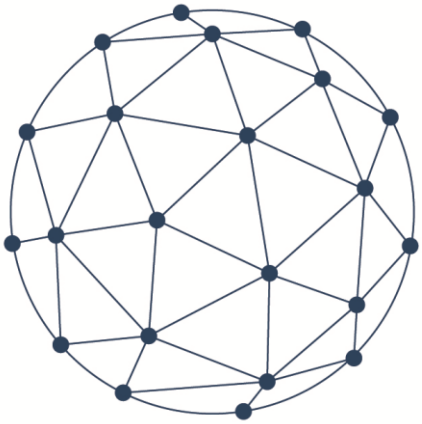


SGSE

Soluciones Globales de Seguridad Electrónica

NOTIFIER MONITOR PLUGIN

User guide

User guide for the installation of the Notifier Monitor Plugin
and interaction with the Notifier ID3000 Series panels into Milestone XProtect

Index

1. Document versions

Version	Date	Author	Changes in the version
1.0	24/02/2020	JCR	First version (English)
1.1	09/08/2021	SDA	Adaption to current status
1.2	11/08/2021	SDA	Minor changes
1.3	04/04/2023	SDA	Included Moxa NPort 5110

2. Introduction

The purpose of this document is to explain the operation, installation and use of the plugin solution called "*NOTIFIER MONITOR"* for use in Milestone XProtect®.

This solution consists of a plugin that allows to monitor and interact with Notifier ID3000 fire detection systems, from the user interface and the working environment of the XProtect platform® of Milestone.

The Notifier plugin application is designed specifically to provide the Management procedure from Milestone XProtect® software to Notifier ID3000 panels. It's the bridge between Milestone system and panels devices from Notifier.

The Plugin enables the possibility to send commands to the Notifier panel from the Milestone Smart Client application. And it also receives events from the Notifier panel. User can configure alarms for these events in the Milestone Management Client.

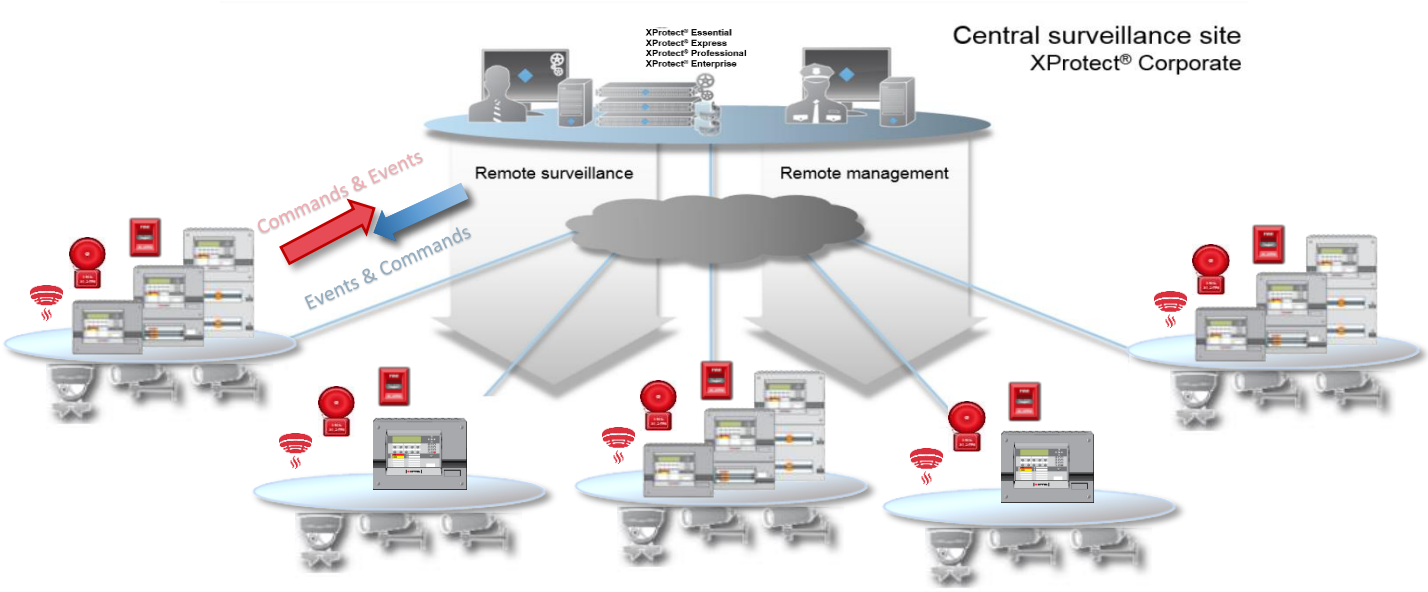
Simplicity, When the plugin establishes connection with Panel, configuration's data are taken from panel and include these like a part of the XProtect devices, including detector, manual call point, … description text and all relevant data from the panel*. You just need to insert three parameters: Notifier IP Address (serial converter), the port where the Notifier is listening (serial converter) and the local port to listen to the fire panel.*

In this way, the management begin in the XProtect system and ending in the Notifier ID3000 devices, the software send-receive the relevant data (alarm, prealarm, disable, enable…) to permit the interaction between two systems XProtect (Milestone)-ID3000 (Notifier) creating a unique environment system.

For more information, you can click this link.

3. Architecture

The Plugin and the Notifier panel communicate using the ***Third-Party Protocol***. The Plugin is able to send commands to the Notifier, i.e.: enable, disable, etc. And it listens for the Notifier events, for instance: faults, alarm, prealarm, etc. When an event is triggered, the Plugin informs it to Milestone. Then, due to the done configuration, Milestone triggers an alarm and also remarks the source item of the event in a map.



Due to this architecture configuration, the panel has to be equipped with a serial-to-Ethernet module in order to communicate with the Plugin. In theory, any serial to Ethernet converter supporting tunneling could do the work, but the serial to Ethernet converters used for development and test, thus the only whose compatibility has been validated by SGSE are:

- Lantronix UDS-1100 (fw versions from V6.6.0.1 to V7.0.0.2)
- Moxa NPort 5110 (fw version 2.10)

4. Installation

Interface Installation (Serial to Ethernet Communications)

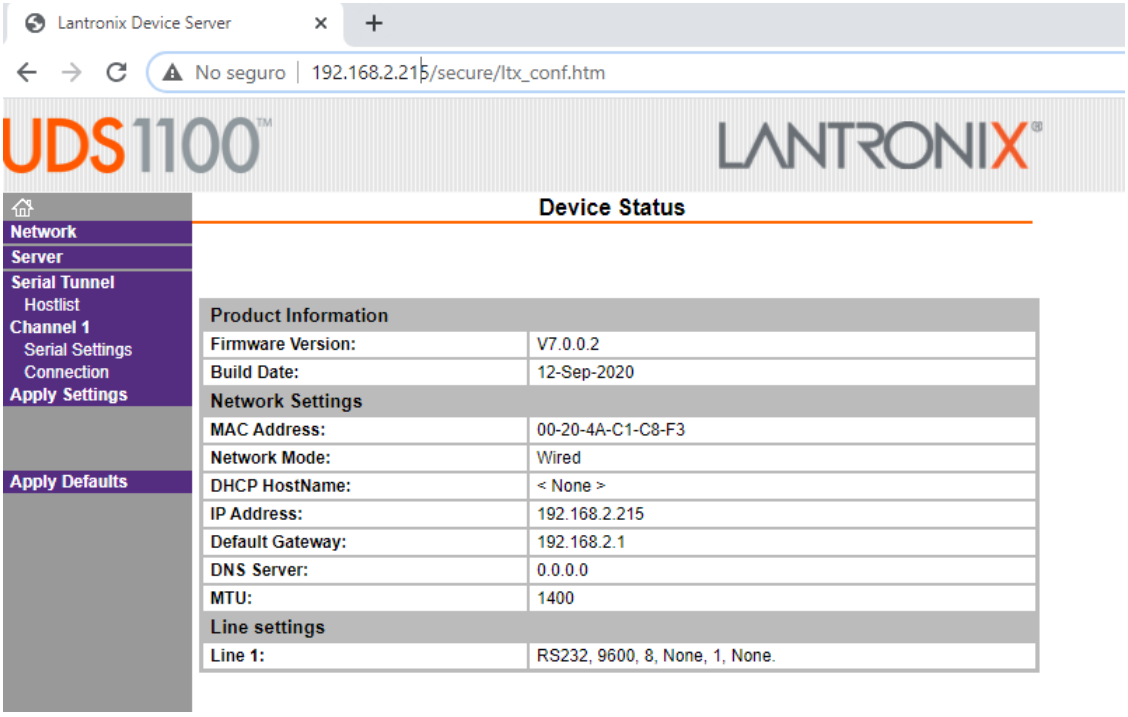
To communicate over Ethernet with the Notifer panel, use a reliable serial to Ethernet connectivity server. The aim is to create a tunnel that sends what receives from the serial port (Notifier) through the Ethernet port to a specific IP address and port (Milestone), and the other way round, that it sends through the serial port what it receives from the Ethernet interface.

Lantronix UDS-1100

The UDS1100 can be set up locally through its serial port, or remotely using Telnet or a web browser. To find the device or assign an IP address, please use the tool manufacturer provides (for Lantronix UDS1100, use Device Installer).

