

Nemtek Plugin

Documentation



Authors:
Jacques Smuts
19 April 2024

Index



Table of Contents

Index.....	2
Overview.....	4
Features.....	4
Licensing.....	4
Requirements.....	6
Installation.....	6
Hardware.....	6
Software.....	8
Milestone Setup.....	11
Enable License.....	12
Add FG7.....	13
Add Energizers.....	15
Set Up Zones.....	16
Milestone Rule Engine Integration.....	17
Ideas for Rule Engine Rules:.....	17
Arm/Disarm All Energizers.....	18
Client Setup.....	25
Operations.....	26
Control Energizers and Zones.....	27
See Energizers and Zone Key Information.....	28
Support and Feedback.....	30

Overview

The Nemtek Electric Fence Integration is a Milestone XProtect VMS plugin that runs on XProtect Smart Client. The plugin monitors Nemtek Energizers and Electric Fence zones, and allows a Milestone XProtect user to manage, control and automate the Nemtek system using the XProtect Rule Engine

Features

- Monitor Nemtek Alarms and Alerts
- See a comprehensive summary of the Nemtek system
- Control Energizers and Zones
- Map Cameras to Zones or Energizers
- Full Rule Engine Integration. Automate the system.
- XProtect Mobile App Support
- Easy Installation

Licensing

The perpetual license purchased on PJHTechnologies.com allows the user to use the software indefinitely, but support and updates are only available for 1 year from the day of purchase. After that, a license renewal is required to continue receiving support and updates. The license packs are counted per Nemtek Energizer.

Requirements

- Surveillance system that uses XProtect VMS system.
- XProtect Smart Client 2023 R2 or newer
- A Nemtek Electric Fence system with a Nemtek FG7 Device

Installation

Hardware

1. You will need a Nemtek FG7 control device. The control device should be set up and working, to control Nemtek Energizers via an Ethernet cable. To enable Milestone integration, you must plug a second Ethernet cable into the FG7, to connect it to the same network as your XProtect VMS Management Server.

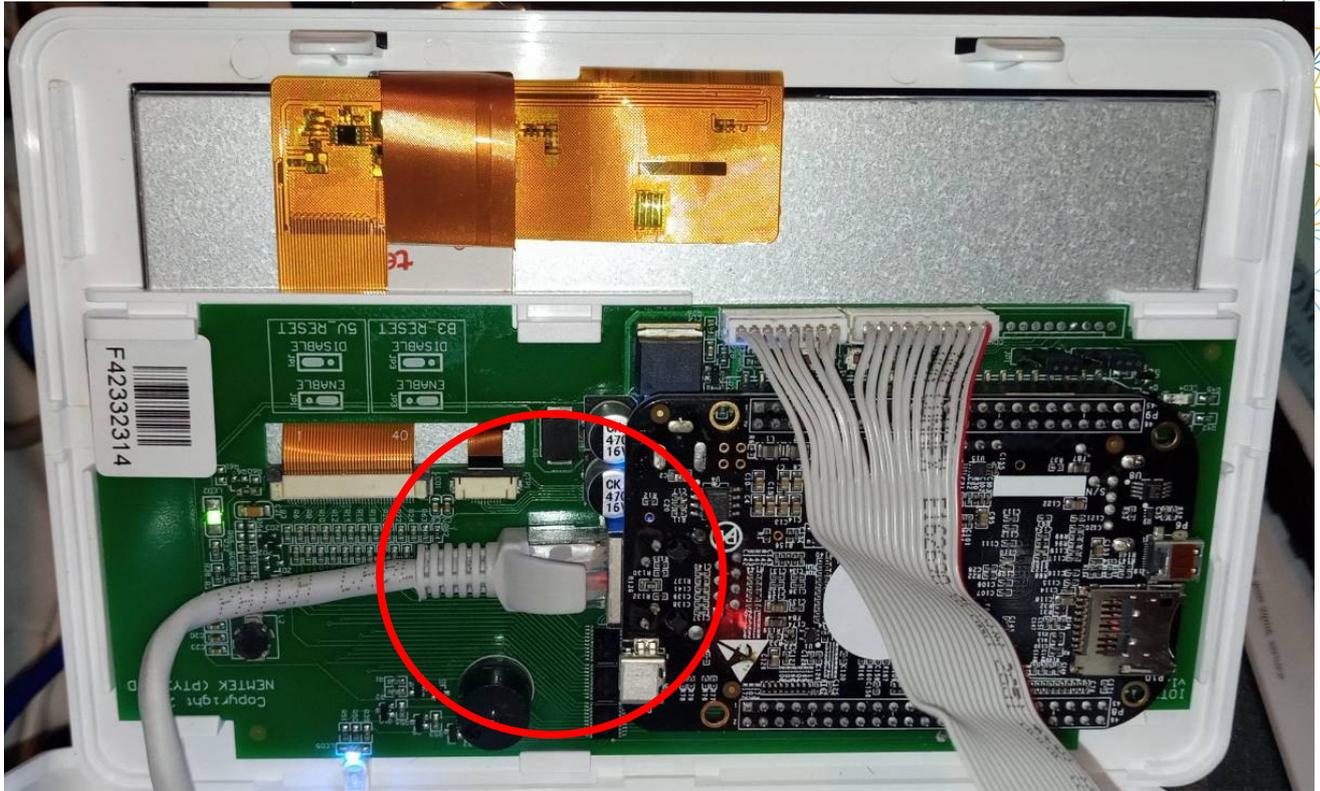


Figure 1: The Ethernet Cable must be plugged in at the back of the FG7, as demonstrated here

2. Ensure that the FG7 firmware is updated to version 5.8 or higher. If the firmware is outdated, please contact Nemtek customer support.

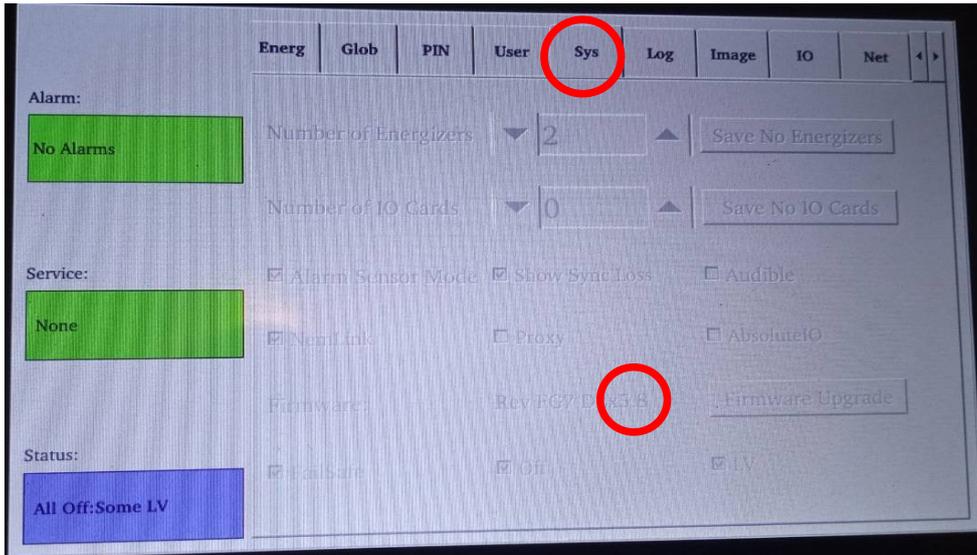


Figure 2: The Firmware version can be seen in the Sys tab on the FG7, as demonstrated here

Software

On your XProtect Event Server, run the Nemtek Event Server Integration installer, as obtained on the PJH Technologies Licensing Portal: https://pjhtechnologies.com/licensing_portal/
The installation is simple, and once it is done, the XProtect Event Server will restart and be ready to use.

