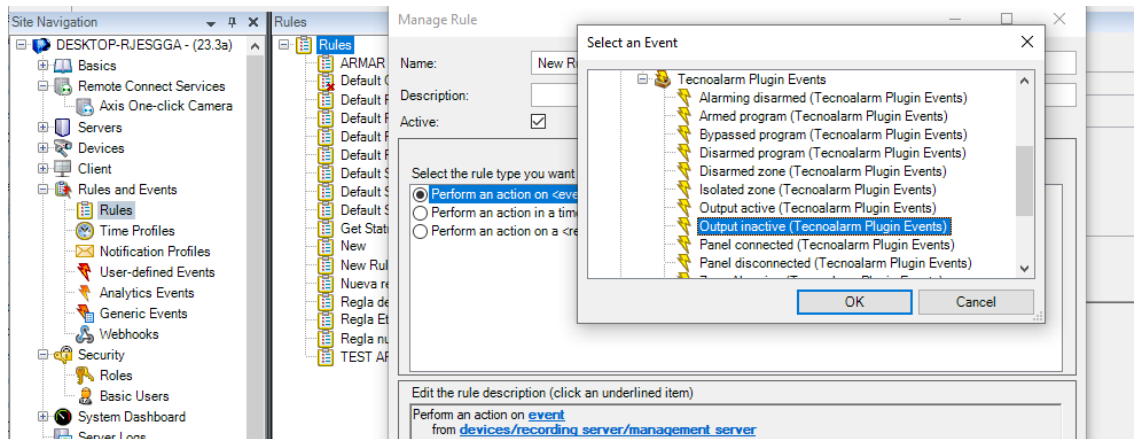
Rules in XProtect

By means of the rules you can make events trigger actions, actions of Tecnoalarm and others.

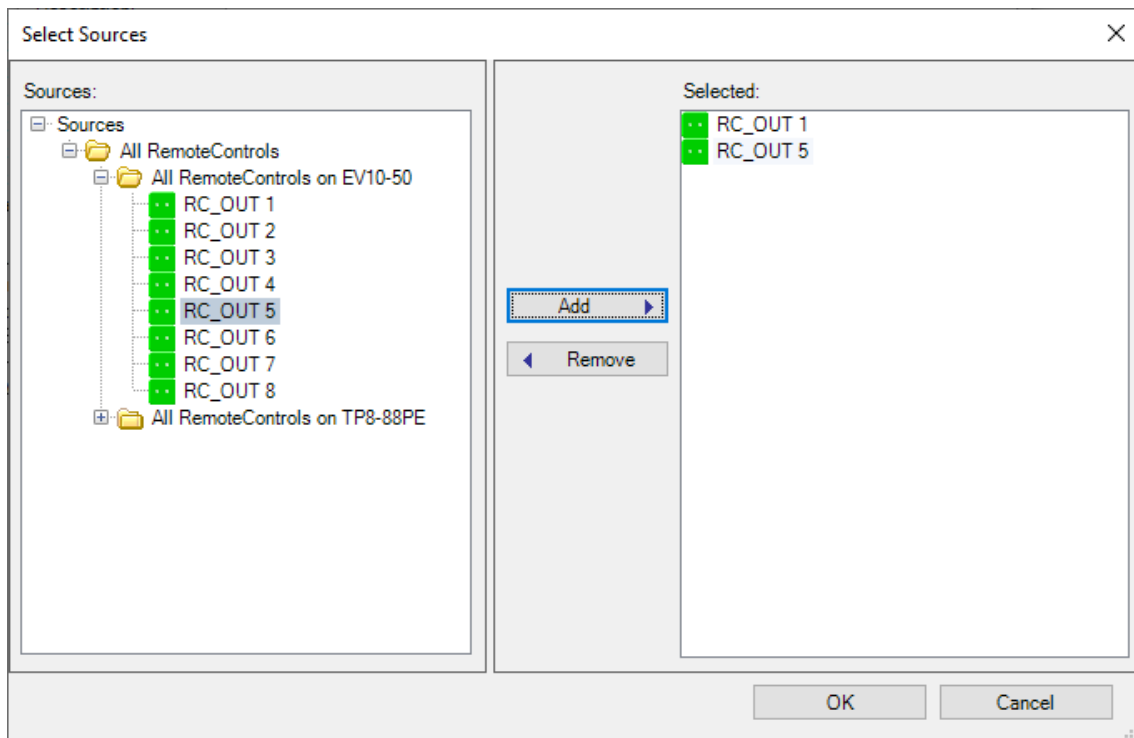
Also, the configurator can create actions on the panel:

