I

OPERATIONAL GUIDE

MILESTONE XPROTECT PLUG-IN FOR ELKRON SYSTEMS

Rev. 1.0

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Introduction

The Milestone-Elkron plug-in enables the integration of Elkron anti-intrusion systems with Milestone's Xprotect advanced video surveillance platform.

The integration provided by the plug-in enables the centralised management of alarm systems, i.e. to display their status on the synoptic screen and to perform the main actions such as the total and partial activation of the system, as well as the initiation of scenarios and other functions.

In addition to system management, if the control unit is equipped with virtual inputs and outputs, events from cameras managed by Milestone can be associated with corresponding virtual inputs of Elkron control units. This approach opens up the possibility of greatly expanding the detection capabilities of the anti-intrusion system. In fact, it is possible to use the advanced video analysis featured in new generation cameras to detect abnormal behaviour and to trigger the alarm system accordingly.

Similarly to virtual inputs, the virtual outputs of Elkron control units can be connected to actions on the cameras. For example, it is possible to start video recording on the SDCard of the cameras rather than on the NVR, following alarm events detected by the control unit.

1 - Operation

After plug-in installation, the first step is to configure the ELKRON control unit(s) within the Xprotect configurator: *Milestone Xprotect Management Client.*

Once this operation is completed, the plug-in will start to cyclically query the ELKRON control units connected via LAN to obtain the updated status in real time and to send any commands.

After the control unit teach-in procedure, it is immediately possible to manage the alarm system via the *Milestone Xprotect Smart Client* user software.

The plug-in allows system elements to be positioned on graphical maps so that they can be quickly located by the operator.

Graphical elements are active elements that allow you to view the status of the individual element (e.g. detector open, input active, system on, etc.) and allow you to send commands to the system by clicking on the element itself.

Going back to the *Management Client* configurator, if the control unit is equipped with virtual inputs and outputs, it is possible to use Xprotect's rules and events to associate video surveillance events with anti-intrusion actions and vice versa.

The following chapters explain in detail how to carry out the various operations.

1.1 Installation

Installation is very simple. The plug-in comes with the installation software *Elkron.MIPPlugin.Setup.msi*, which performs all the necessary operations to add Elkron support to Milestone Xprotect.

The plug-in does not install Milestone Xprotect, which must already be installed on the computer.

For the installation of Xprotect, please refer to the product installation guide.