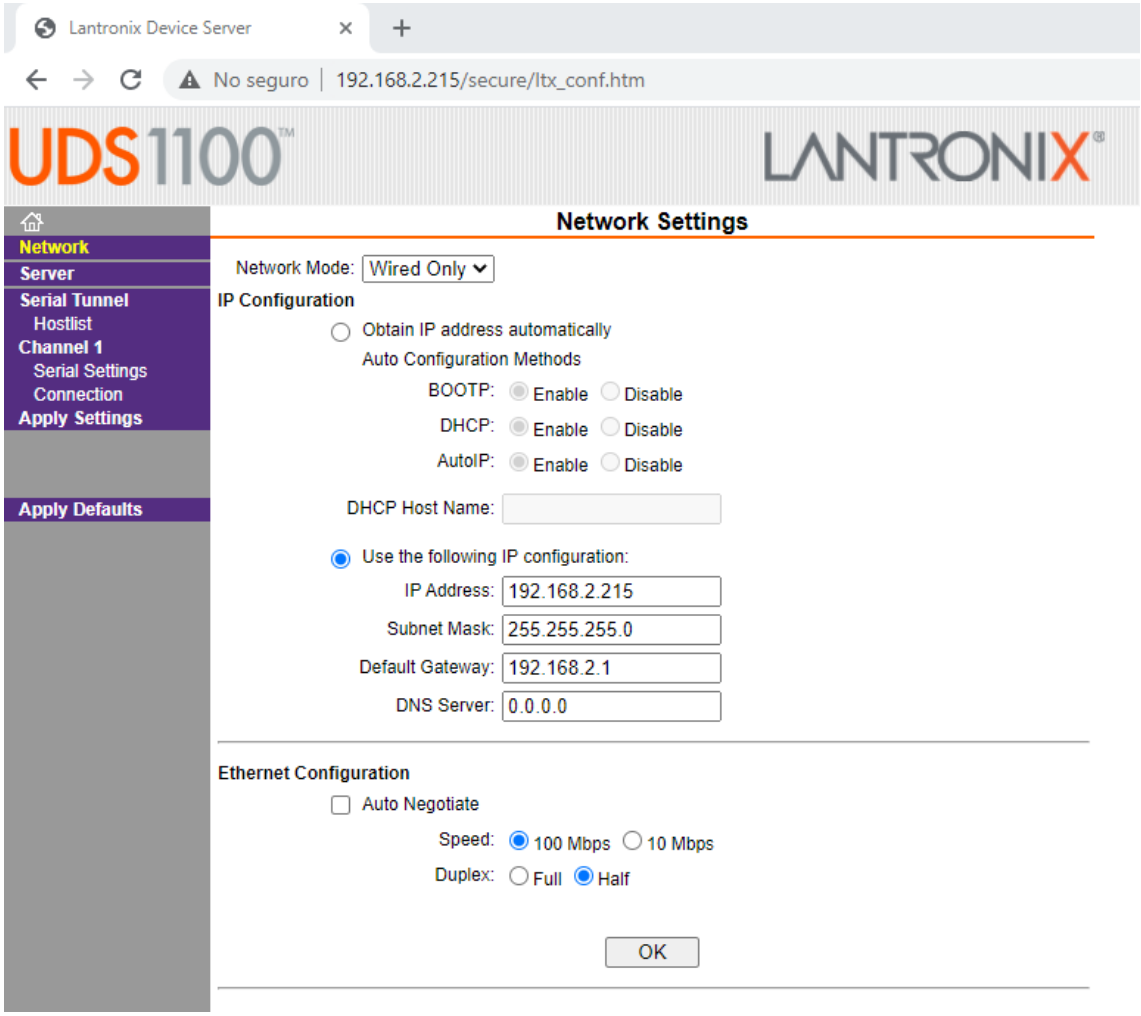
Below you can find a simple configuration guide with the required setup when UDS-1100 is used.

Connect to the UDS; open web browser a type http://<uds_ip_address>

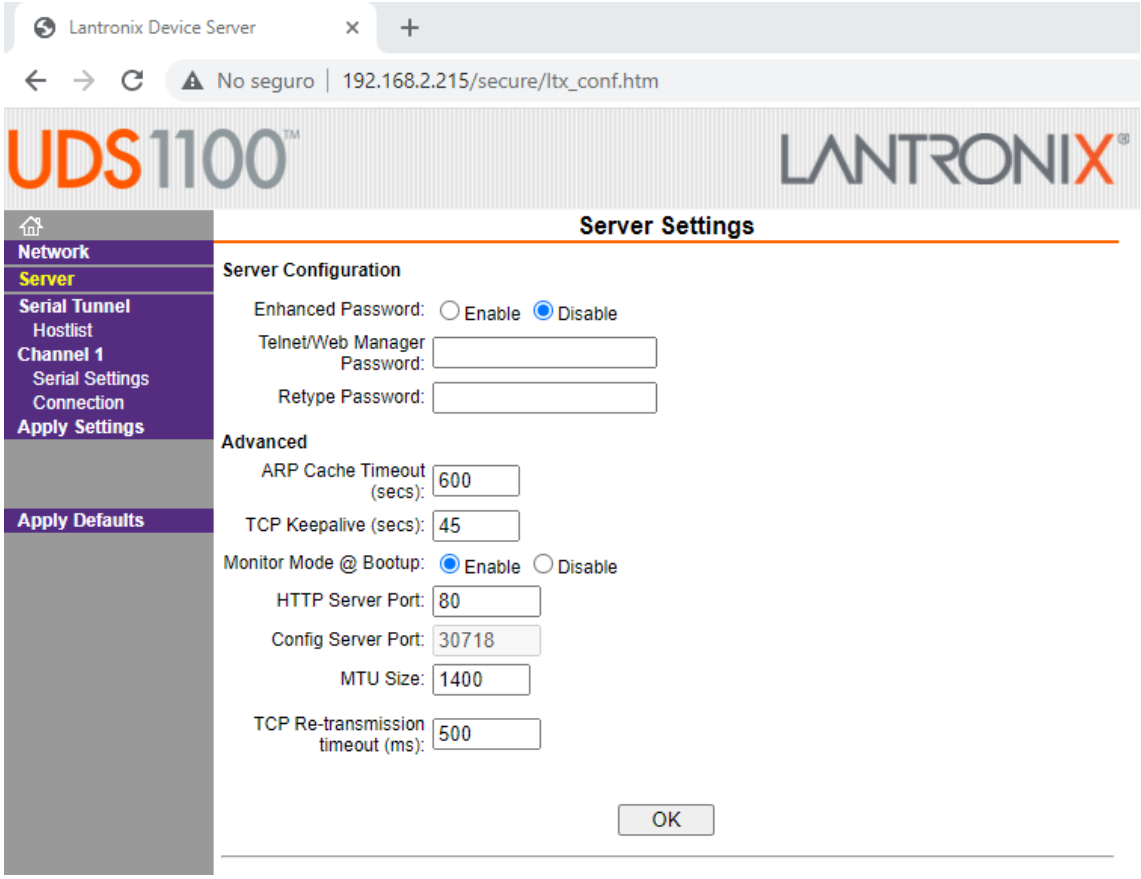


Click over text label “Network” and fill in the following data in function of your network parameters:

- IP Address (will be the Notifer ID3000 Panel IP)
- Subnet Mask
- Default Gateway
- DNS server

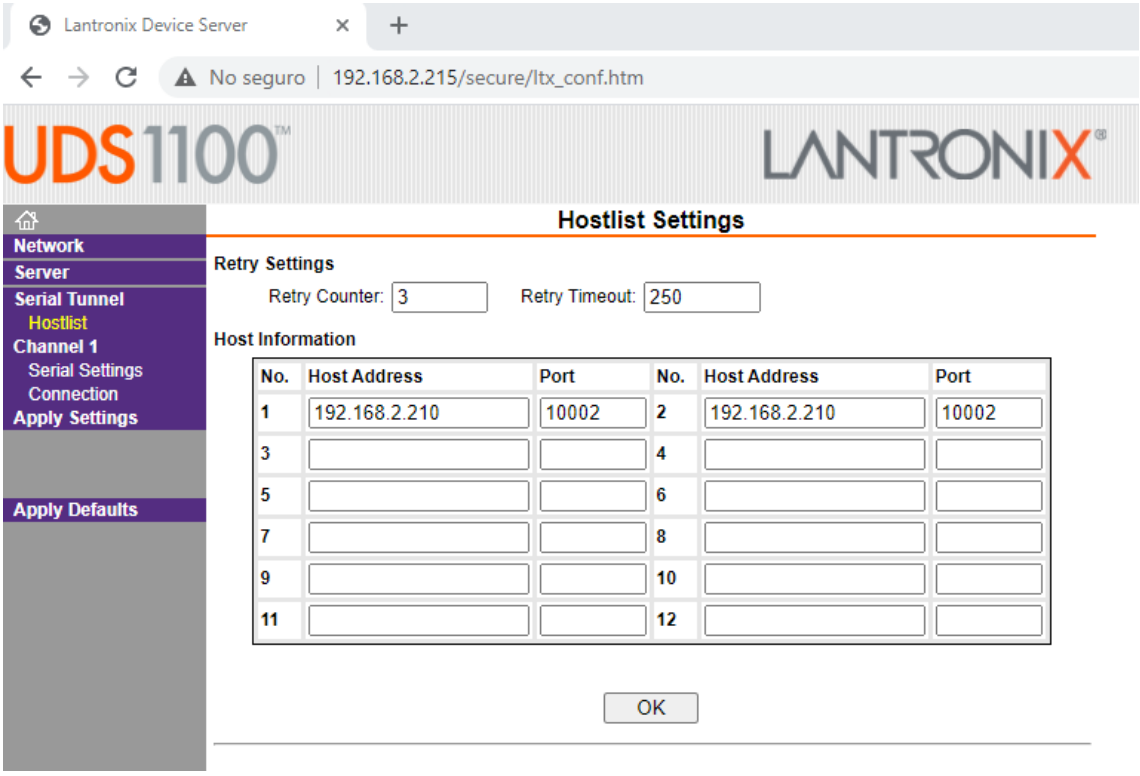


Click over text label “Server” and check that all parameters are as following picture:



Click over text label “Hostlist”, following fields are those referring to communication with the plugin. In our case, Plugin IP address (XProtect Event Server) is 192.168.2.210 and listening port is 10002.