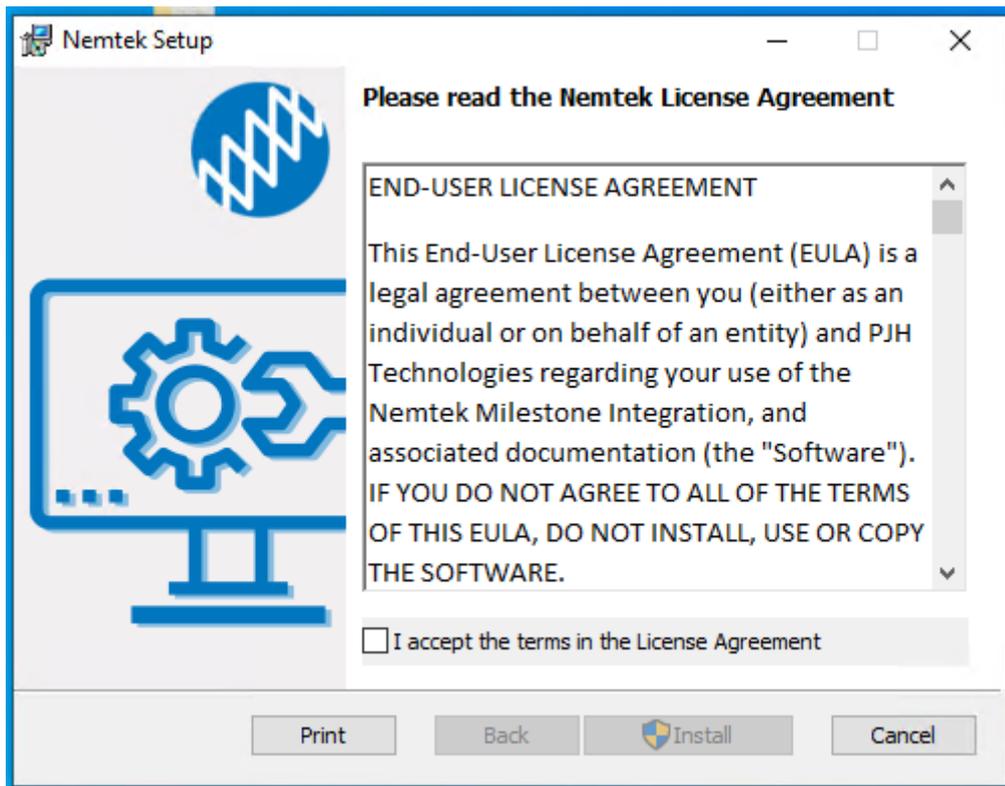


Figure 3: Accept the Terms of the License Agreement to proceed

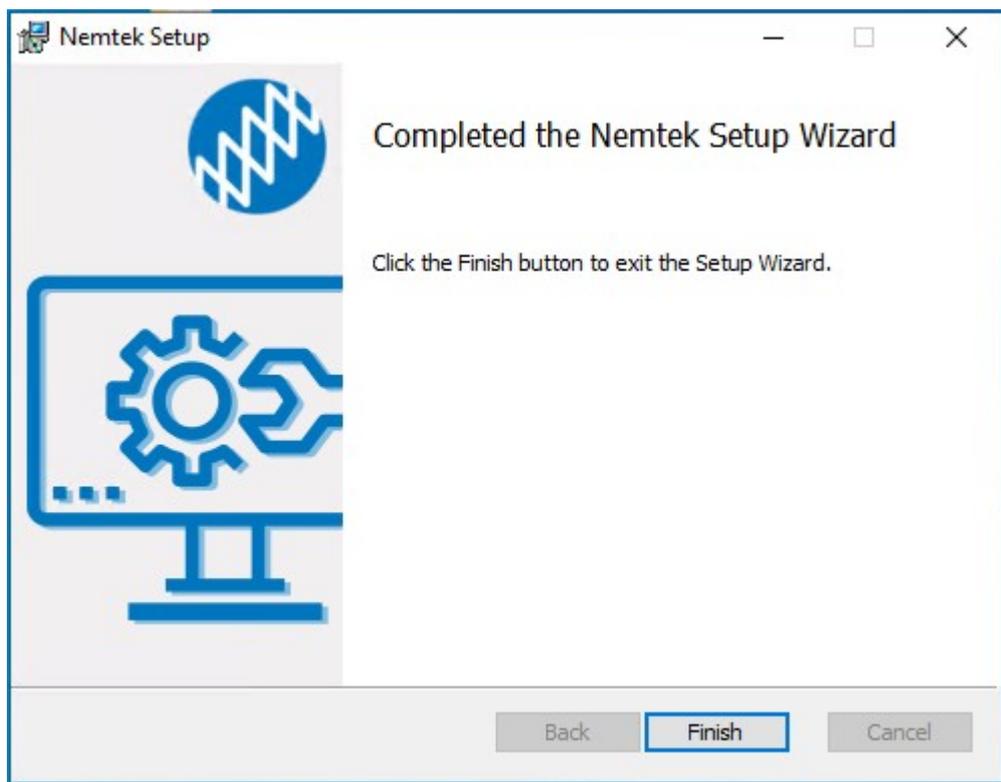
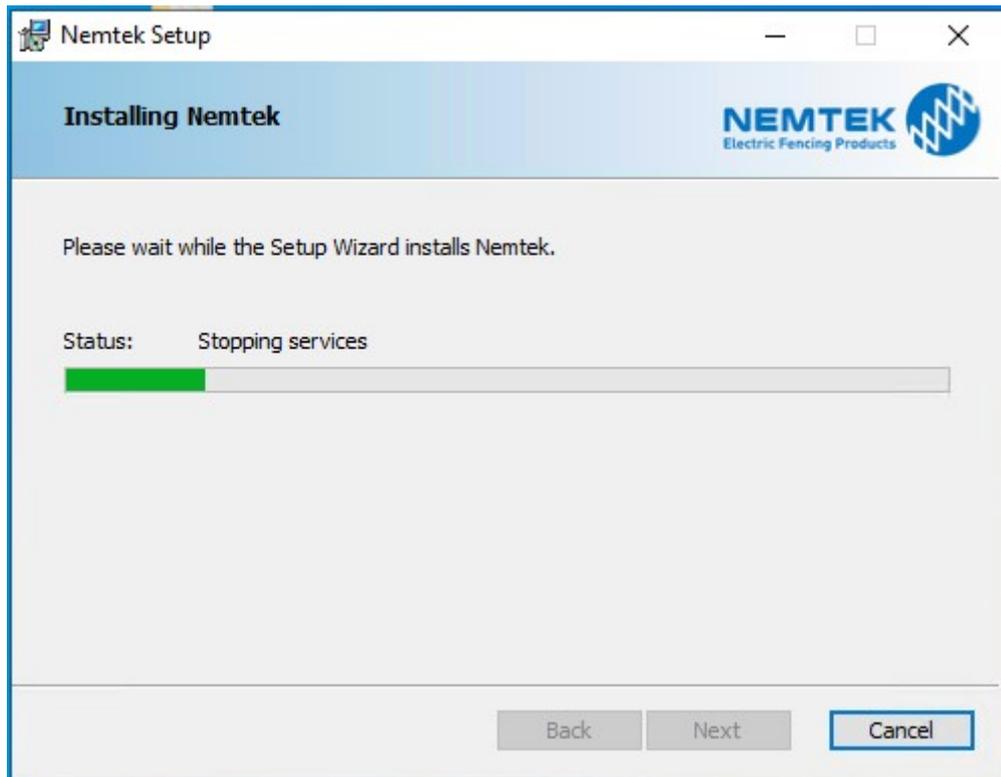


Figure 4: Let the Installer finish, and the integration is ready to use

Milestone Setup

In order to use this integration, you must install the Nemtek Client Integration Installer on your XProtect Management Server and XProtect Smart Client Device, as obtained on the PJH Technologies Licensing Portal: https://pjhtechnologies.com/licensing_portal/
The installation is simple and identical to the Event Server installation above.
After installation, you must enable the license and set up the Nemtek Devices in the Milestone XProtect Management Client.

Enable License

In order to use the integration, you must enable a license by going to the Milestone XProtect Management Client, navigating to PJHNemtek under MIP Plug-ins, and following the instructions for Automatic or Manual Licensing.