And/or associate the events of the panel to specific rules:

Rules and Events > Rules > Add Rule (right click over Rules) > event

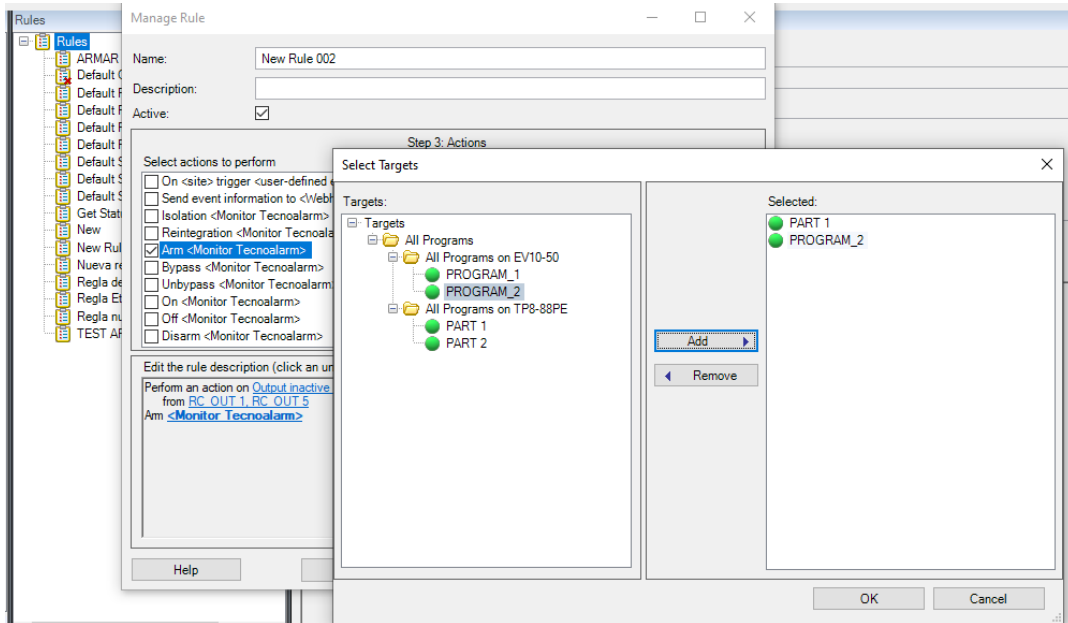


Select the event and then the source of the event activation, even multiple sources and from other panels.



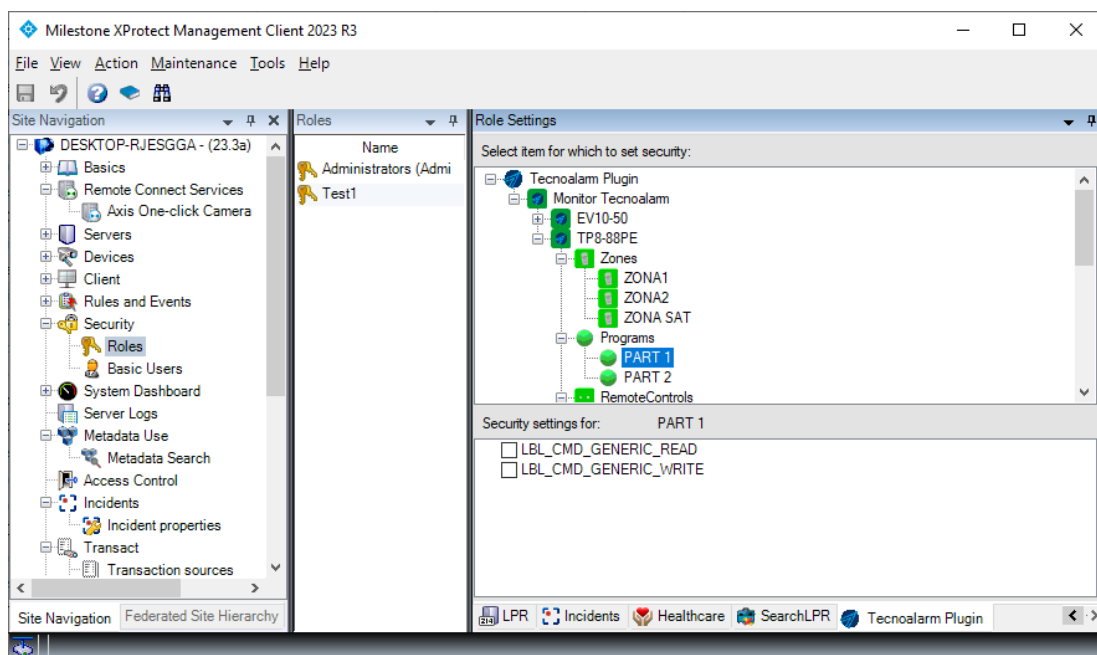
Click next and follow the dialog to perform your preferred actions to do.