2 - Standard configuration

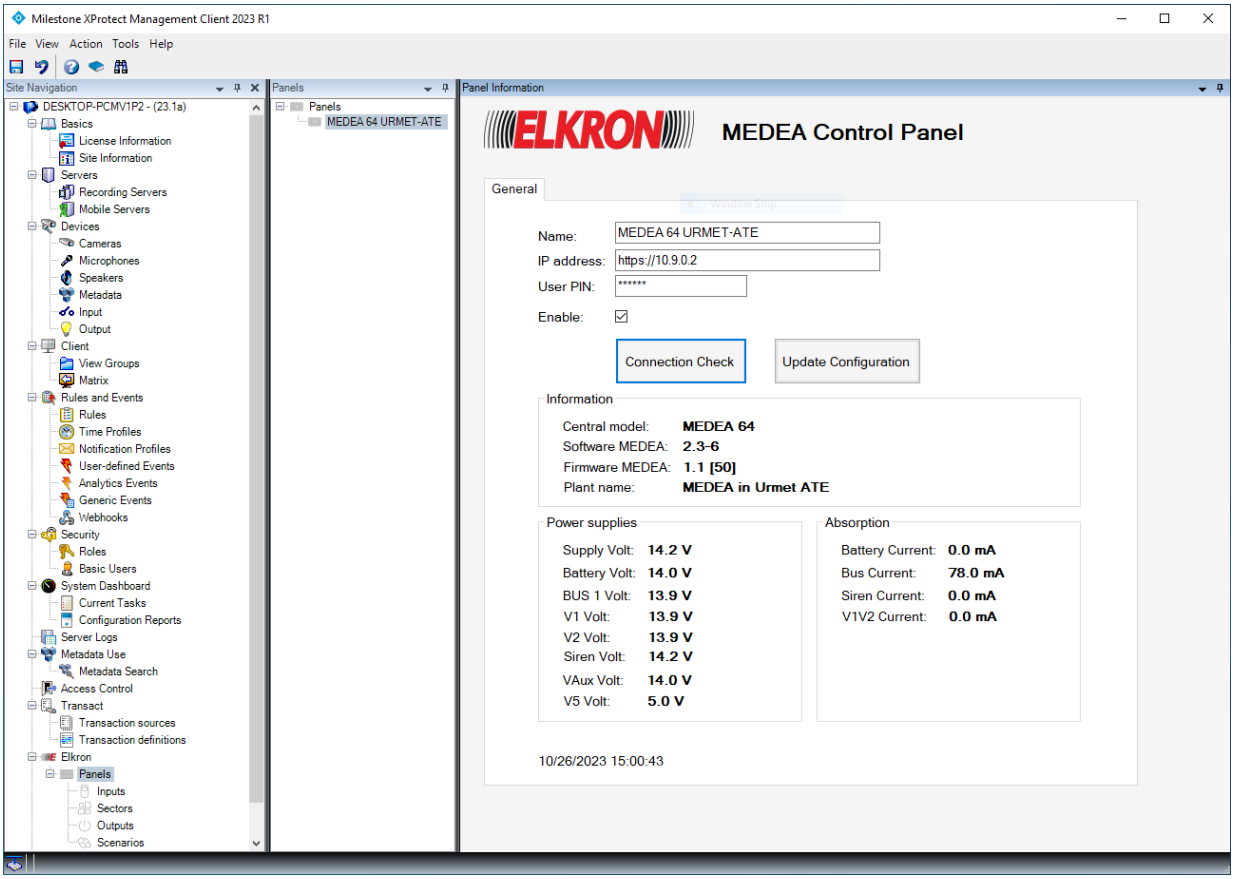
After installing the plug-in, start the *Milestone Xprotect Management Client* configurator.

The new Elkron menu with the (empty) list of panels, i.e. alarm control units, should appear in the device list on the bottom left-hand side.

To add a new panel, right-click on "**Panels**" and choose "**Add new**".
Essentially, only two parameters are required: the IP address of the control unit to be entered after *https://* and the PIN or user code to be used to access the system.

The PIN entered determines the partitions to which Milestone Xprotect will have access, so if you want to manage the entire system, you must enter a PIN that is enabled for all sectors.

It is advisable to create a dedicated user code for Xprotect, so that it is possible to distinguish in the events of the control unit which accesses are made by regular users and which by Xprotect.



To test if IP and PIN are correct, click on "**Connection Check**", the plug-in connects to the control unit displaying the software/firmware releases, the **Plant name** and the voltage and current parameters read from the control unit.
The configuration of the control unit can now be automatically downloaded by clicking on the "**Update Configuration**" button.
A screen page is displayed where the plug-in shows the list of devices already detected and the list of new devices. Accept the new configuration.