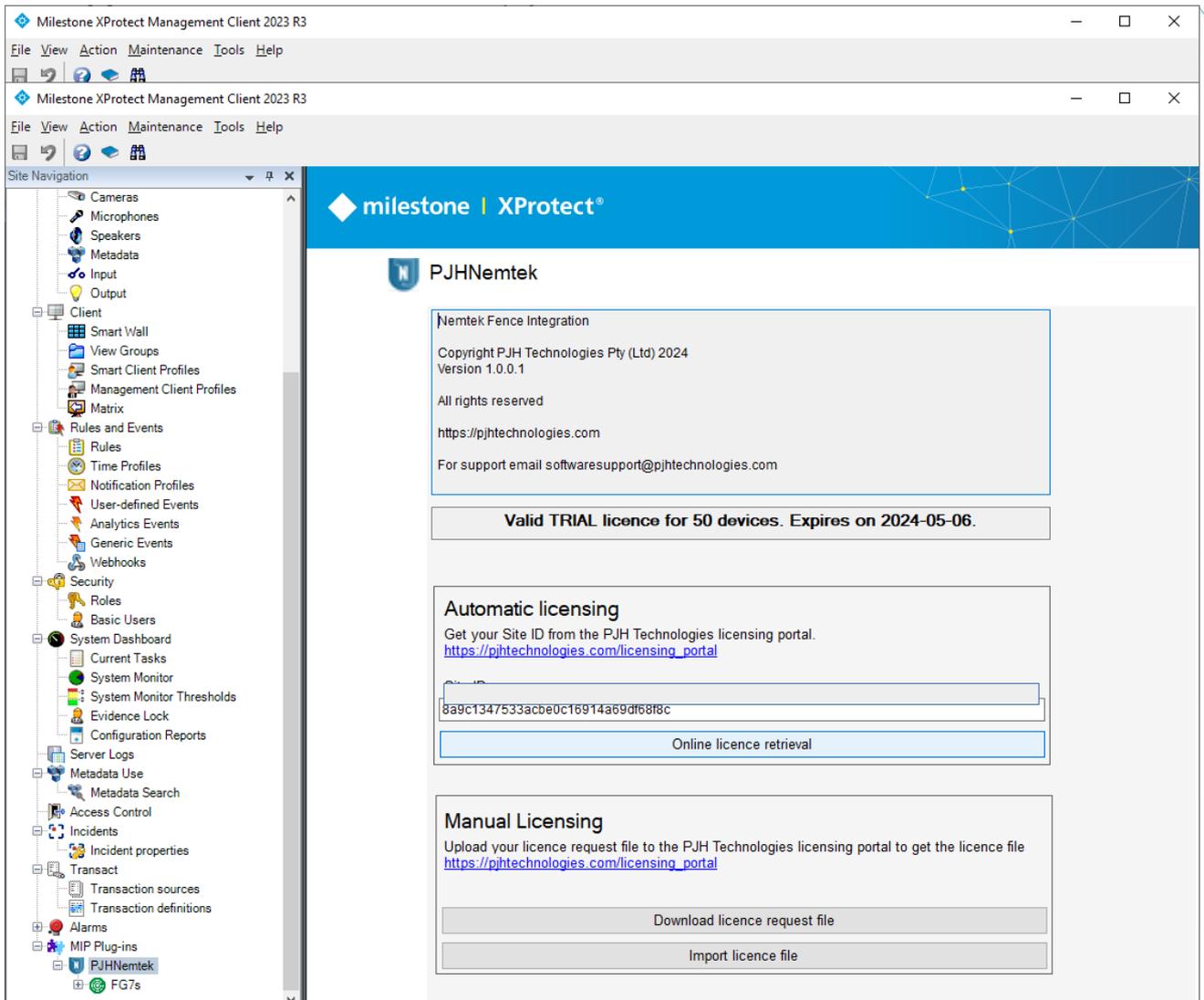


Figure 5: You can obtain a trial license from the PJH Licensing Portal linked on this page.

Add FG7

The first device you must add is the FG7.

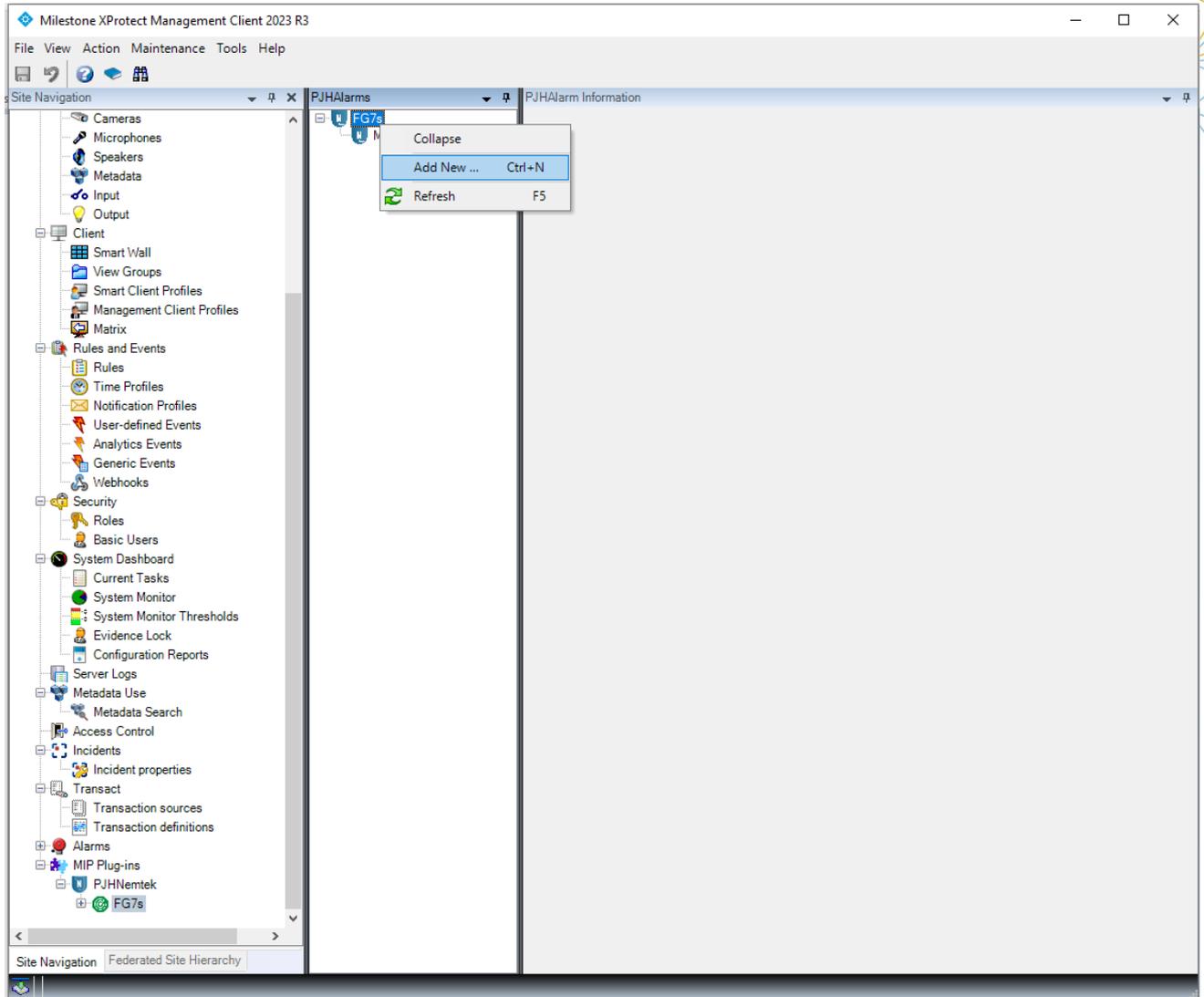


Figure 6: Under MIP-Plugins>PJHNemtek>FG7s, right-click on FG7s and add a new FG7