For example, this rule, send actions to 2 different panels and for 2 specific programs to be armed.



User roles

In all those installations where we want to introduce a restriction on the action on different devices related to the user's role, this integration depending on the roles of the different users is possible thanks to the integration developed. It is very easy in the security section select a role and at the bottom of the Roles information block select Tecnoalarm Plugin, expand the whole tree and select the element or elements on which you want to apply the properties (Input 1).

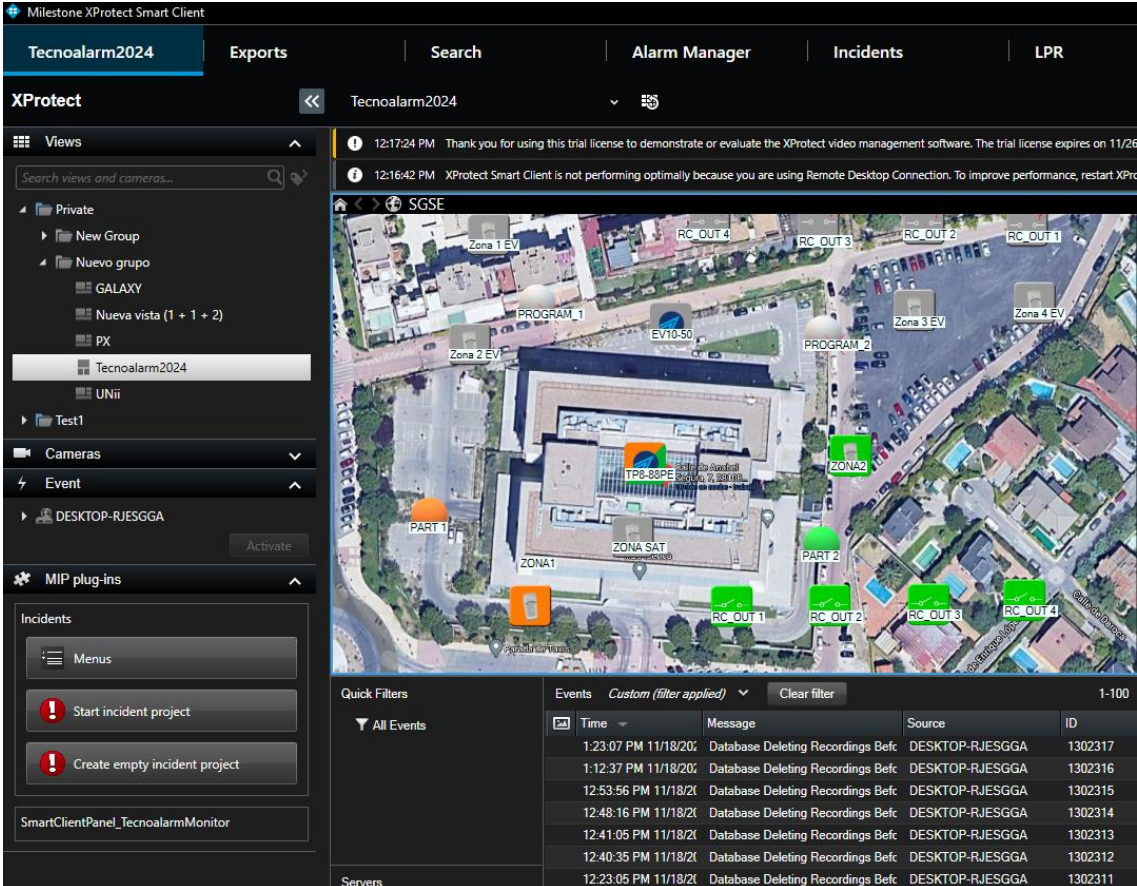


7. Operation

Milestone Smart Client

The plugin automatically obtains all the elements associated with the dashboards that have been registered to be managed by the integration of the XProtect Management Client.

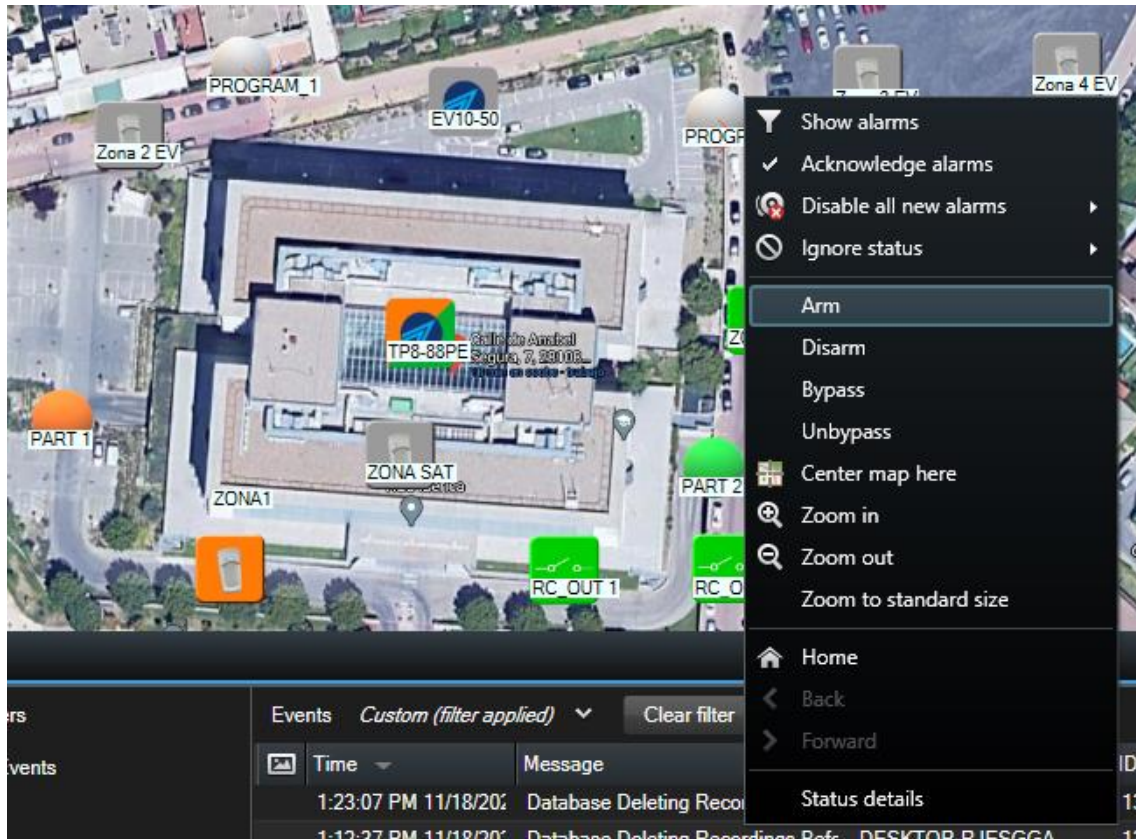
All the elements collected by the plugin will be available to be dragged onto the map, with the name assigned from the Tecnoalarm configuration application.