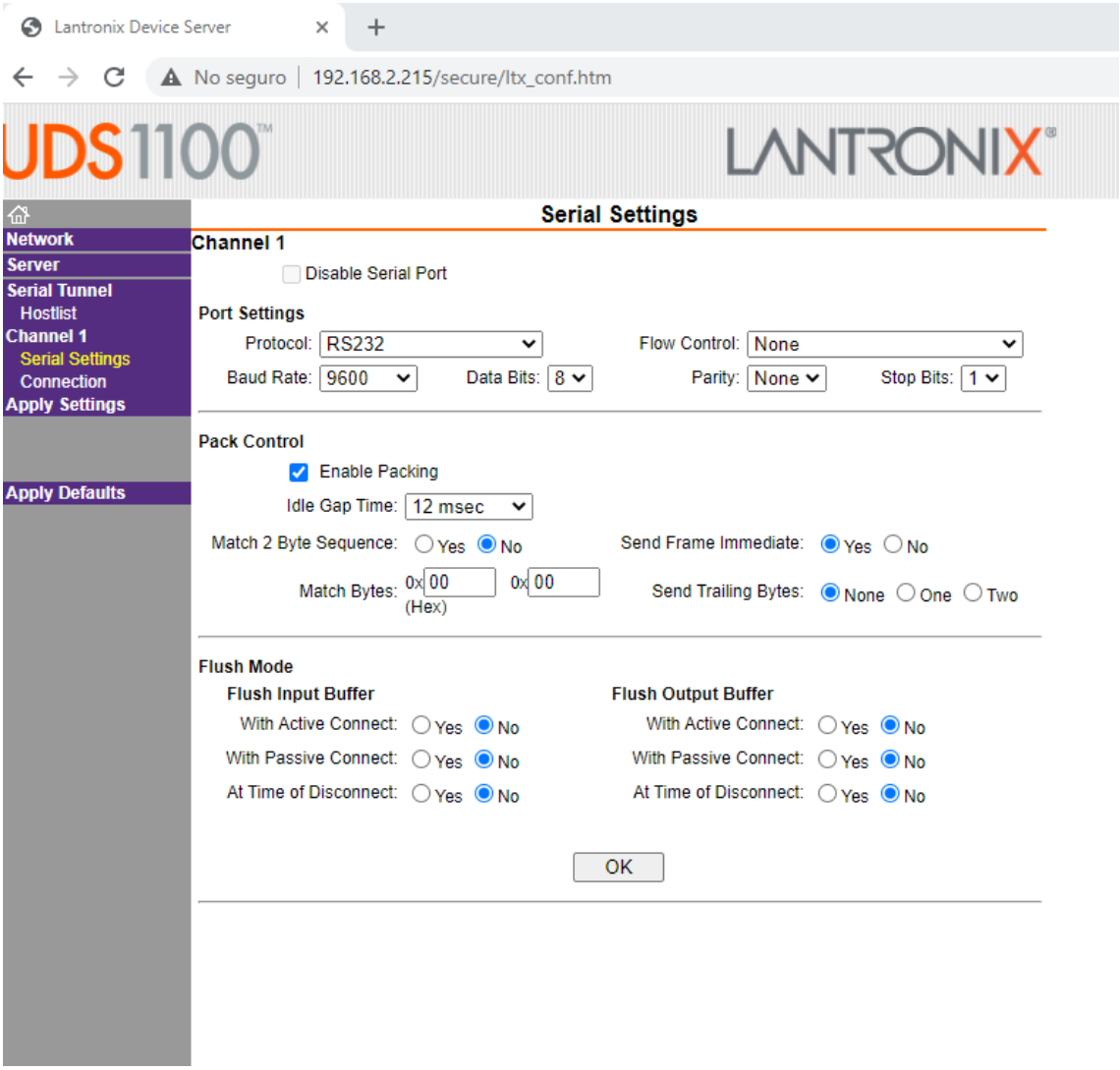
Fill in with your installation data and press ok button



Click over “Serial settings”, the serial configuration relationship between Notifier panel and UDS server. In our case the Notifier serial port is configurated with the following parameters:

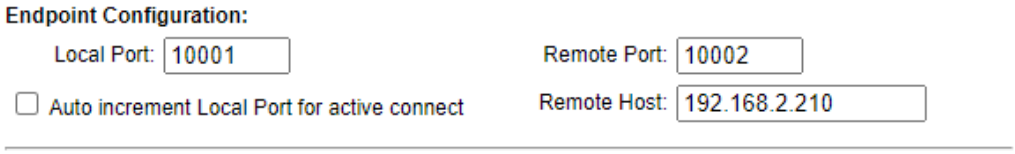
- Flow control: None
- Baud Rate: 9600
- Data bits: 8
- Parity: None
- Stop bits: 1

The rest of the parameters (package control and Flush mode) are kept as in the following picture.



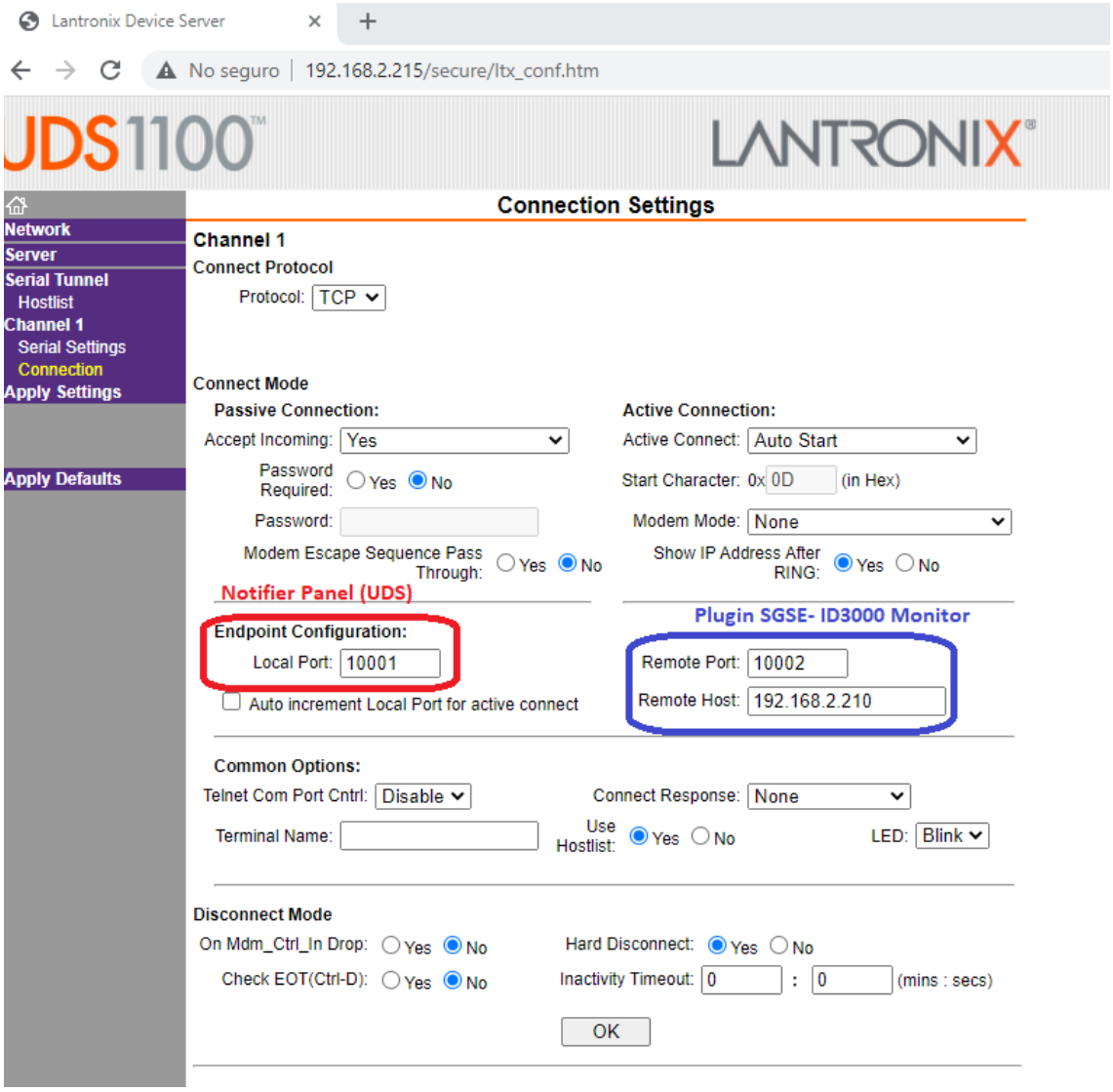
Last step is the connection, click over Connection label.

On the connection settings page, check that all the data is like the following image, except the endpoint settings:

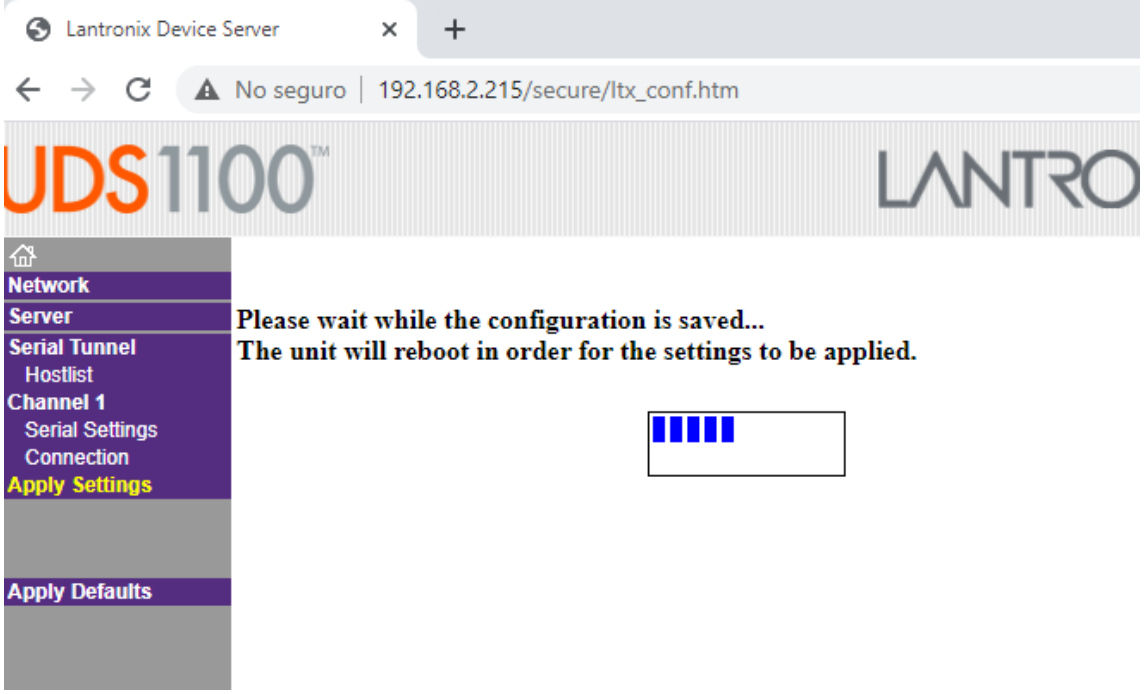


- Endpoint configuration
  - Local port: Listening port of the Notifier panel over UDS server.
  - Remote Port: Listening port of the Plugin SGSE-ID3000 Monitor. It's the port to which UDS server will send data to the Plugin (XProtect Milestone).
  - Remote Host: Ip of the Plugin SGSE-ID3000 Monitor