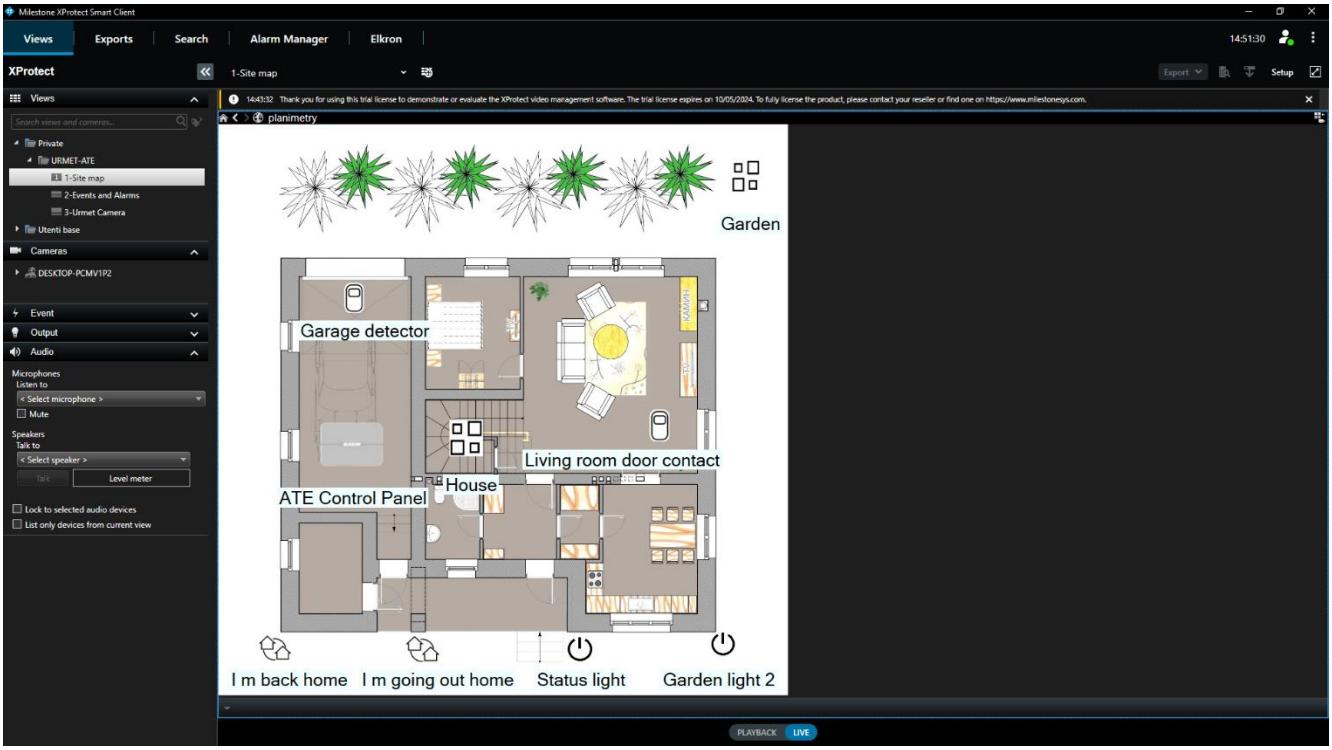
NOTE: it is necessary to update the configuration with the "**Update Configuration**" button each time the configuration of the control unit is changed to allow the plug-in to detect the changes.
The objects that are imported by Xprotect are all sectors, inputs, outputs and scenarios. Each object is imported with its description, which was entered in the configurator of the control unit.

2.1 Operator Interface

The operator interface of Xprotect is *Milestone Xprotect Smart Client*.

The Smart Client is organised into views that are defined by the administrator user who configures the Xprotect suite.

All devices recognised by Xprotect can be placed on the views, thus also objects from the anti-intrusion world. In particular, the ELKRON plug-in exports the following objects: panels (the actual control units), sectors, inputs, outputs and scenarios.



Various objects have been placed in the image above.

As can be seen, objects are automatically provided with a characteristic icon and description downloaded from the control unit configuration.

The icons reflect the real-time status of the object, e.g. the input icon is grey when the input is balanced and red when it is unbalanced, while it is crossed out when the input is disabled.

By right-clicking on an object, it is possible to interact directly with the alarm system. For each object there is a dedicated menu with the possible operations for that type of object.

For example, by right-clicking on the control unit icon, the following operations are available: *Set all* (sectors), *Unset all*, *Alarm reset*, *Tamper reset*, *Fault reset* and *Global reset* which resets all memories.