The screenshot displays the Milestone XProtect Smart Client interface. The top navigation bar includes 'Tecnoalarm2024', 'Exports', 'Search', 'Alarm Manager', 'Incidents', and 'LPR'. The left sidebar shows a tree view of views and cameras, with 'Tecnoalarm2024' selected. The main area features a satellite map of a facility with various zones labeled (Zona 1 EV, Zona 2 EV, Zona 3 EV, Zona 4 EV, ZONA SAT, ZONA1, ZONA2, PART 1, PART 2) and cameras (RC OUT 1, RC OUT 2, RC OUT 3, RC OUT 4, EV10-50). A central camera feed shows a building with a camera icon and 'TP8-88PE' label. The bottom right section displays a list of events:

Time	Message	Source	ID
1:23:07 PM 11/18/20	Database Deleting Recordings Befc	DESKTOP-RJESGGA	1302317
1:12:37 PM 11/18/20	Database Deleting Recordings Befc	DESKTOP-RJESGGA	1302316
12:53:56 PM 11/18/20	Database Deleting Recordings Befc	DESKTOP-RJESGGA	1302315
12:48:16 PM 11/18/20	Database Deleting Recordings Befc	DESKTOP-RJESGGA	1302314
12:41:05 PM 11/18/20	Database Deleting Recordings Befc	DESKTOP-RJESGGA	1302313
12:40:35 PM 11/18/20	Database Deleting Recordings Befc	DESKTOP-RJESGGA	1302312
12:23:05 PM 11/18/20	Database Deleting Recordings Befc	DESKTOP-RJESGGA	1302311

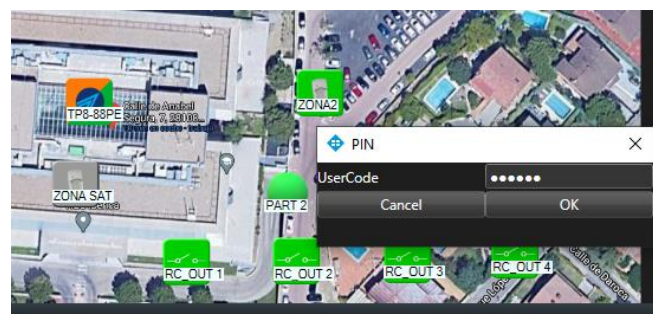
The operator can send commands to the panel; to do so he must hover over the panel icon and press the right mouse button, so that it appears to him as a context menu from which he can interact with the panel.



The operator can interact with the item through the context menu (right-mouse button) and perform the following specific actions:

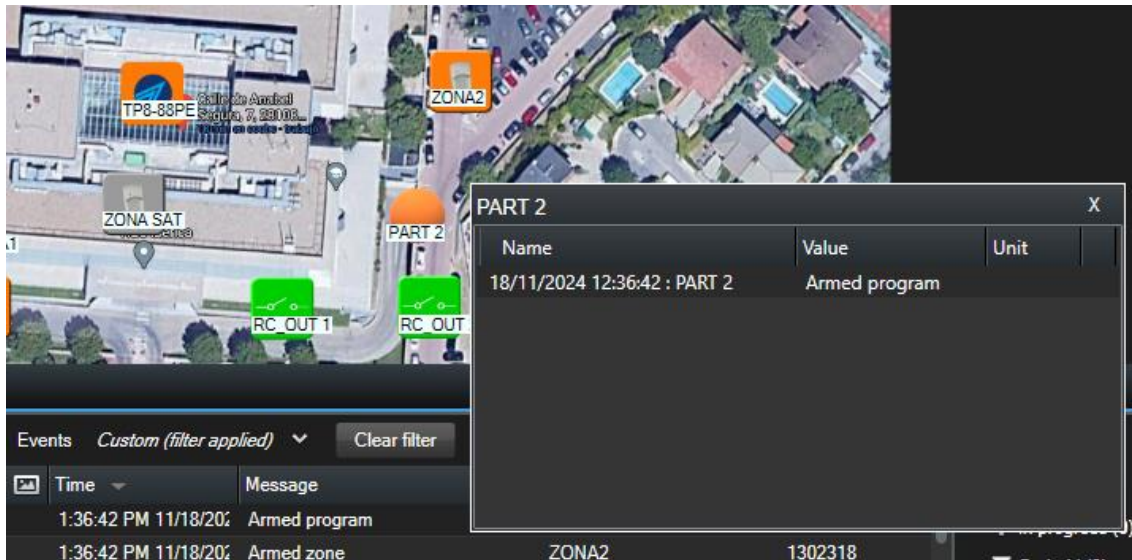
- a) Isolate/Reintegrate Zones
- b) On/Off RC Outputs
- c) Arm/Disarm Programs
- d) Bypass/Unbypass Programs

Actions of Arm and Disarm require a PIN code to be inputted.