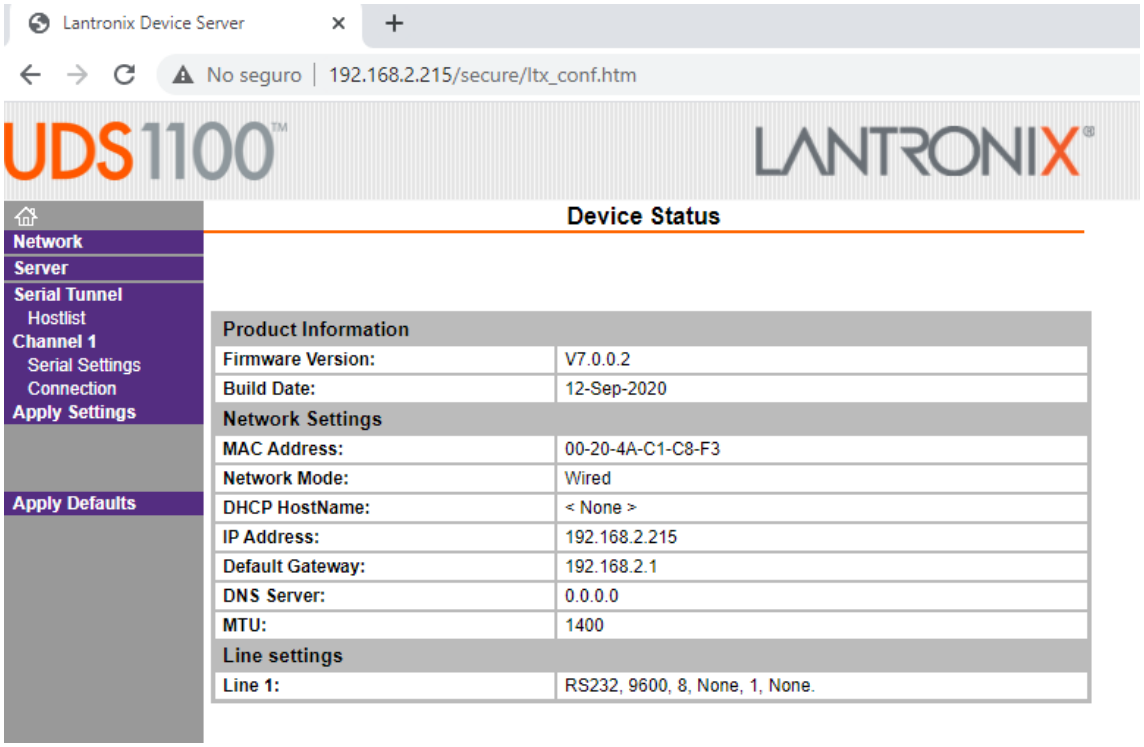
Check all data are correct and click over the OK button.



Finally, apply settings clicking in the apply setting label.



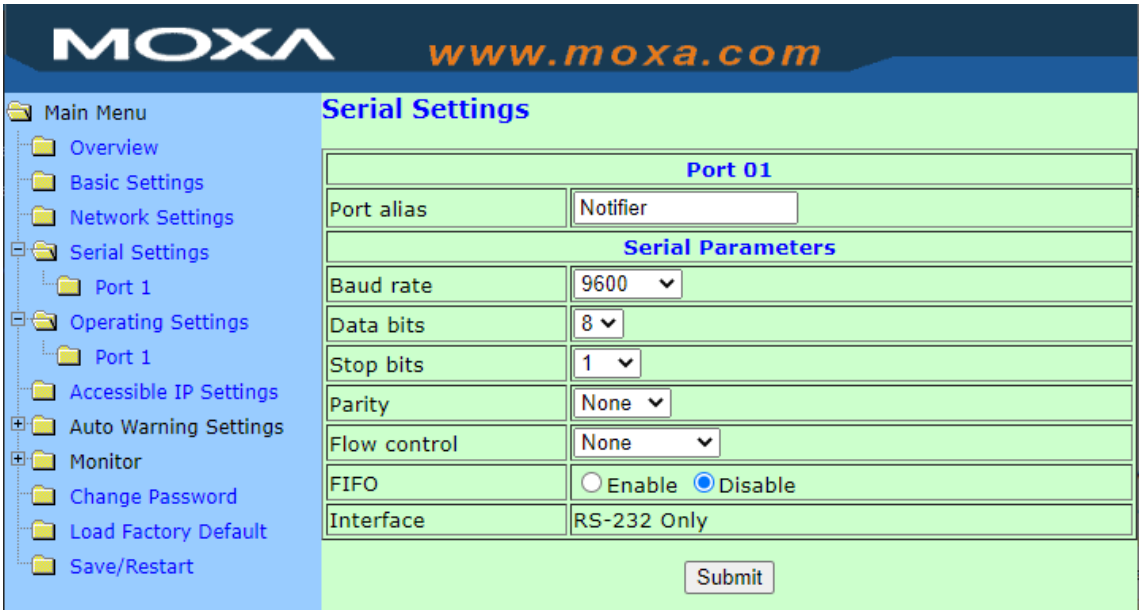
At the end of this process the terminal shows a summary of the established configuration.



Moxa NPort 5110

It is also possible to connect the Notifier ID3000 using a Moxa NPort 5110 serial to Ethernet converter.

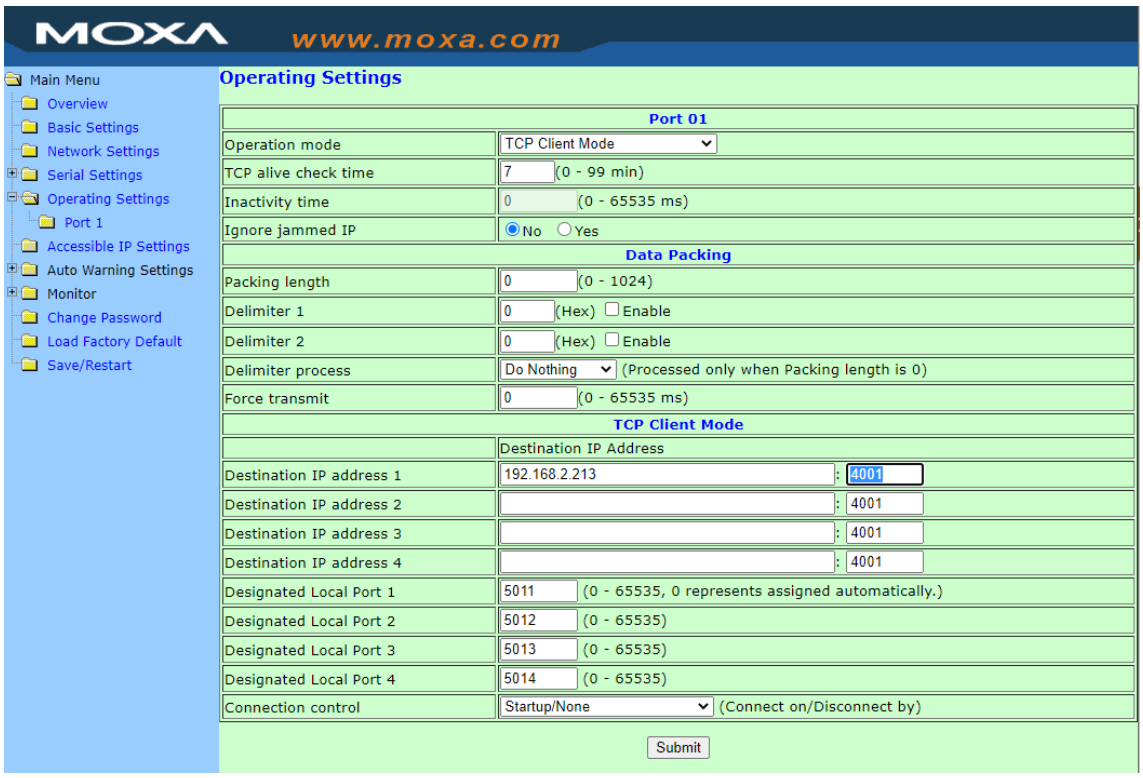
Firstly, the serial setup must be configured to match the serial parameters of the Notifier ID3000 RS232 serial port.



Then, network configuration must be done for the converter to communicate with the plugin. To do so, access the configuration web page of the converter and go to “Operating Settings” section, then “Port 1”, and set:

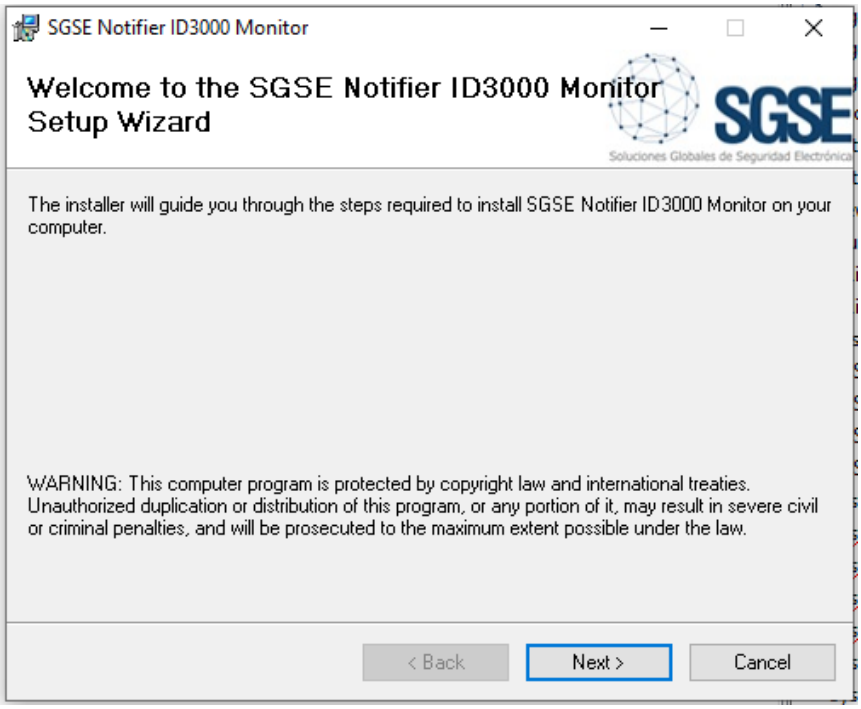
- **Operation mode** as “TCP Client Mode”
- In the **Destination IP Address1** field, enter the Milestone Event Server IP Address, and the port in which the plugin will listen to a connection from the converter (parameter *Milestone Port* in the plugin configuration).
- In the **Designated Local Port 1**, enter the port of the converter to which the plugin will send commands (parameter *Notifier Port* in the plugin configuration).

In this case, the plugin is installed in the PC with IP address 192.168.2.213 and is listening at the port 4001.