The functions available for the other objects are:

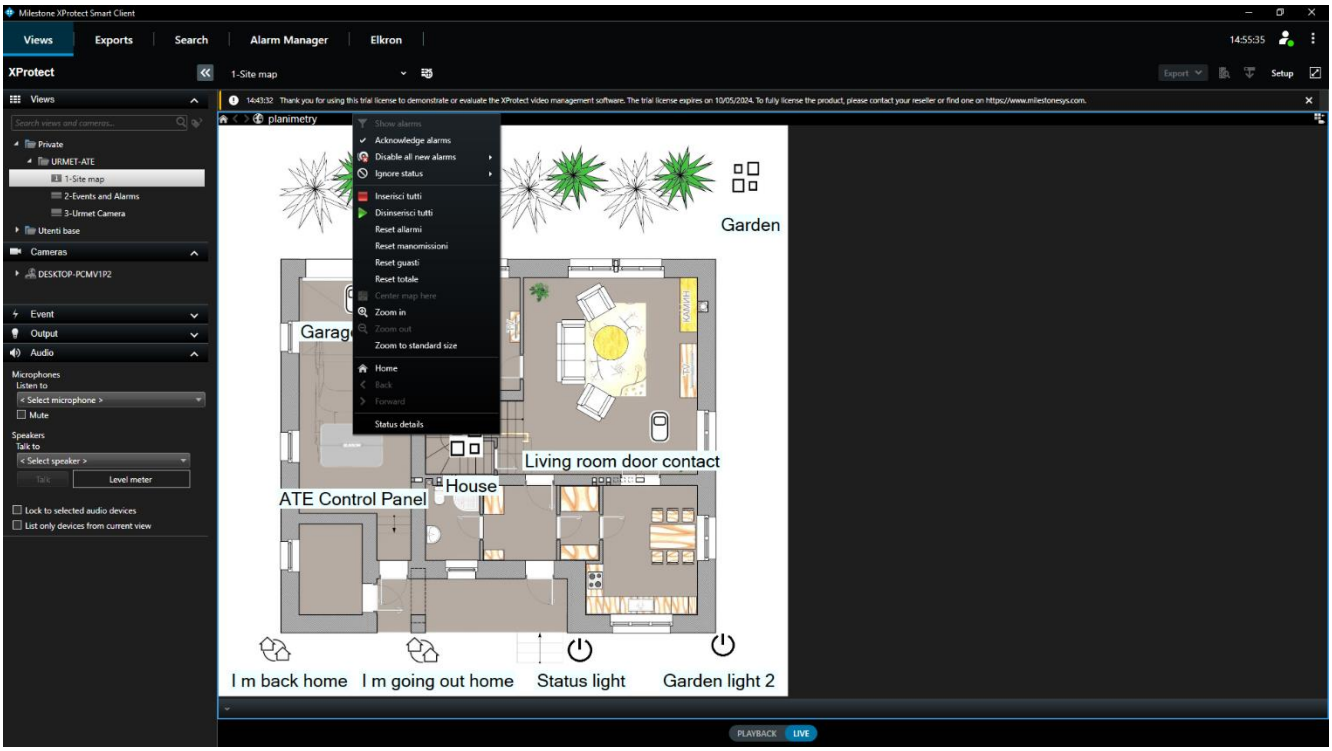
- sectors: set, unset.

- inputs: enable, disable.

- outputs: activate, deactivate, switch.