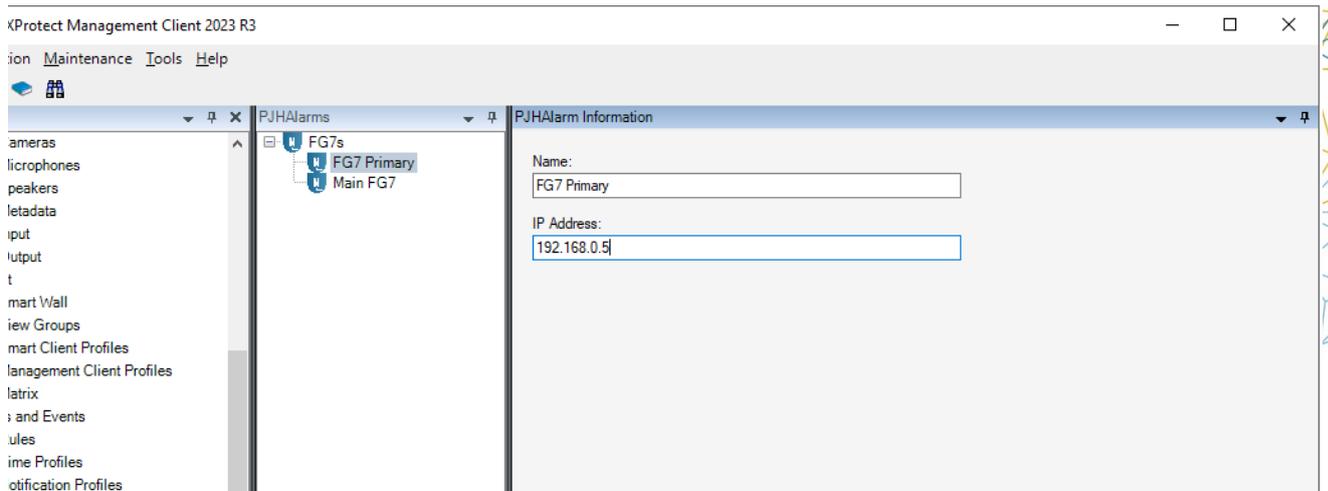


Figure 7: Insert the IP Address of the FG7

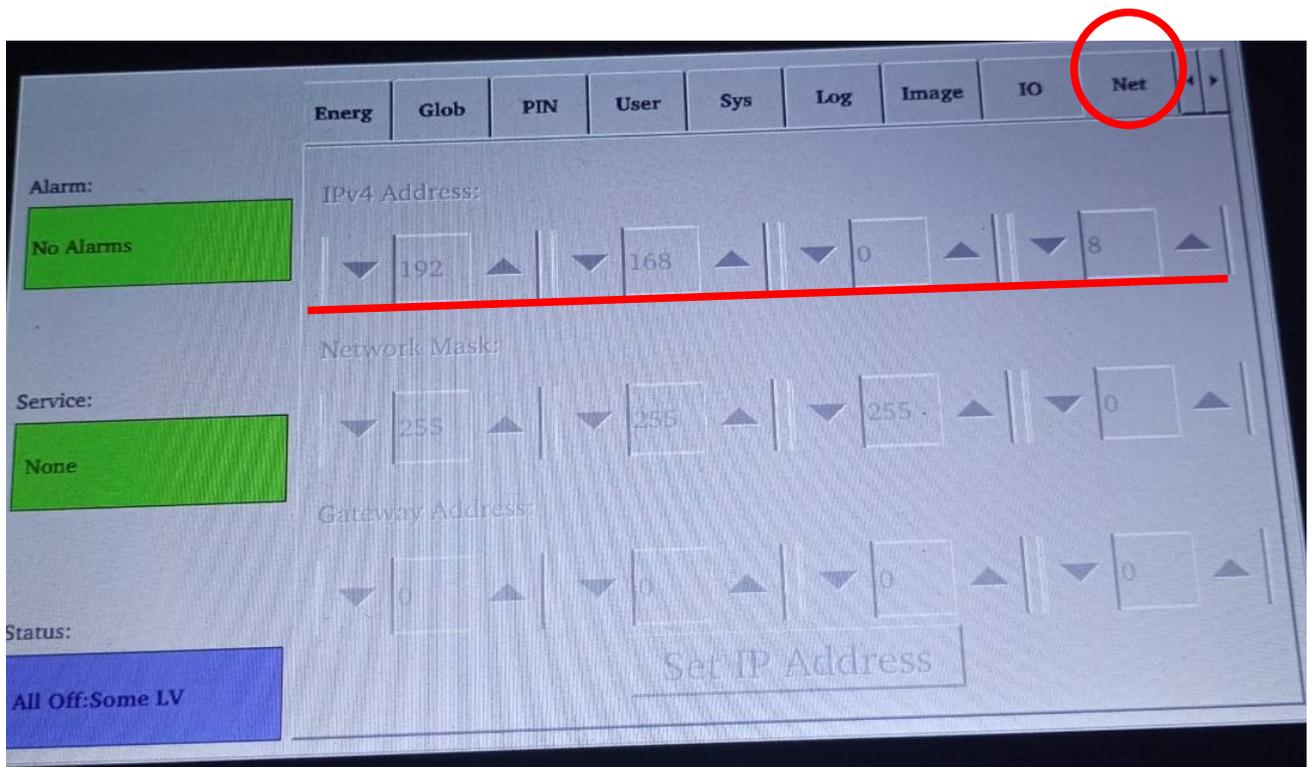


Figure 8: The IP Address of the FG7 can be obtained by navigating to the Net tab on the FG7 control panel.

Add Energizers

You must add all Energizers individually, by right clicking on the FG7 that you wish to add them to. You must match the network id with the network id set up on the Energizer Unit

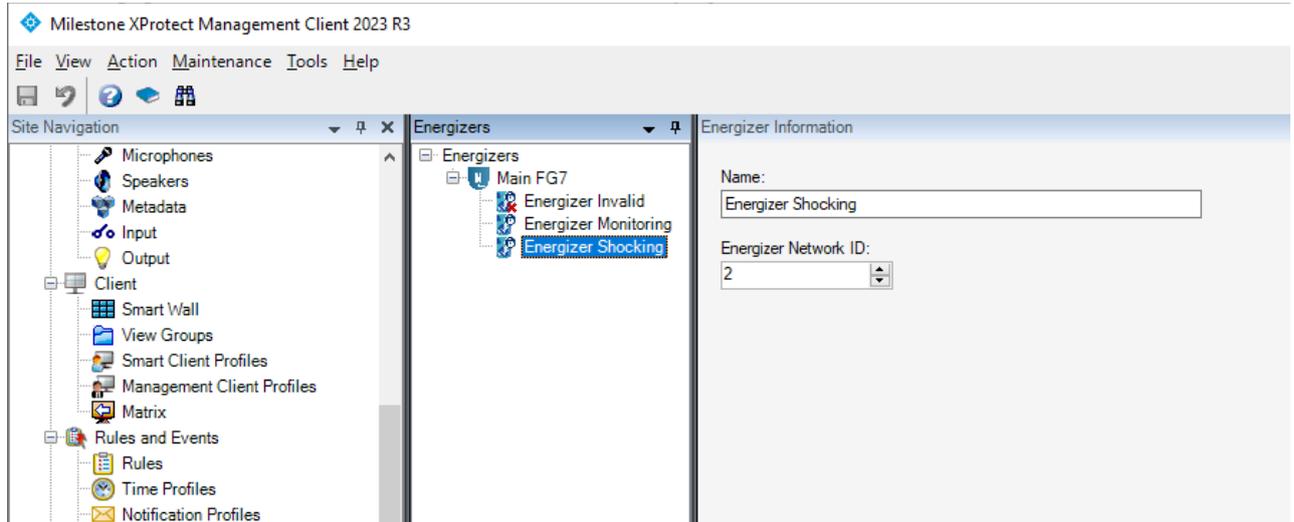


Figure 9: You must match the Energizer Network ID with the network ID set up on the Energizer unit.

Set Up Zones

Once you've set up Energizers, you can name zones and associate up to two cameras with each zone.

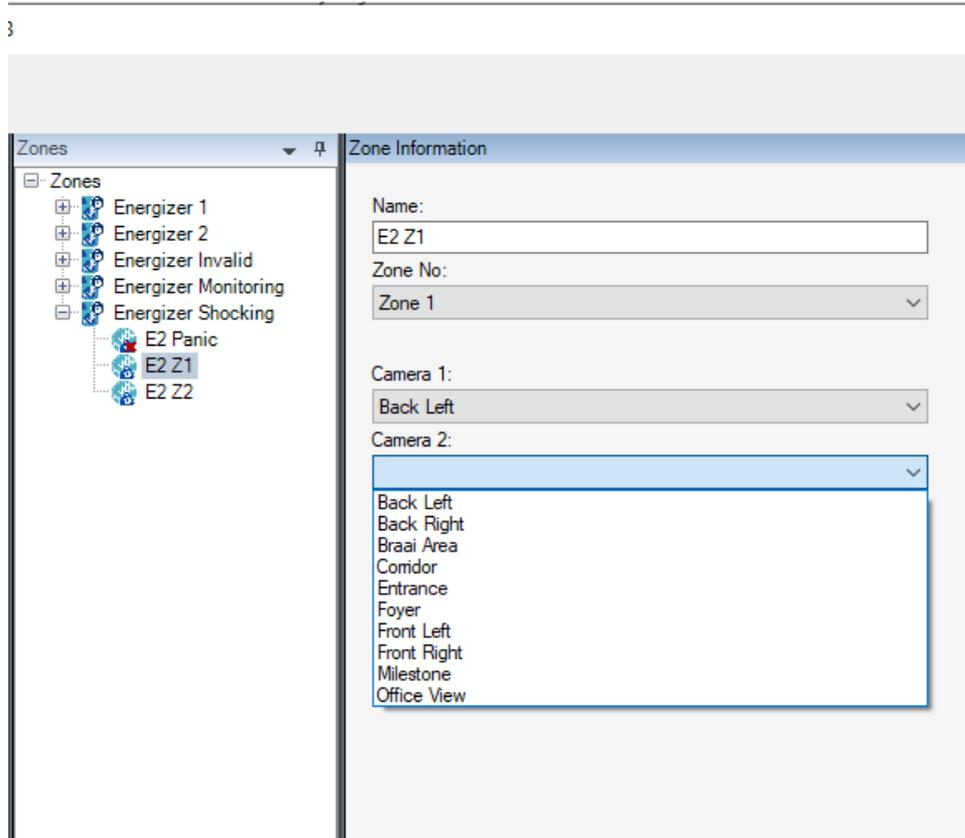


Figure 10: Each Energizer automatically has two zones associated with it.

XProtect Rule Engine Integration

The Nemtek XProtect Integration has full Rule Engine support, which means that you can set up your own custom rules to run within Milestone XProtect. This manual will not detail the exact workings of the XProtect Rule Engine, but will provide a sample rule you might consider useful.