Status Detail

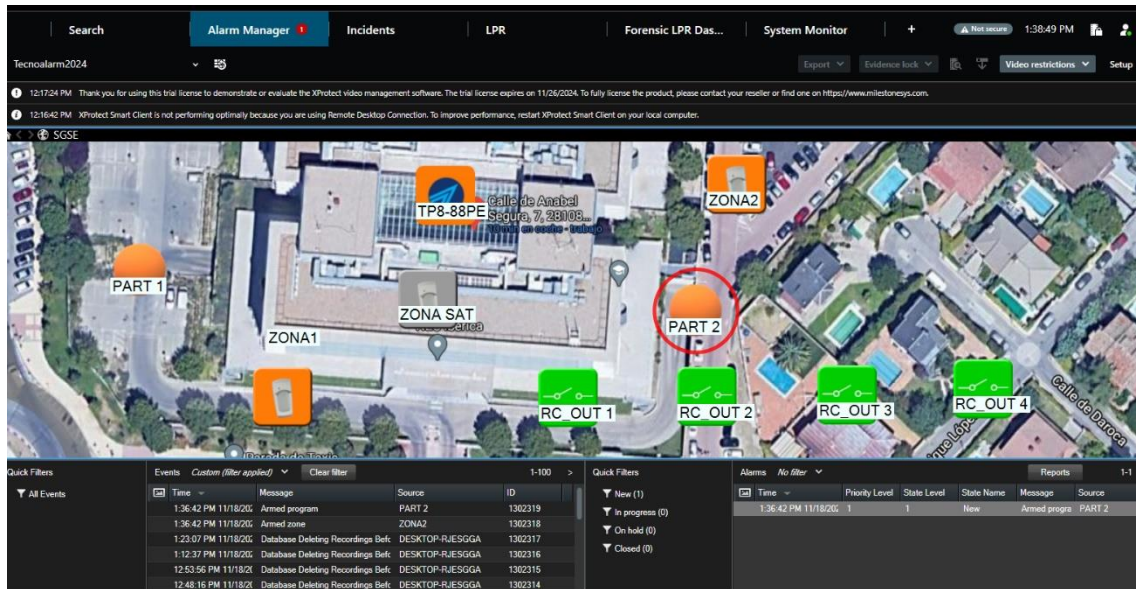
If we position ourselves on an element and right-click on it, we are shown a context menu where we can select the Status Details function.



The "Tecnoalarm Monitor" plugin allows you to monitor and interact with dashboards through the standard XProtect® Smart Client user interface.