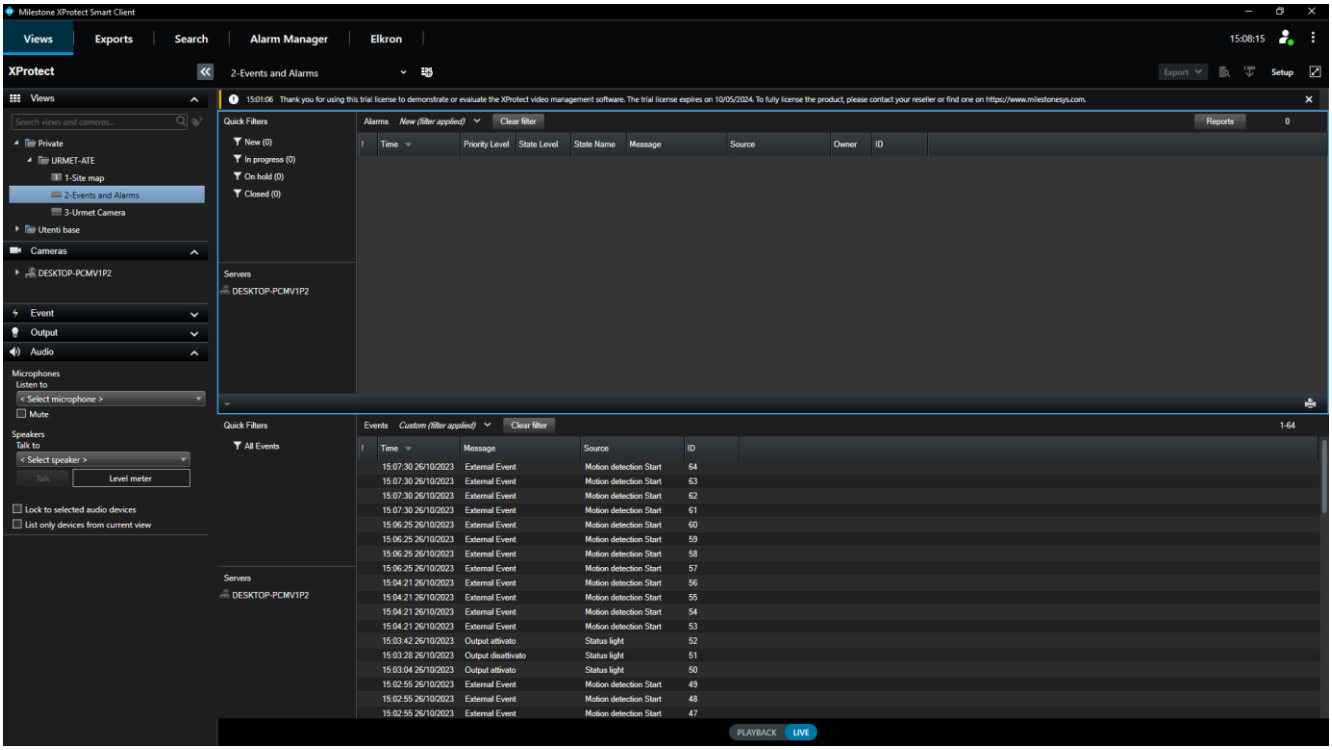
- scenarios: run.

Example of a contextual menu of the control unit:



2.2 Events

In addition to the synoptic screen already mentioned, the operator interface allows the configuration of views containing lists of events. The Elkron plug-in automatically synchronises the events of Xprotect with the events of the control unit, so it is possible to create views that also include events and alarms generated by ELKRON control units. See example below.