Ideas for Rule Engine Rules:

- Disarm All Energizers as User-Activated Event
- Arm All Energizers as User-Activated Event
- If Panic is Detected, Disable All Energizers
- If Zone 1 is Disarmed, send a Notification
- At 23h59 Every Day, Arm All Energizers

Arm/Disarm All Energizers

To create an event to Arm All Energizers, follow these steps in the Milestone XProtect Management Client:

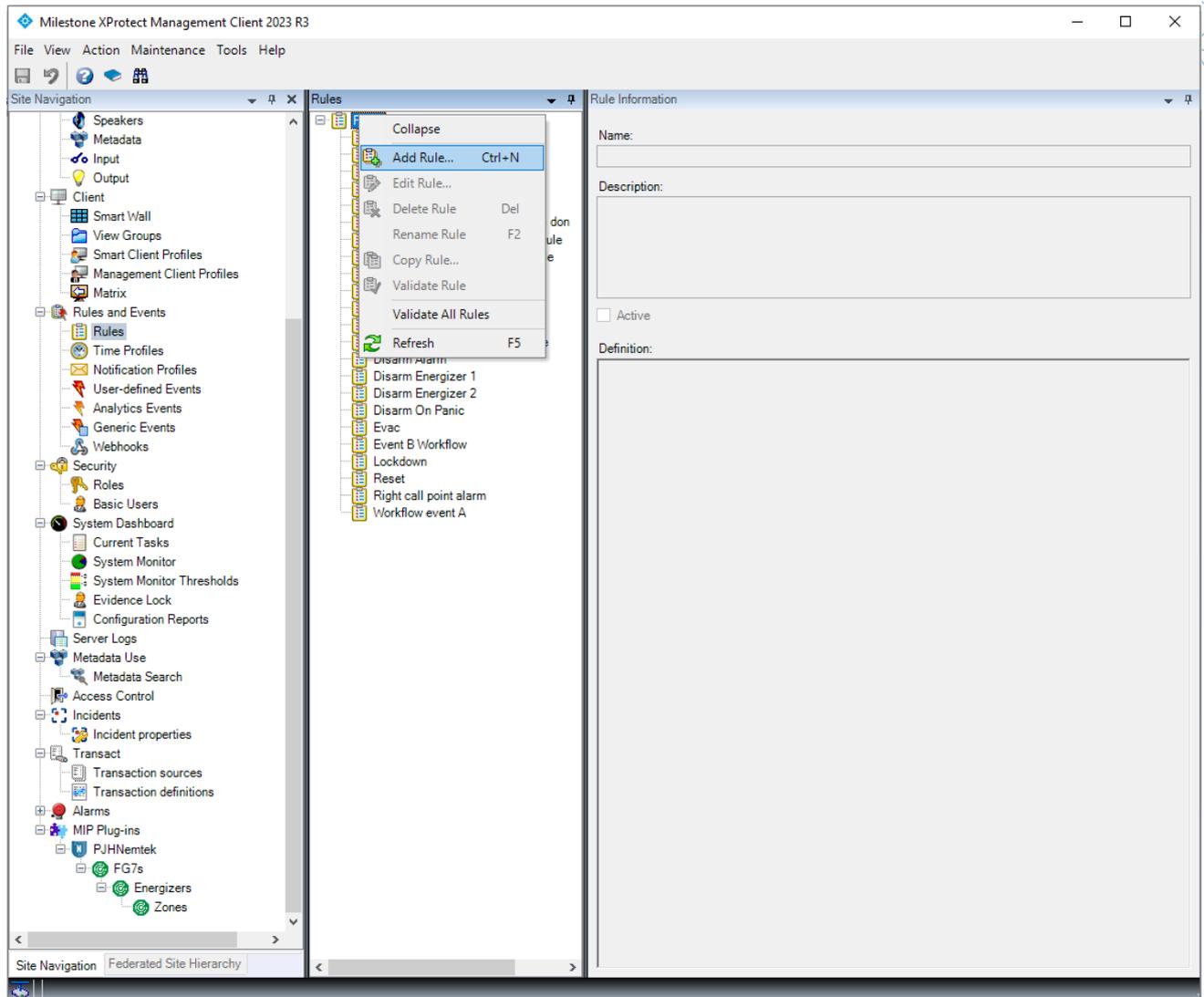


Figure 11: Under Rules and Events > Rules, Right Click to Add a Rule.

Manage Rule

Name: Am all energizers

Description:

Active:

Step 1: Type of rule

Select the rule type you want to create

- Perform an action on <event>
- Perform an action in a time interval
- Perform an action on a <recurring time>

Edit the rule description (click an underlined item)

Perform an action on event
from devices/recording server/management server

Help Cancel < Back Next > Finish

Figure 12: Name your Rule and set the type of rule

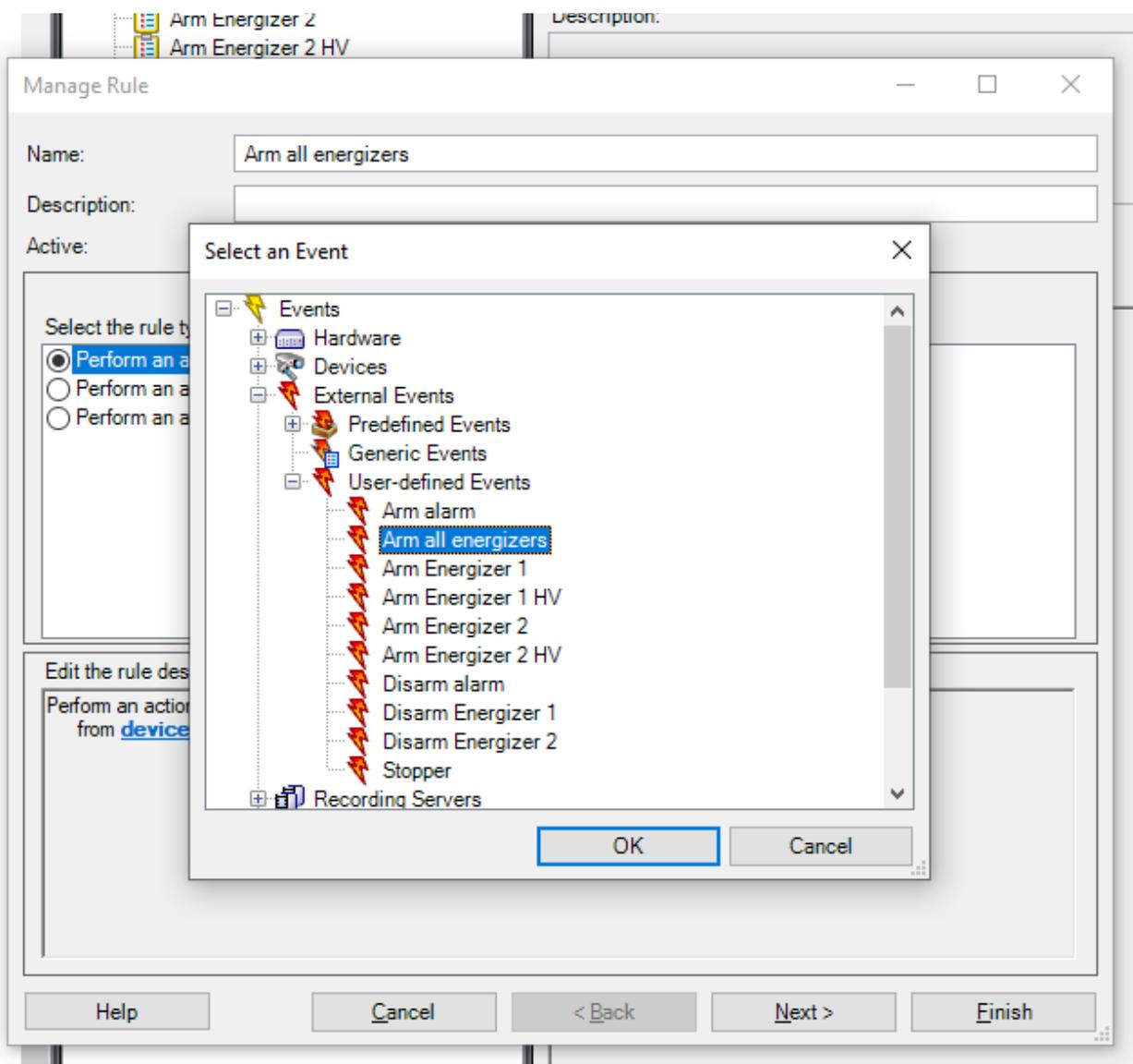


Figure 13: Choose the same event

Manage Rule

Name:

Description:

Active:

Step 2: Conditions

Select conditions to apply

- Within selected time in <time profile>
- Outside selected time in <time profile>
- Within the time period <start time> to <end time>
- Day of week is <day>
- While failover is active
- While failover is inactive
- Event is from <window>

Edit the rule description (click an underlined item)