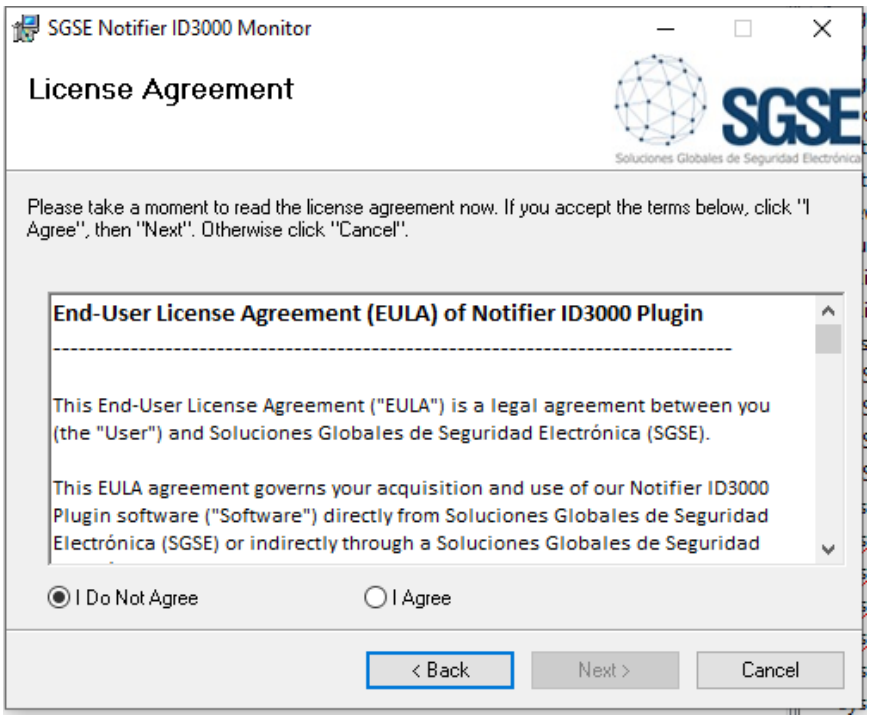


Plugin installation

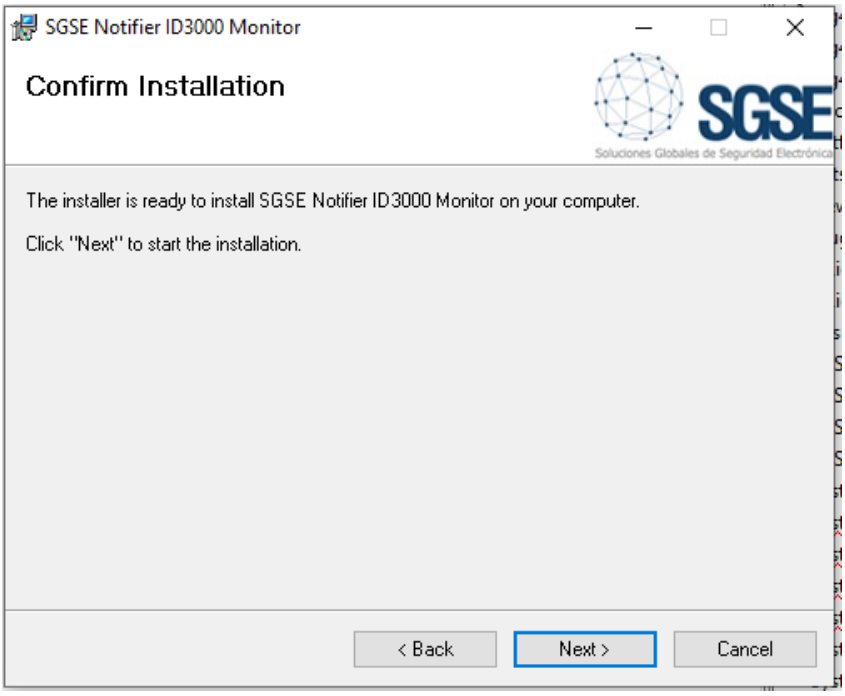
To install the plugin, simply execute with administrator rights the installer " SGSE_NotifierID3000Monitor_Installer.msi" provided by SGSE. The process is automatic. Throughout the different screens of the installer, we will only have to accept the End User License Agreement, a mandatory condition to be able to use the plugin.



Click “Next >” to start the installation process.

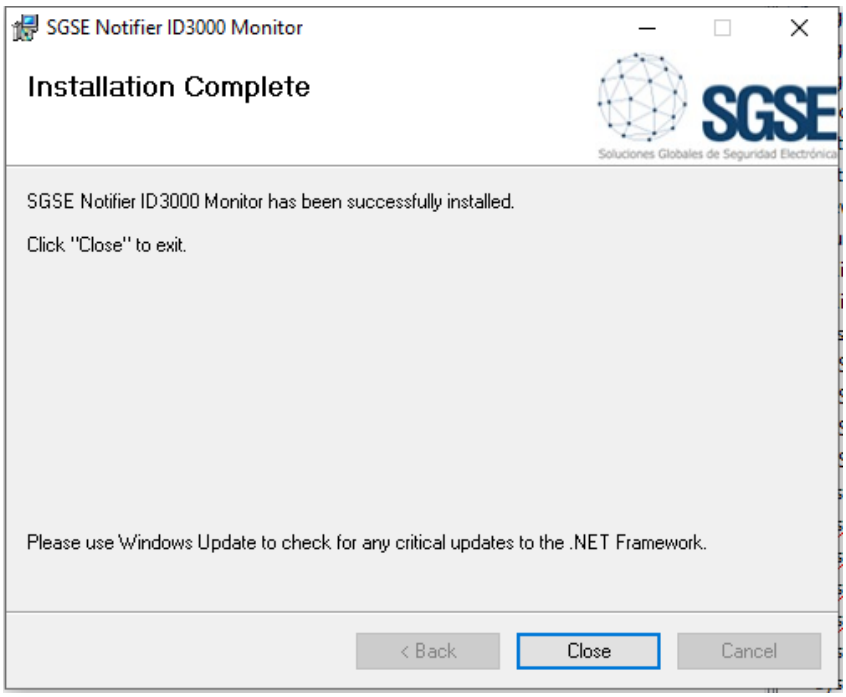


You will have to read and accept the End User License Agreement in order to proceed with installation.



Click “Next >” to proceed and install the plugin files.

If Windows User Account Control is enabled, you may have to allow the installer to go ahead with installation.



Once the process is finished, we can click “Close”. The plugin is already installed!

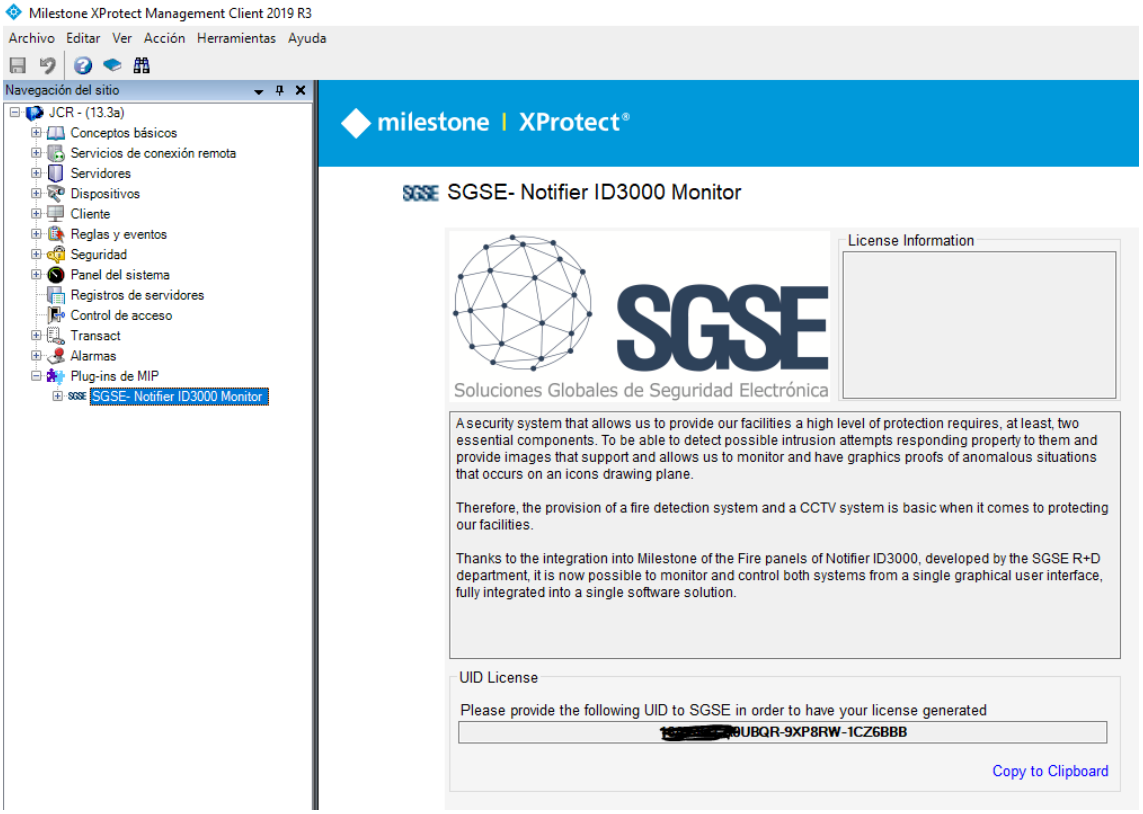
Plugin License process: Getting a UID

The plugin needs a license to run. Each panel must be licensed. These licenses are generated by SGSE. The procedure to obtain the license file corresponding to the acquired license is described below.

In order to generate the license, you must provide the corresponding UID at the Event Server. This UID is a unique identifier to which the license is bound.

To get this code, you have to run XProtect® Management Client at the Event Server after installing the plugin, and go to the corresponding menu item.

In that screen, when the plugin is not licensed, you will see the corresponding UID.

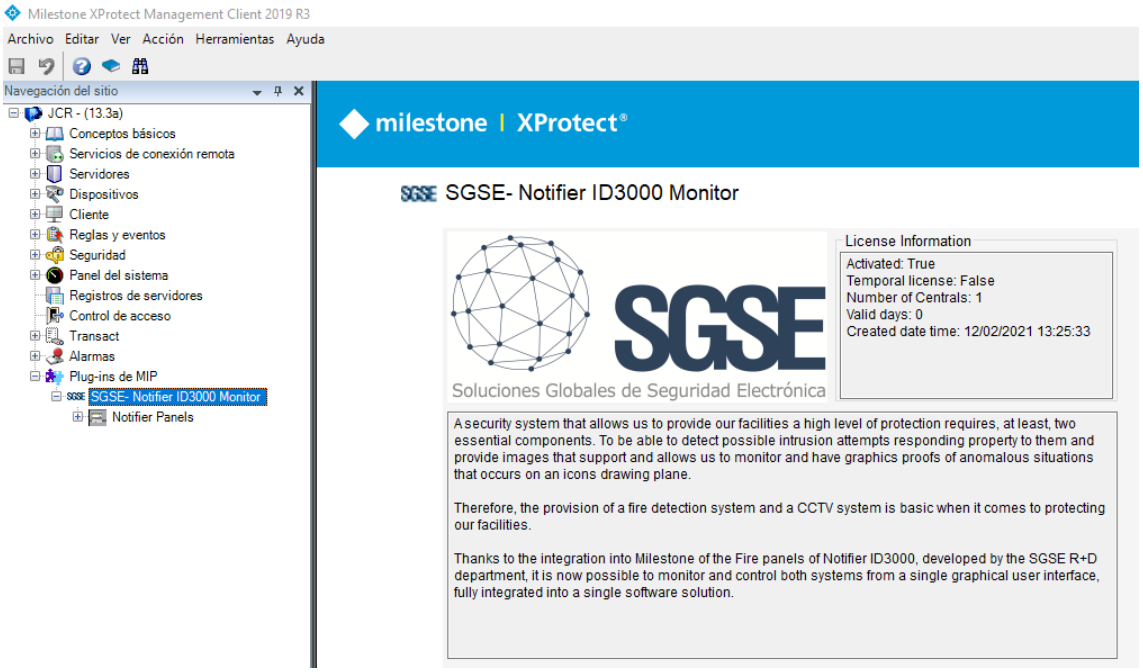


Configurator user has to provide it to SGSE and we will provide the license file.