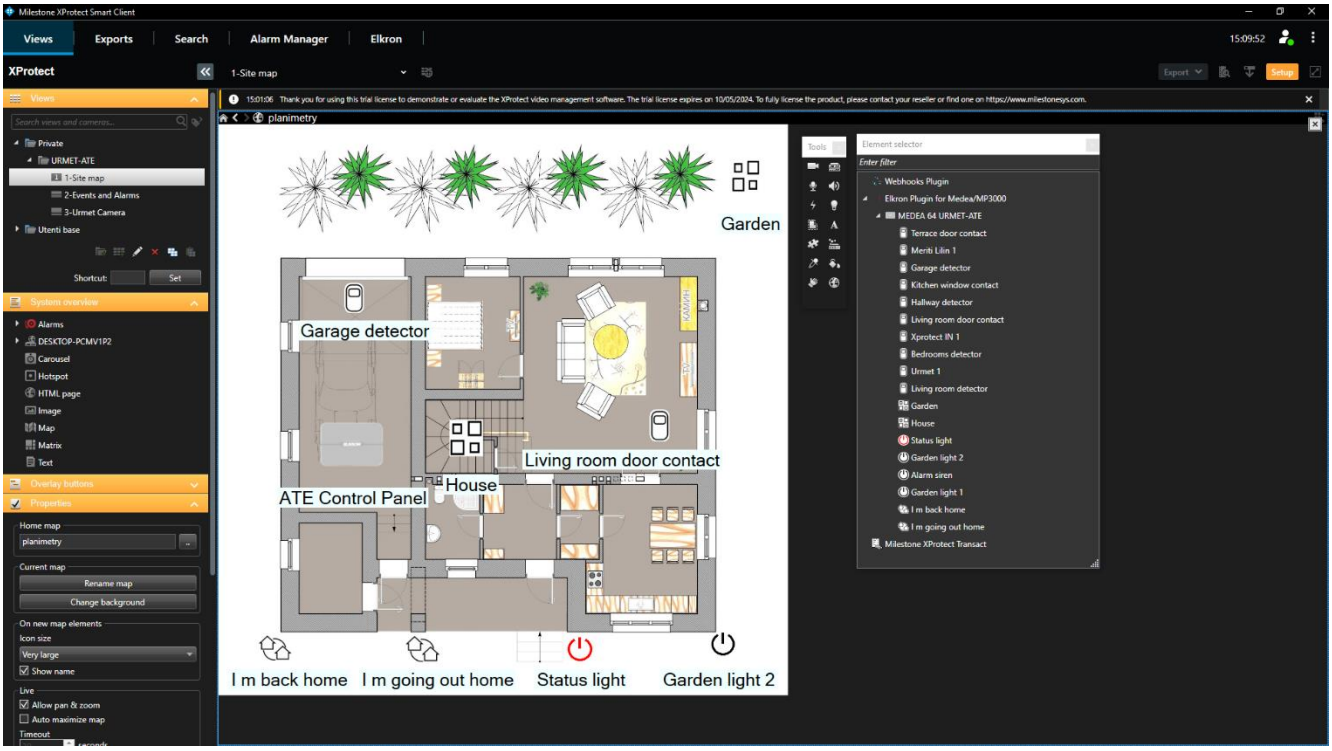


2.3 Synoptic screen configuration

As mentioned above, the synoptic screen configuration is always carried out within the *Smart Client* by the Xprotect administrator user.

For details on how to carry out this operation, please refer to the Xprotect guide.

Once the map and any Milestone objects such as cameras have been configured, add Elkron anti-intrusion objects by simply selecting the puzzle icon from the component palette, opening the list with the objects imported from the control unit and dragging the objects onto the map.



3 - Advanced configuration

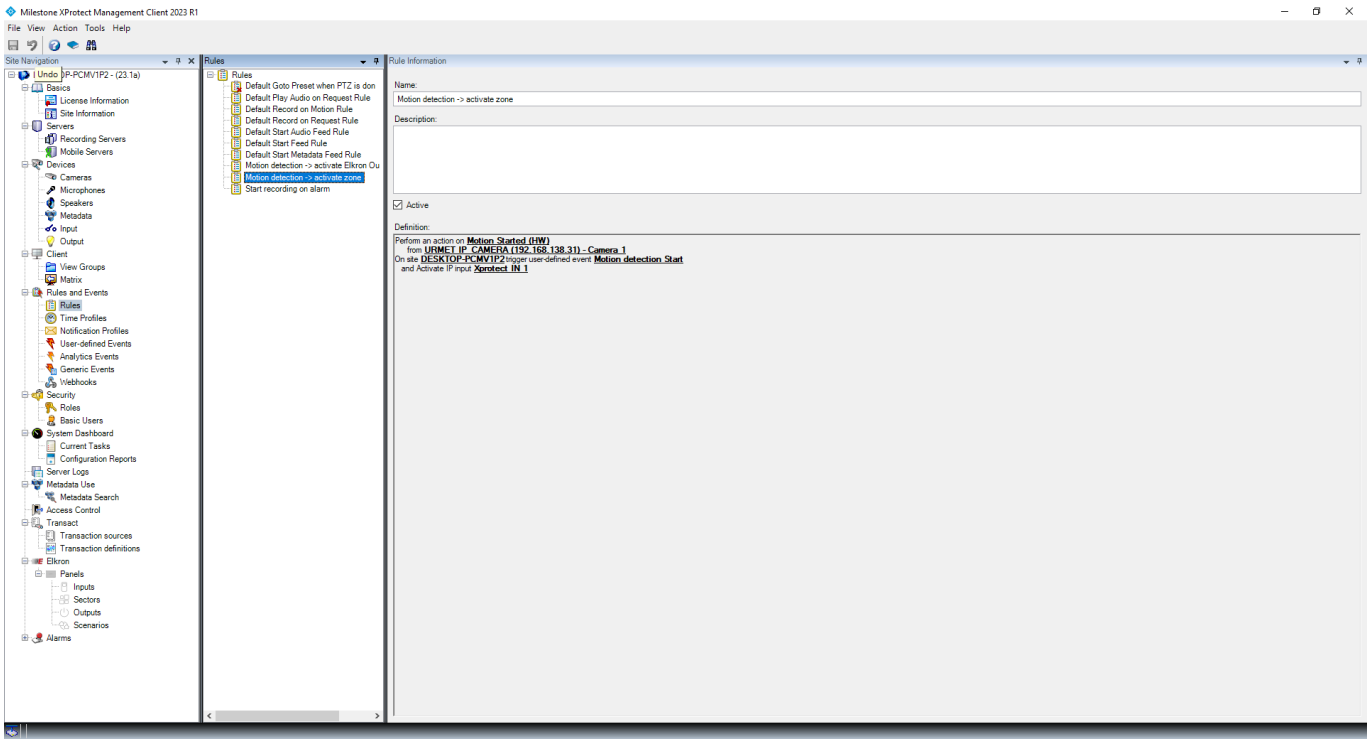
The *Basic configuration* chapter explains the procedure for adding a control unit to the Milestone system in order to be able to manage the anti-intrusion system via the Xprotect user interface.