Perform an action on Arm all energizers
from External

Buttons: Help, Cancel, < Back, **Next >**, Finish

Figure 14: Set the conditions to match your rule

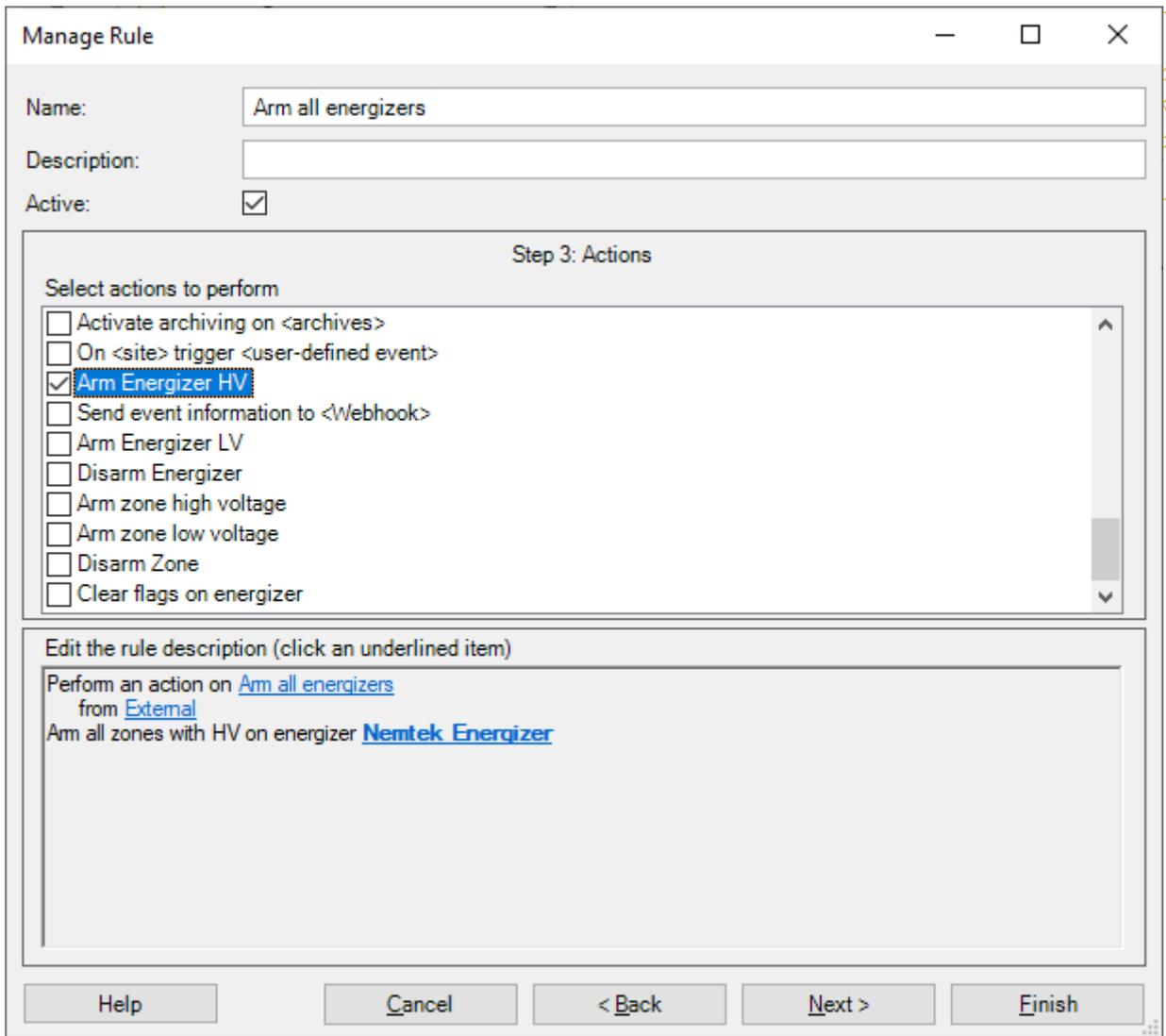


Figure 15: Set the action to "Arm Energizer HV", or the Nemtek Action you want to happen

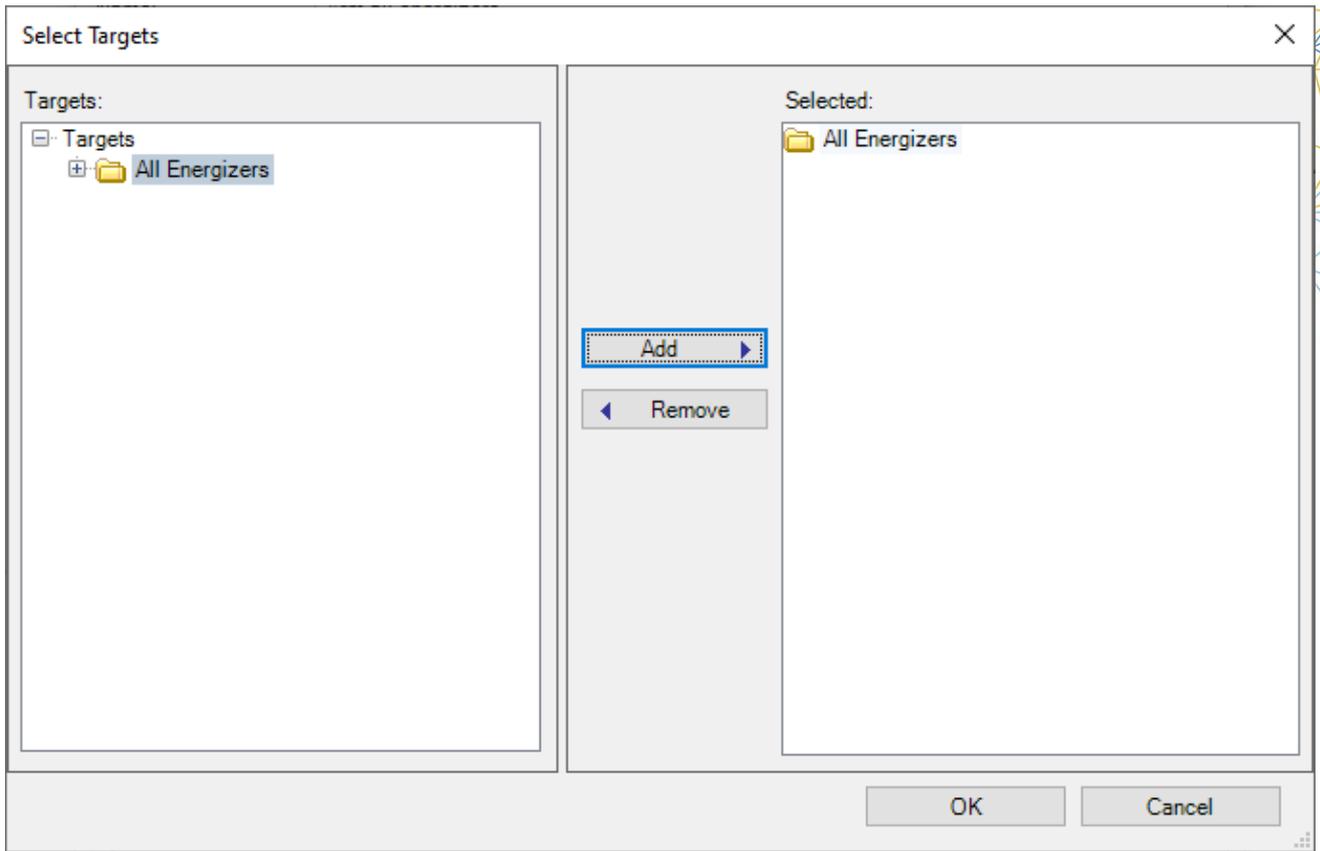


Figure 16: Add the Targets for the Rule. In this case, All Energizers are selected.