The licence file received must be placed in the plugin folder, with the name *Licencia.lic*. By default, plugin folder is:

C:\Program Files\Milestone\MIPPlugins\Notifier

Once the license is installed, the Plugin will be available:



Smart Client or Management Client PCs

If you are running Smart Client or Management Client on PCs different than the Event Server, then you will need license files for those PCs too (these are free of charge).

In order to generate the UID for these clients, ask SGSE for the UID Generator tool, then run it in the PC, select the Notifier plugin, copy the UID and send it to SGSE identifying the PC where this UID has been generated. This identification is for you to know where to place the license file SGSE will give you back.

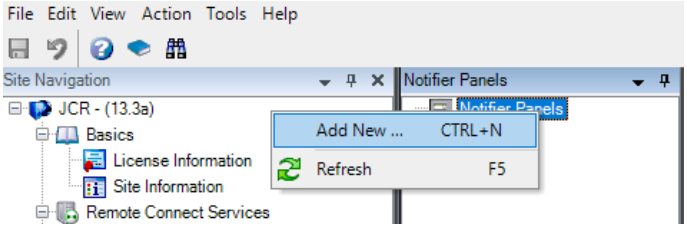
5. Configuration

The plugin has been designed to simplify as much as possible its configuration process, so that the start-up is as simple as possible for the installer.

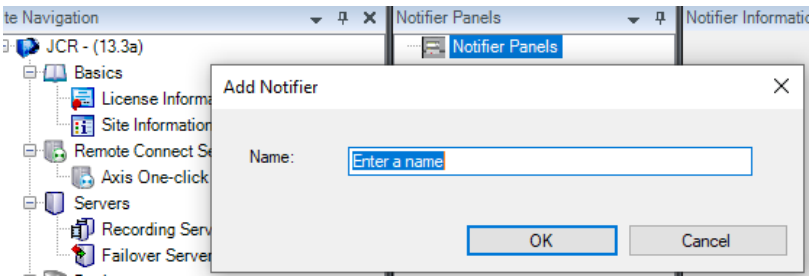
If the plugin and the license were successfully installed, configurator user should be able to create a Notifier item. Configurator user has to configure.

Set up a Notifier ID3000

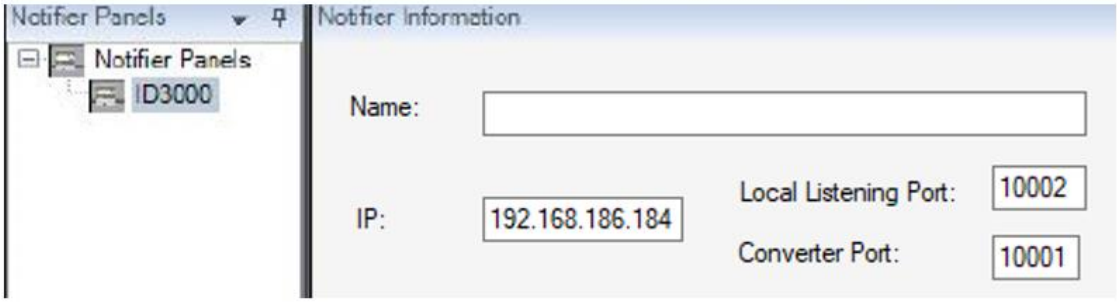
To set up a Notifier ID3000 in Milestone, the procedure is extremely simple.
Select "*Add new…*"



After click "Add new…" assign a name to the Notifier ID3000 Panel and click OK (Submit).



You just have to assign a name to the panel, to identify it in the system, and configure the needed parameters to establish the connection between plugin and panel over Ethernet:



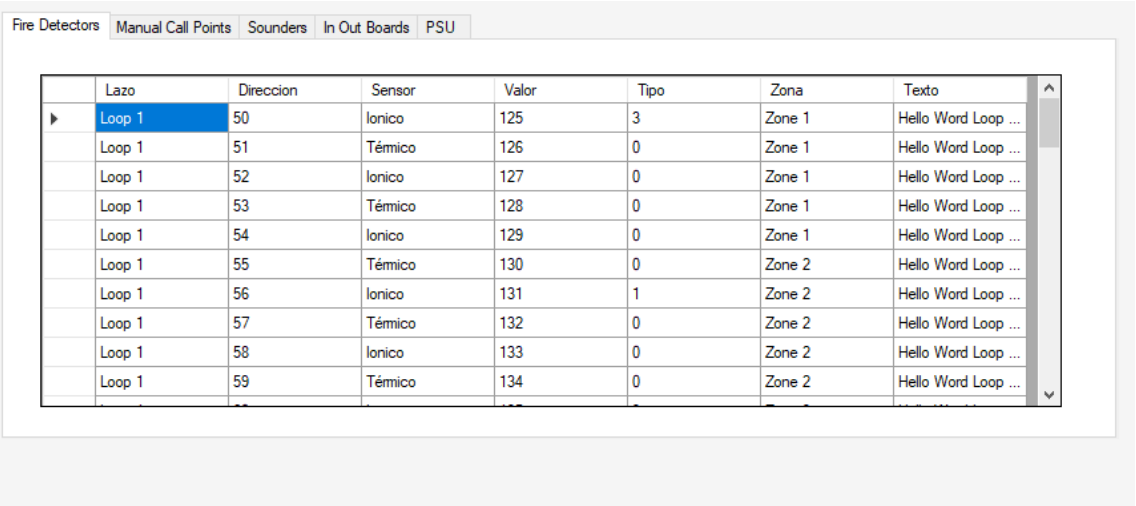
- IP: The IP address of the serial to Ethernet converter.
- Milestone Port: The port where the plugin will listen to receive data from the serial to Ethernet converter, sent by the Notifier panel.
- Notifier Port: Port where the serial to ethernet converter will listen, and where the plugin will send its commands and requests.

After saving changes, Event Server must be restarted. One it has restarted, you can automatically import the Notifier ID3000 devices and status (devices), state of each element (Alarms, pre-alarms), by clicking the download button.

The plugin will automatically create in Milestone the items corresponding to devices of the Notifier ID3000. These items will be accessible from the interface of Management Client.

Serial to Ethernet converter configuration must match with the Plugin configuration, both configurations share some parameters that must have the same values as IP addresses and ports.

This process may take time, depending on the quantity of selected items. Finally, it will show the elements downloaded from Notifier ID3000 panel.



Fire Detectors | Manual Call Points | Sounders | In Out Boards | PSU

Lazo	Direccion	Sensor	Valor	Tipo	Zona	Texto
Loop 1	50	Ionico	125	3	Zone 1	Hello Word Loop ...
Loop 1	51	Térmico	126	0	Zone 1	Hello Word Loop ...
Loop 1	52	Ionico	127	0	Zone 1	Hello Word Loop ...
Loop 1	53	Térmico	128	0	Zone 1	Hello Word Loop ...
Loop 1	54	Ionico	129	0	Zone 1	Hello Word Loop ...
Loop 1	55	Térmico	130	0	Zone 2	Hello Word Loop ...
Loop 1	56	Ionico	131	1	Zone 2	Hello Word Loop ...
Loop 1	57	Térmico	132	0	Zone 2	Hello Word Loop ...
Loop 1	58	Ionico	133	0	Zone 2	Hello Word Loop ...
Loop 1	59	Térmico	134	0	Zone 2	Hello Word Loop ...

All elements downloaded from the Notifier ID3000

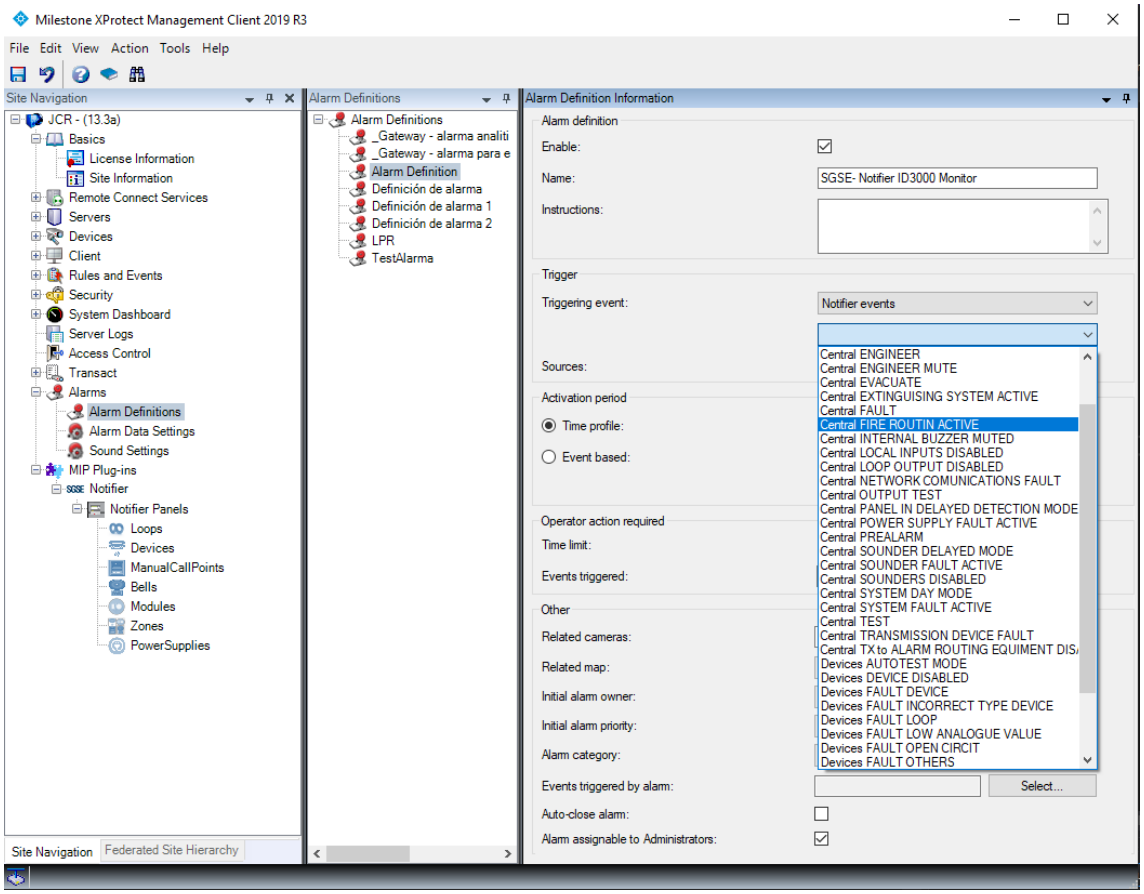
Devices downloaded from the panel are classified into different categories.