This chapter deals with the process of creating rules to enable the integration of video surveillance or video analysis events (often called metadata) and the intrusion alarm system.

As anticipated, this function requires a control unit that supports virtual inputs and outputs.

3.1 Examples of rules

Rules are created through the *Milestone Xprotect Management Client* software using the menu in the sidebar::



By right-clicking on “**Rules**”, you can select the “**Add**” option, which allows the creation of new rules.

Rules are created in steps.

Below are the steps for creating a rule that associates an alarm event with a virtual input.

Step 1: type of rule, choose the following type of rule: “Perform an action on <event>”.
From the available events, choose the event that is to trigger the rule. For example, an event from the metadata of a camera, such as a vehicle crossing a prohibited area.

Step 2: conditions, no conditions.

Step 3: Actions, select the action: "Activate MEDEA < ip input>" and select the virtual input to be activated following the event.

Step 4: stop criteria, leave: "Do not perform any action at the end of the rule".

Save the rule with the **save** button.

From this moment on, every time Milestone Xprotect detects the set event, the corresponding virtual input is triggered, so if the system is on, the corresponding sector sets to alarm mode.

It is also possible to create rules that use anti-intrusion events to initiate actions on cameras such as starting video recording.

An example of such a rule is given below:

Step 1: type of rule, choose the following type of rule: “Perform an action on <event>”. Choose the following event from the list of Elkron events: "Sector in Alarm (Elkron Control Unit Events)", then from the list of sectors choose the sector that triggers the rule.

Step 2: conditions, none.

Step 3: actions, “Enable archiving on archives”, and select an archive such as a local server that can also act as an NVR.

Step 4: stop criteria, none.

After saving the rule, each time the sector goes into alarm, the server starts recording the video.

3.2 Actions

The following is a list of actions that the plug-in allows you to perform on ELKRON systems.

- Set all sectors of the ELKRON <panel>
- Unset all sectors of the ELKRON <panel>
- Set the ELKRON <sector>
- Unset the ELKRON <sector>
- Disable ELKRON <input>
- Enable ELKRON <input>
- Activate ELKRON < ip input>
- Deactivate ELKRON < ip input>
- Activate ELKRON <output>
- Deactivate ELKRON <output>

3.3 Events

List of available events that the plug-in enables on ELKRON control units.

- Input alarm
- Access disabled
- Access enabled
- Output activated
- Output deactivated
- Sector alarm
- Sector unset
- Sector set

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