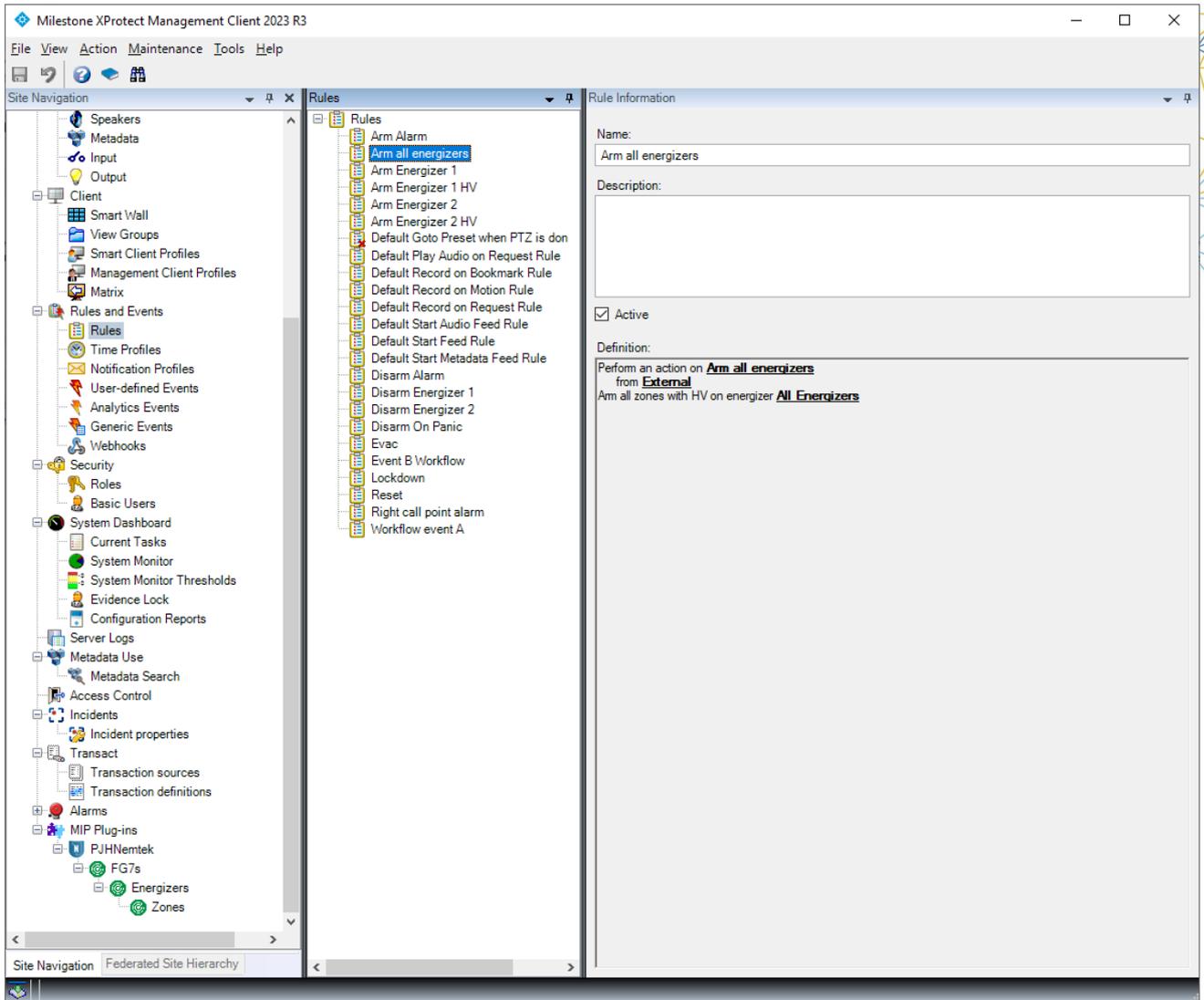


Figure 17: When your setup is finished, you should have a new rule that you can run from the XProtect Smart Client

XProtect Smart Client Setup

In order to use the integration, you must add Energizers and/or Zones to a Map. In your Milestone XProtect Smart Client, set up a new view.

Drag the Nemtek logo into a view block to access the List View.

Drag a map into a view block, then drag Energizers and Zones from the plugin (puzzle piece) list to the map.

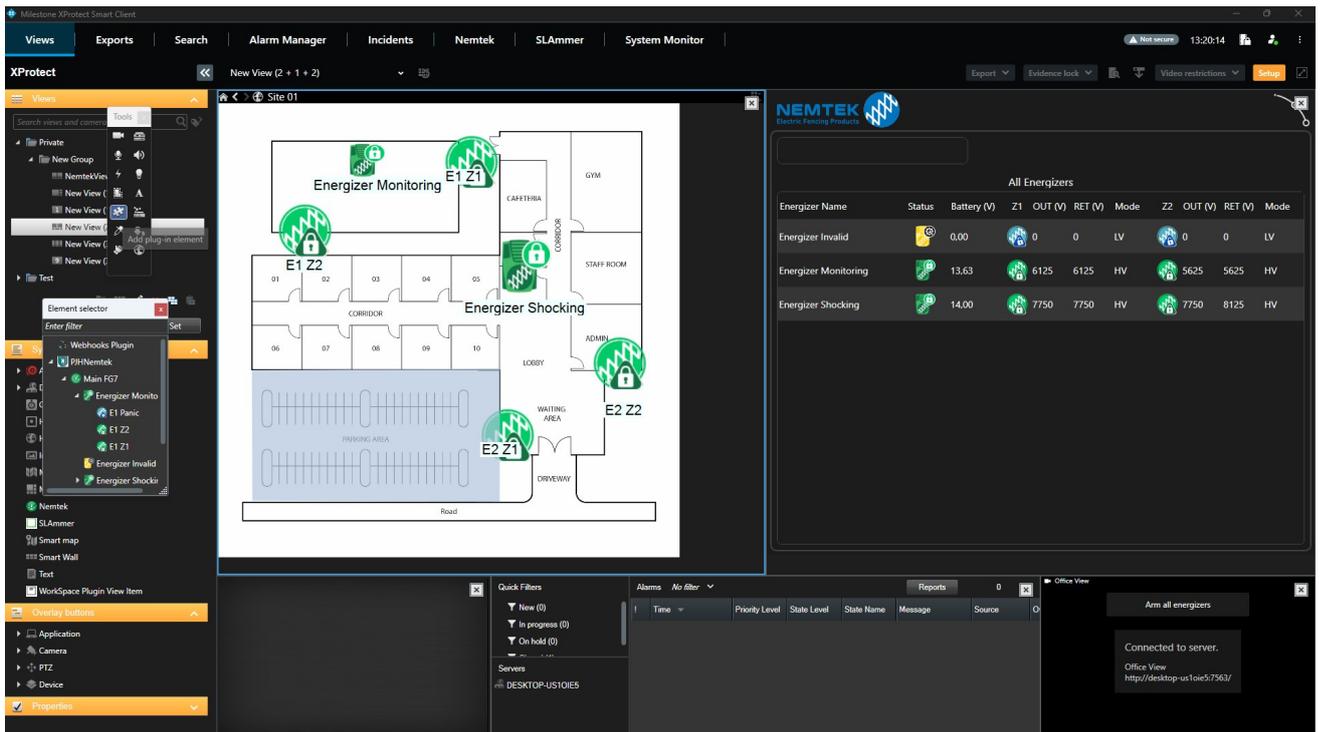


Figure 18: An example of a view to manage Nemtek energizers

Operations

Once you have set up Energizers and Zones on a Map in the Milestone XProtect Smart Client, the client allows you to manage the Nemtek system with great ease.

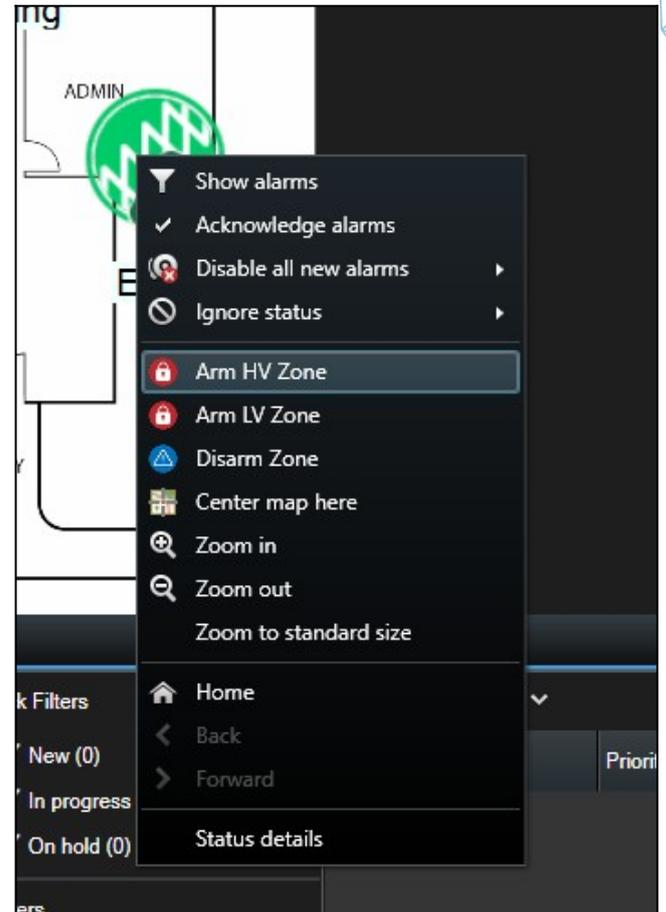
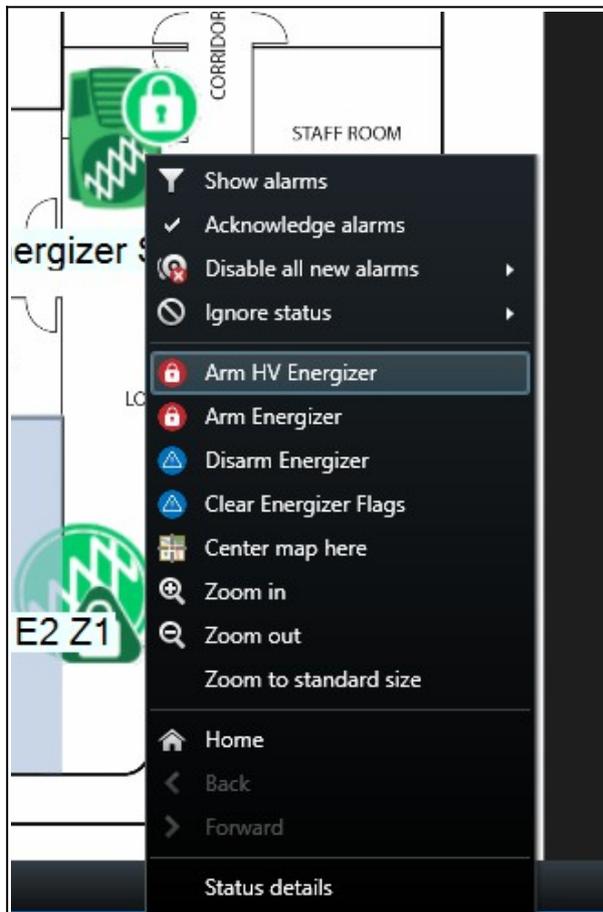
The screenshot displays the Milestone XProtect Smart Client interface. The main window is divided into several sections:

- Map:** A floor plan of a building with various rooms labeled (GYM, CAFE/TERA, CORRIDOR, STAFF ROOM, CORRIDOR, LOBBY, ADMN, WAITING AREA, PARKING AREA, DRIVEWAY, Road). Green icons representing Energizers are placed on the map, labeled E1 Z1, E1 Z2, E2 Z1, and E2 Z2. Labels for 'Energizer Monitoring' and 'Energizer Shocking' are also present.
- Nemtek List:** A table titled 'All Energizers' with columns: Energizer Name, Status, Battery (V), Z1, OUT (V), RET (V), Mode, Z2, OUT (V), RET (V), Mode. The table contains four rows of data.
- Alarms:** A table with columns: Time, Priority Level, State Level, State Name, Message, Source, Owner, ID. The table is currently empty.
- Quick Filters:** A sidebar with filters for 'New (0)', 'In progress (0)', and 'On hold (0)'. Below it, 'Servers' are listed as 'DESKTOP-US101E5'. A 'PLAYBACK' button is visible at the bottom.
- Office View:** A small window in the bottom right corner showing a message: 'Connected to server. The server has lost connection to the camera. Office View http://desktop-us101e527563/'.

