

SGSE

Soluciones Globales de Seguridad Electrónica

PROBE MONITOR PLUGIN

User guide

User guide for the installation of the PROBE Monitor Plugin
and interaction with the W&T Series Probes into Milestone XProtect

Index

1. Document versions	2
2. Introduction	3
3. Architecture.....	4
4. Installation.....	5
Probe Installation (Serial to Ethernet Communications)	5
Manual activation of DHCP	5
Assigning the IP using the ARP command.....	5
Home	7
Login	8
Basic Settings.....	8
Network.....	8
HTTP or HTTPS.....	9
Password	9
Plugin installation.....	9
Plugin License process Getting a UID	12
5. Configuration.....	14
Set up a PROBE.....	14
5.1.1. Milestone alarms.....	18
5.1.2. Milestone rules.....	19
5.1.3. Milestone Smart Client.....	20
6. Troubleshooting	23

1. Document versions

Version	Date	Author	Changes in the version
1.0	22/11/2021	JCR	First version (English)
1.1	23/11/2021	JCR	link

2. Introduction

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

This solution consists of a plug in allows to monitor and interact with Milestone software included in the solution, from the user interface and the working environment of the Xprotect platform ® of Milestone.

The PROBE plugin application is designed specifically to provide the Management procedure from Milestone Xprotect software to PROBE sensors (Temperature, Humidity, Pressure) . It's the bridge between Milestone system and panels devices from PROBE.

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

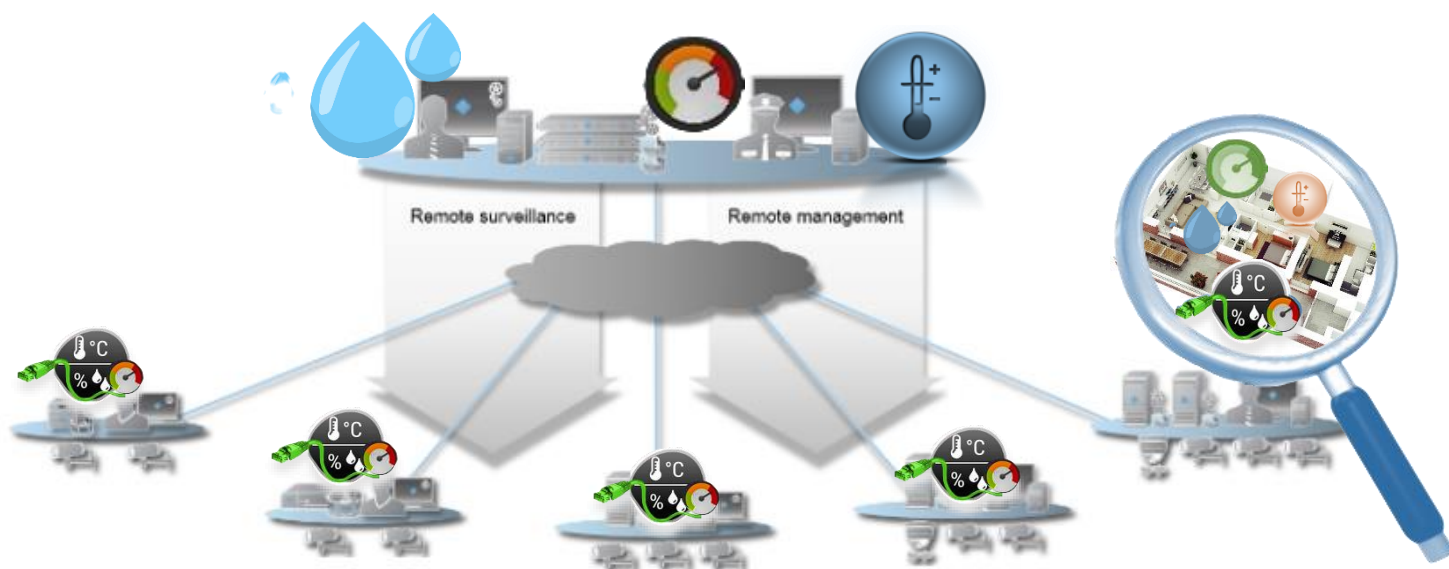
Simplicity, When the plugin stablish connection with Sensors, configuration's data can be taking from Probe and include these like a part of the Xprotect devices; including description text and all relevant data from the probe. ***Just only four parameters must be introduce are ip, port, user, password.***

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

For more information, you can click this link. <http://www.sgse.eu/plugins-de-integracion-en-milestone/>

3. Architecture

The Plugin and the PROBE panel communicate using the **Third-Party Protocol**. The Plugin is able to send status to the PROBE, i.e.: enable, disable, etc. And it listens for the PROBE events, for instance: faults, alarms, etc. When an event is triggered, the Plugin informs it to Milestone. Then, due 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 probe can be connected to Ethernet with the possibility to power over ethernet in this case installation cost is very low

4. Installation

Probe Installation (Serial to Ethernet Communications)

DHCP protocol is activated by the factory default settings, so that in network environments dynamic IP assignment is sufficient for connecting the device to the network. The following parameters can be assigned using DHCP:

- IP address
- Subnet mask
- Gateway address
- DNS-Server

Manual activation of DHCP

To prevent unintended address assignments or address changes, DHCP protocol is automatically deactivated when using all other methods for assigning the IP parameters. The following methods are then available for later activation of DHCP.