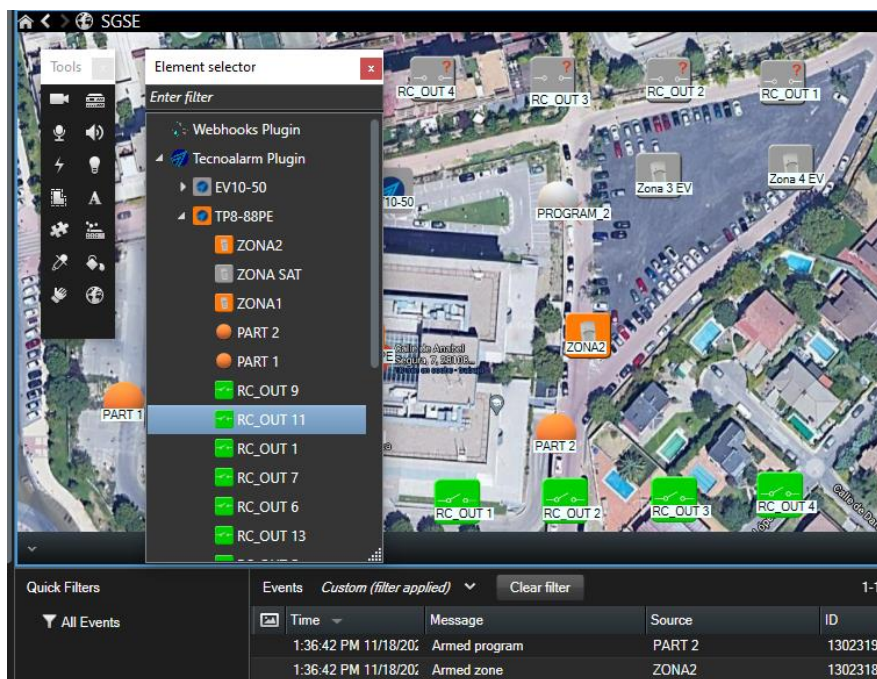
Event and alarm viewer

From Milestone's generic alarm and event viewer, alarms and events coming from panels can be viewed and managed.



Maps

Devices corresponding to panels and zones can be placed on XProtect® maps.



Each item's icon reflects its current state according to the legend below.




Colour	Example	Meaning
Green		The panel is idle but no sections armed.
Orange/Green		Panel Idle with some section armed.
Grey		The plugin does not communicate with the dashboard, so it does not know its status, or panel is disabled in management.

Table 1. Color logic that applies to icons associated with panel.







Colour	Example	Meaning
Green		Output is off
Green		Output in on
Grey		Unknown.

Table 2 Color logic applied to icons associated with alarm relays.

Colour	Example	Meaning
Green		The input is idle but no sections armed
Red		The input is alarmed.
Orange		The input is Armed.




Blue		The input is Bypassed.
Dark green		The input is opened.
Grey		Unknown.

Table 3 Color logic applied to the icons associated with the Zones.







Colour	Example	Meaning
Green		The input is idle but no sections armed
Red		The input is alarmed.
Orange		The input is Armed.
Blue		The input is Bypassed.
Dark green		The input is opened.
Grey		Unknown.

Table 3.1 Color logic applied to the icons associated with the virtual Zones.




Colour	Example	Meaning
Green		idle. This is normal operation.
Orange		Armed. The siren is armed.
Grey		Unknown.

Table 4 Color logic applied to icons associated with Programs

*The same color logic applies to icons associated with other sensors.

ESTADOS

Activated	Deactivated	Unknown	
			On/Off lighth bulb
			Door control
			Activation of sirens
			On/off cameras
			Activation of irrigation system
			HVAC Systems Control
			Control of electric locks
			Activation of audible alarms
			Control of motorised blinds
			Emergency lighting control
			Intrusion notifications
			Biometric access control
			Activation of exhaust fans
			Fire detection system control
			Control of electrical generators
			Control of barrier




			Bollard control
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Table 5 Color logic applied to icons associated with Remote controls

8. Troubleshooting

Integrated Systems

In case the integration does not work, please confirm that the panel and its firmware version are compatible with the plugin.

The compatibility of the plugin has been tested with a Tecnoalarm panel whose firmware version 2.1.06 of TP8-88P and 1.2.04 of EV10-50. Compatibility is not guaranteed with any previous or later firmware version. While later firmware versions should work correctly, compatibility will be subject to testing specific to each firmware version.

Equipment Needed

The panel must have an Ethernet connection in order to communicate with the plugin. Check with your Tecnoalarm panel provider for more information.

Other problems:

- The panel does not establish communication.
 - Review the panel connections
 - Reset the panel.
 - Review the configured IP address and connection port.
- The plugin does not allow you to add a device
 - Check that you have an active license on the help screen.
- The map shows black circles with white blades instead of the icons.
 - When the panel is created in Milestone, the items are new to the system, so the icons corresponding to the deleted items must be removed from the drawing and added again.
- The commands don't work.
 - The state of the panel or its elements might prevent certain commands from being executed. Refer to the Milestone MIP log for a possible error code.
- In the event of a communications failure, try restarting the XProtect® Event Server.

Learn more

To use XProtect smart client help press F1 or [Standard tabs - XProtect Smart Client | Milestone Documentation 2023 R3 \(milestonesys.com\)](#)

To use XProtect Management client help press F1 or [Management Server Manager \(tray icon\) - XProtect VMS products | Milestone Documentation 2023 R3 \(milestonesys.com\)](#) For more information, please visit the plugin's online information or contact SGSE at info@sgse.eu.