- Fire detector
- Manual call point
- Sounders
- Modules

Once you have downloaded Notifier devices configuration, and the plugin has created the device items, Event Server must be restarted to establish an operational connection with the Notifier panel.

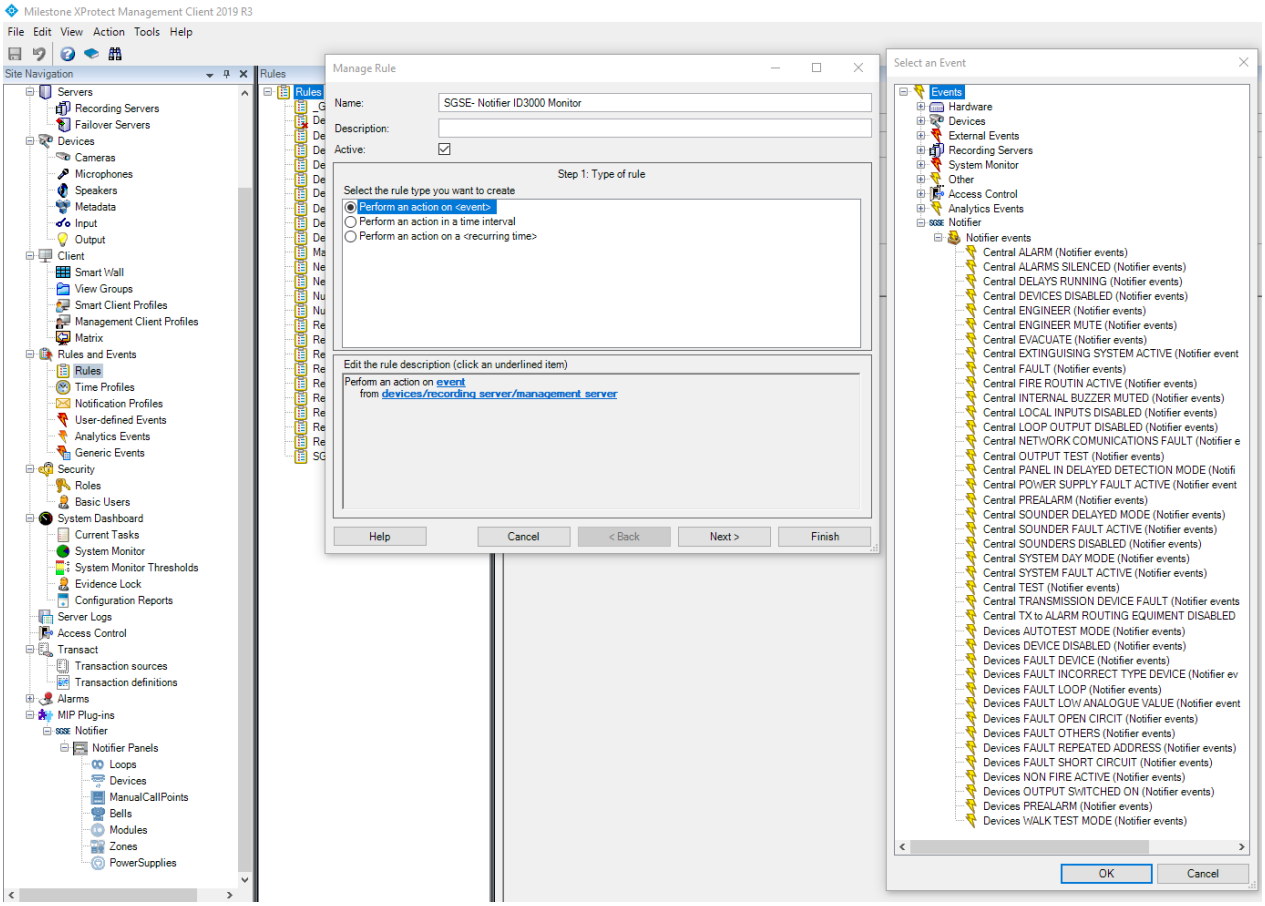
5.1.1. Milestone alarms

After installation, configurator user will see a new set of events in Milestone. It is a list of all events that can be triggered from the Notifier panel. Due this flexibility, configurator user can configure an alarm for each event he wants to have an alarm.



5.1.2. Milestone rules

Also, configurator user can use these events to trigger specific rules:



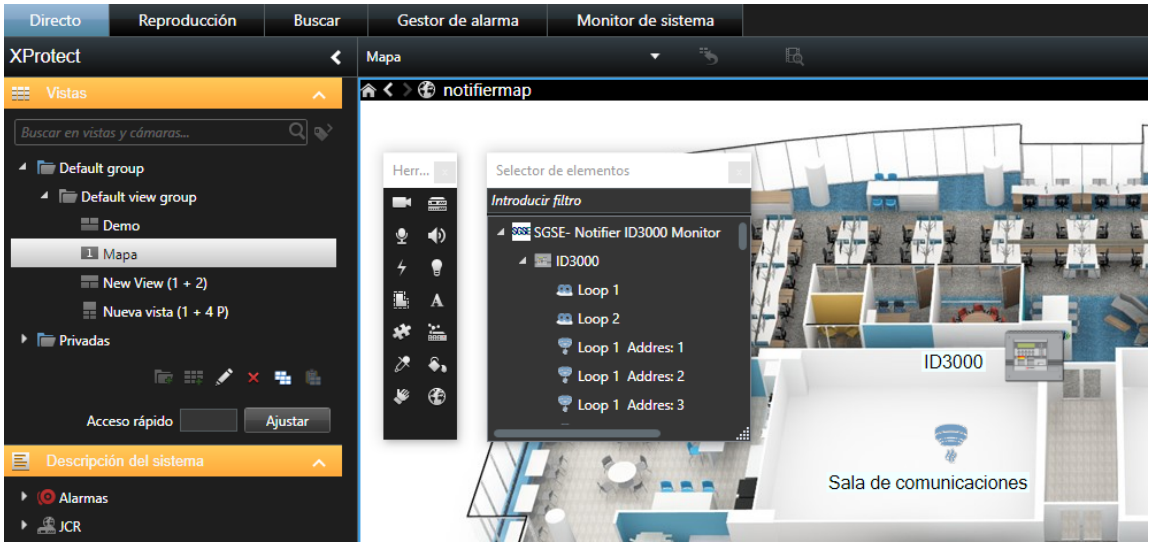
5.1.3. Milestone Smart Client

The plugin also allows us to retrieve the type of sensor parameterized in the fire panel, so that the icon that is shown in the Map, which gives us the clearest interpretation of the Fire installation.

AS follow you can see the different icons:

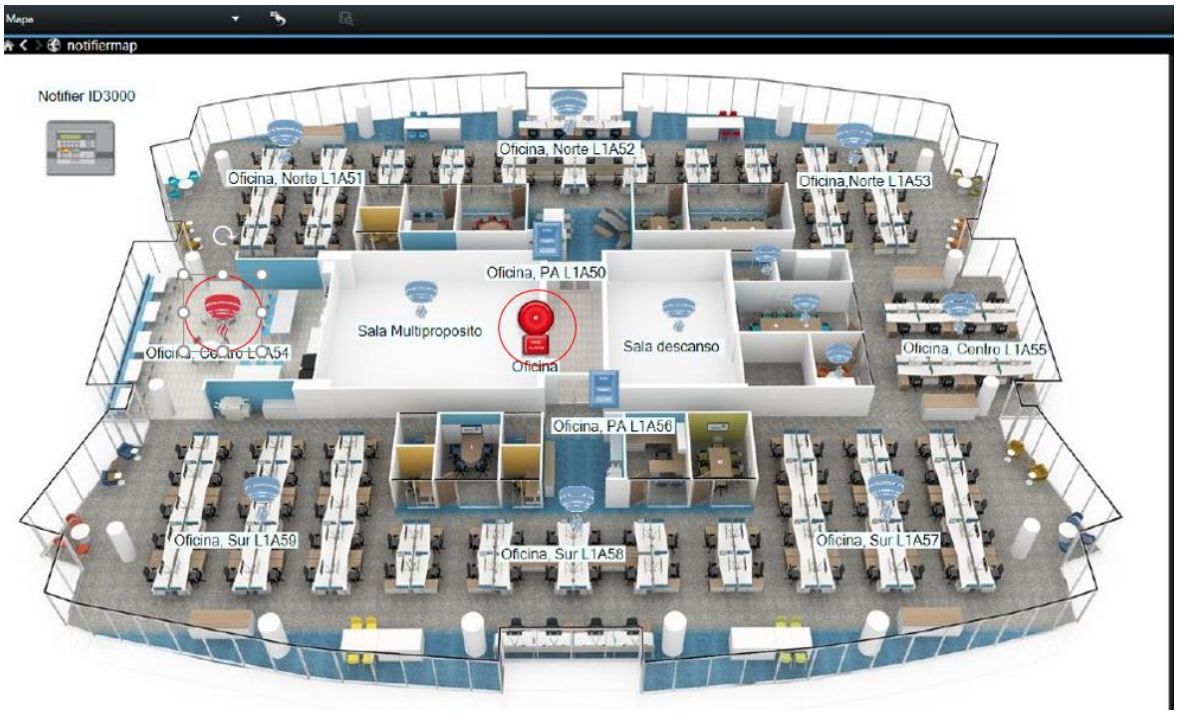
Fire Panel	
Loop	
PSU	
Detector	
Manual call point	
Module	
Bell	
Zone	

If items were created correctly, configurator user will be able to drag and drop the items (panel, Manual call points, fire detectors, modules…) in a map into the Milestone Smart Client:



Creating a visual scenario to control the operations of Notifier Panel.