Figure 19: An example view which shows a map, a Nemtek List, two cameras, and a list of alarms

Control Energizers and Zones

Right-click on a Nemtek Energizer or a Zone to see control or obtain specific information on that device.



Functions include:

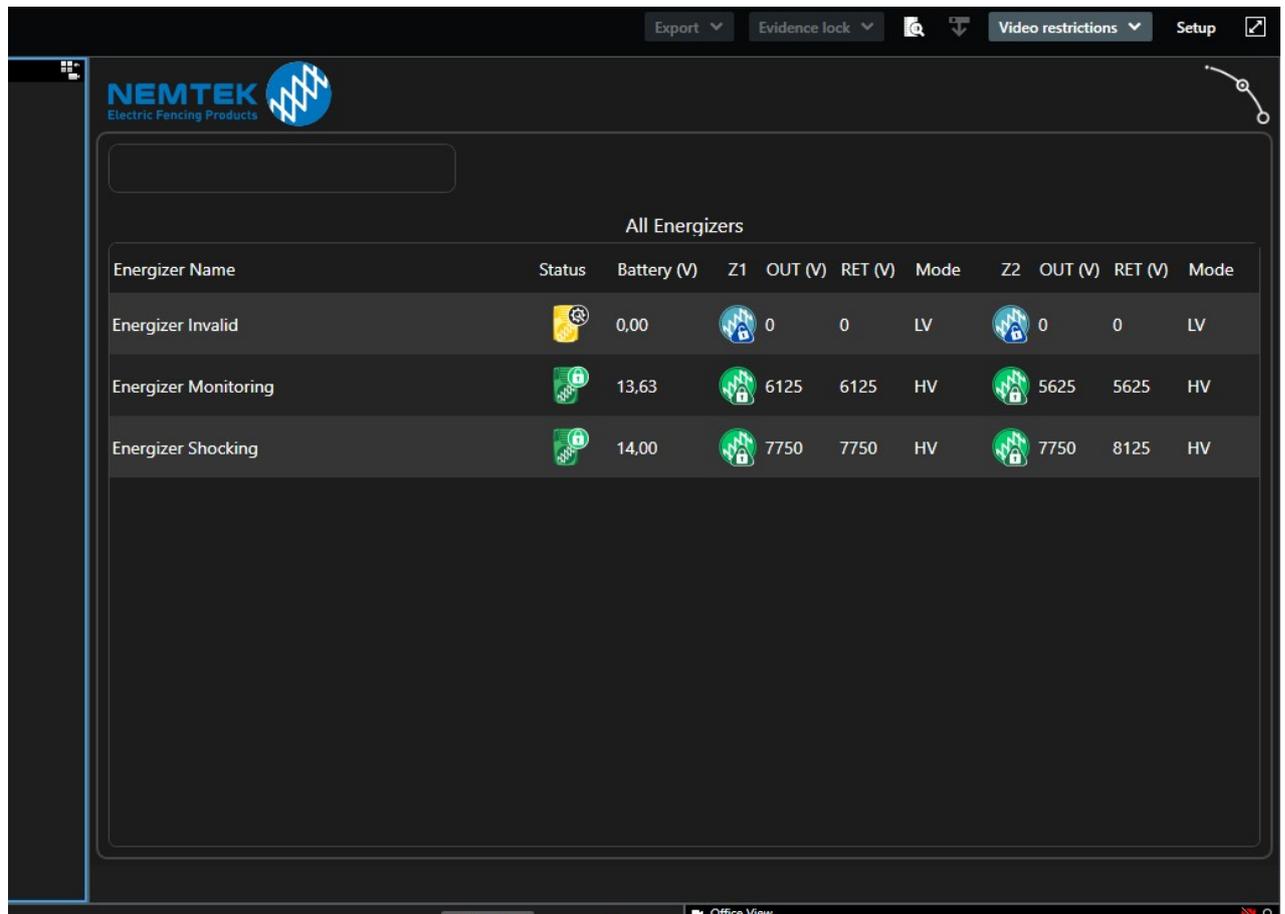
- Arm High Voltage Energizer/Zone
- Arm Low Voltage Energizer/Zone
- Disarm Energizer/Zone
- Clear Energizer Flags (This is used to acknowledge alarms or status updates)
- Status Details for Energizer (Obtain a detailed breakdown of all information available)

See Energizers and Zone Key Information

The integration has a Nemtek List View, which shows key information at a glance. All Energizers and their associated zones are shown.

The list is sorted, from top to bottom:

- Panic
- Alarm
- Maintenance / Tamper Alert
- Armed
- Disarmed



The screenshot displays the Nemtek List View interface. At the top, there is a navigation bar with options: Export, Evidence lock, Video restrictions, and Setup. The main content area features the Nemtek logo and a search bar. Below this is a table titled "All Energizers" with the following columns: Energizer Name, Status, Battery (V), Z1 (OUT (V), RET (V), Mode), and Z2 (OUT (V), RET (V), Mode). The table contains three rows of data:

Energizer Name	Status	Battery (V)	Z1	OUT (V)	RET (V)	Mode	Z2	OUT (V)	RET (V)	Mode
Energizer Invalid		0,00		0	0	LV		0	0	LV
Energizer Monitoring		13,63		6125	6125	HV		5625	5625	HV
Energizer Shocking		14,00		7750	7750	HV		7750	8125	HV

Figure 20: An example of the Nemtek List view

The Nemtek List View also supports search functionality. Type in the Search Box and see a list of all Zones and Energizers that match.

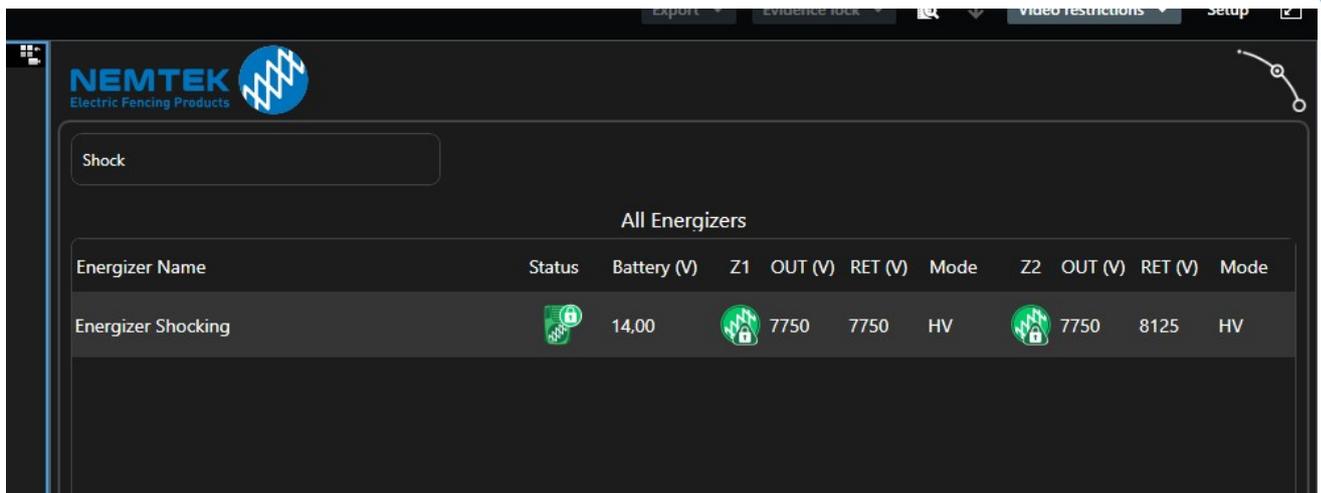


Figure 21: Search by Energizer or Zone

Support and Feedback

If you need assistance with your Milestone Nemtek Integration, please feel free to email us.
If you have a feature request, or any other feedback on the email, please feel free to reach out.

The contact details are updated on www.pjhtechnologies.com

Support and Feedback Email: peter@pjhtechnologies.com

Support Phone: +27 83 984 8447