If an alarm is triggered, operator user will see that the source item of the alarm is marked with a blinky red circle:



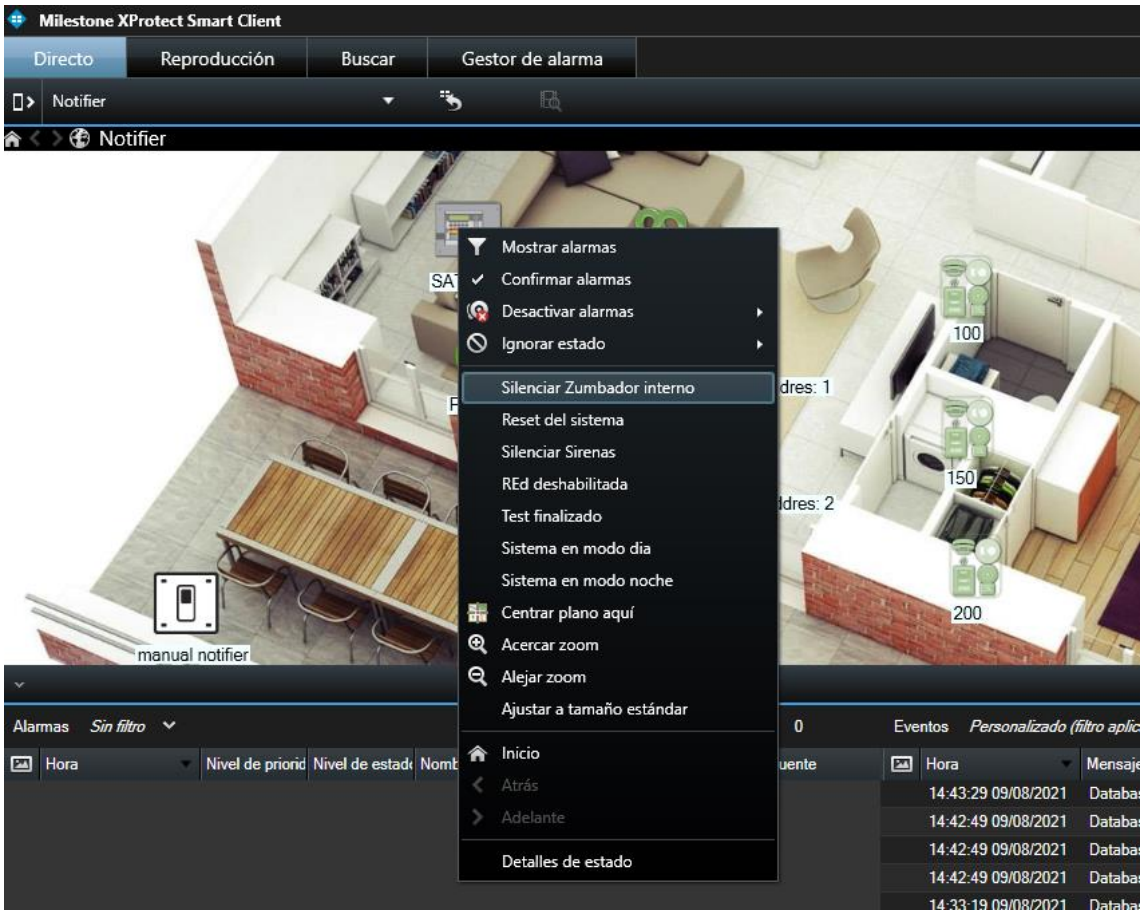
6. Operations

Operator user can send commands to:

a) The central itself
b) Detectors
c) Manual Call points
d) Modules
e) Bells
f) Zones
g) PSU

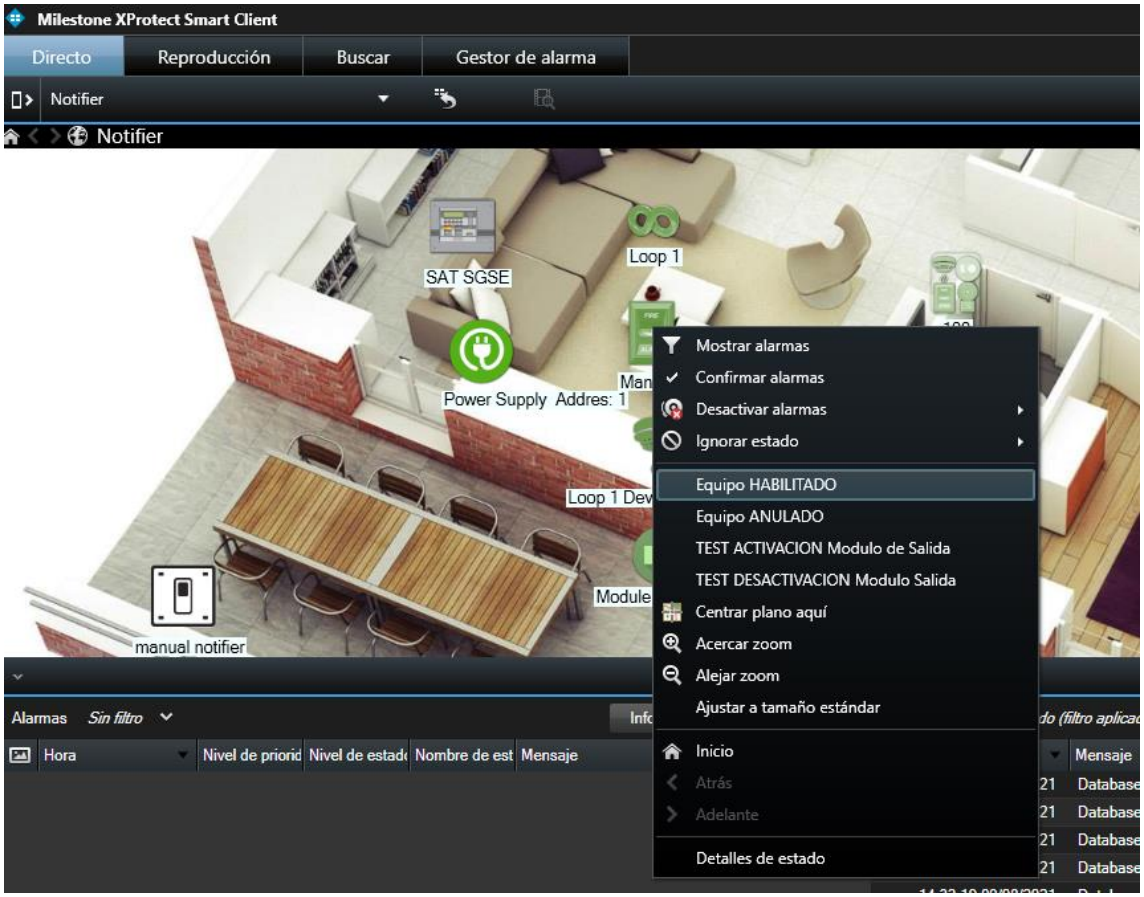
In the map with the icons, operator has to right click over the icon and the system will show the available commands for the selected item.

a) The central itself has the follows commands:
   - Mute internal buzzer
   - System Reset
   - Silence Sounders
   - Power restart
   - Terminate Test
   - System in day mode
   - System in night mode



b) Detectors, manual call points, modules and bells have the following commands:

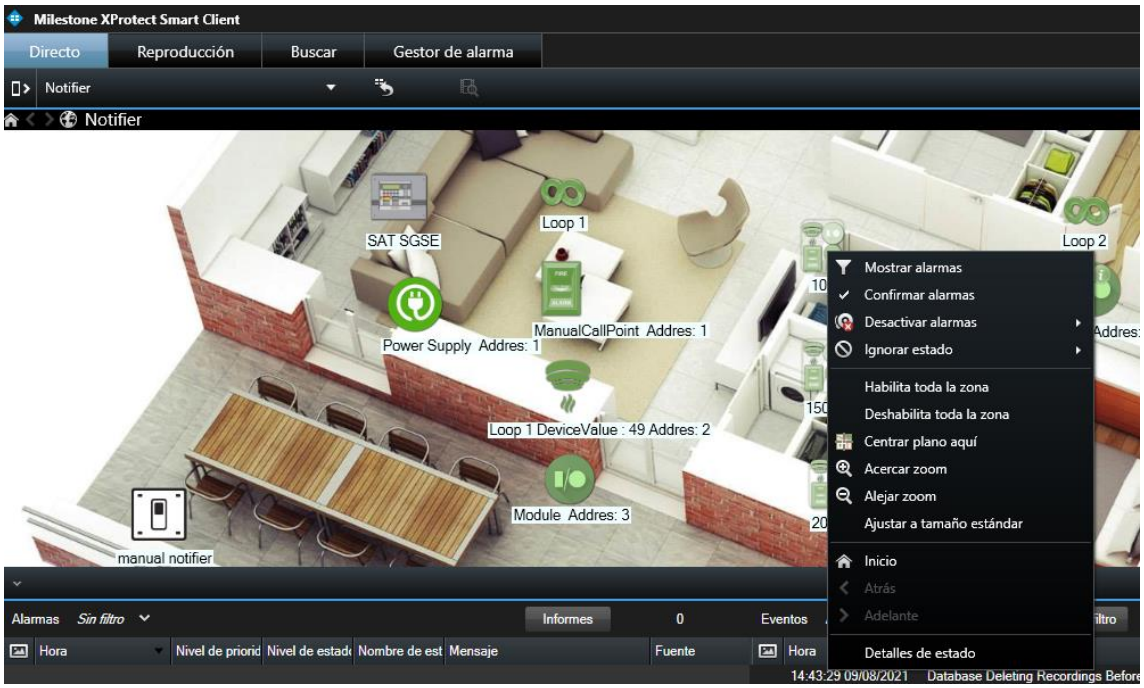
- Device enabled
- Device disabled
- Output module test activation
- Output module test de-activation



c) Zone:

Each zone has the following commands:

- Enable
- Disable



7. Troubleshooting

- The Notifier doesn't receive commands, or it doesn't send events
  - Check the network configuration.
  - To confirm that the problem could be the network, connect the Notifier directly to the PC where the Milestone Event Server is running (the cables of the UTP-5 cable have to be crossed).
- Map in Milestone Smart Client shows crosses instead of the right icon
  - Delete the icon and add it again. This can happen when an item in the Milestone Management Client is deleted and created again.
- There are no alarms
  - Check in the Milestone Management Client that the alarm is related to the right event.
- There are no events neither any alarms
  - Check that serial to ethernet converter is properly configured to start connection to Milestone and to accept connections from Milestone, to send data to and from the Notifier.
  - Restart the Milestone Event Server and check the network.
- With multiple connections, only one works.
  - Verify that each connection is not trying to open the same local port to listen to incoming messages.