- Management-Tool WuTility

Select the desired device from the device list and click on the IP Address button. In the following dialog check the option DHCP and then click on Next.

- WBM configuration

In the menu branch Basic settings → Network → TCP/IP Settings you can activate DHCP protocol.

A set static IP address is deleted after DHCP is activated and the associated automatic reset. The device automatically sets this to 0.0.0.0 and starts sending DHCP requests.

Assigning the IP using the ARP command

Requirements This method can only be used if the device does not already have an IP address, i.e. the entry is 0.0.0.0. To change an IP address, use one of the other methods described in this section or use the configuration menu over web based management. If the device has any other value, this access is disabled.

When the factory setting is in effect as well as after a manual changeover from static to DHCP, the method for assigning the IP described in this section functions only after a delay of approx. 2 minutes after a reset or after power-up.

This method does not work across networks, e.g. through routers. This means the PC and device used for assigning must be connected to the same physical network segment. Only IP addresses whose Net-ID is identical to that of the assigning computer can be assigned.

To avoid unintended changes to the IP address, the DHCP client of the Com-Server is automatically deactivated when configuring using a static ARP entry

Step 1

Read off the Ethernet address of the device from the sticker on the side of the housing.

58xxx [Typ] EN=00c03d004a05 OK xxxxxx Ethernet address

Insert a static entry into the ARP table of the computer using the following command line: arp -s [IP address] [Ethernet address]

E.g. under Windows:

```
arp -s 172.16.231.10 00-C0-3D-00-12-FF
```

E.g. under UNIX/Linux:

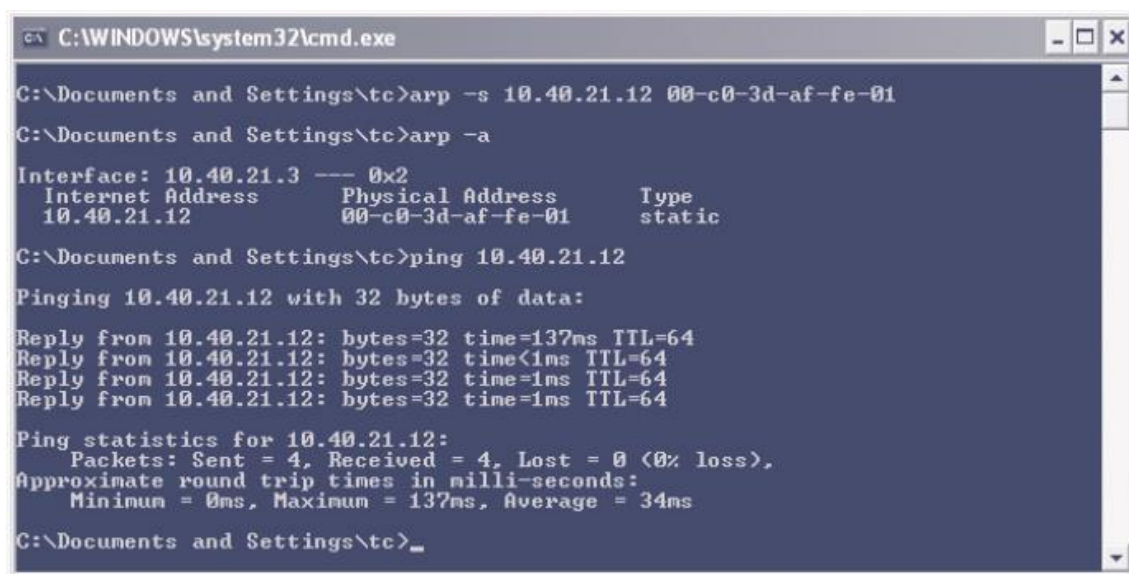
```
arp -s 172.16.231.10 00:C0:3D:00:12:FF 25
```

The IP addresses must be without leading zeros in all Windows environments. Otherwise the entry is incorrectly interpreted by the system and an incorrect IP address is assigned to the device. In Windows Vista and newer the prompt cmd.exe necessary for invoking the ARP command must be started using Administrator rights.

Step 2

Use the following command line to ping the device with the desired IP address:

ping 10.40.21.12



```
C:\WINDOWS\system32\cmd.exe

C:\Documents and Settings\tc>arp -s 10.40.21.12 00-c0-3d-af-fe-01
C:\Documents and Settings\tc>arp -a

Interface: 10.40.21.3 --- 0x2
    Internet Address      Physical Address      Type
    10.40.21.12           00-c0-3d-af-fe-01    static

C:\Documents and Settings\tc>ping 10.40.21.12

Pinging 10.40.21.12 with 32 bytes of data:

Reply from 10.40.21.12: bytes=32 time=137ms TTL=64
Reply from 10.40.21.12: bytes=32 time<1ms TTL=64
Reply from 10.40.21.12: bytes=32 time=1ms TTL=64
Reply from 10.40.21.12: bytes=32 time=1ms TTL=64

Ping statistics for 10.40.21.12:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 137ms, Average = 34ms

C:\Documents and Settings\tc>
```

The device takes the IP address of the first network packet sent to it as its own and saves it in non-volatile memory. The ping requests of the PC are then replied.

It is not possible to configure the subnet mask and gateway address using a static ARP entry. These need to be set in a separate Telnet configuration session (see section Basic Configuration of the device).

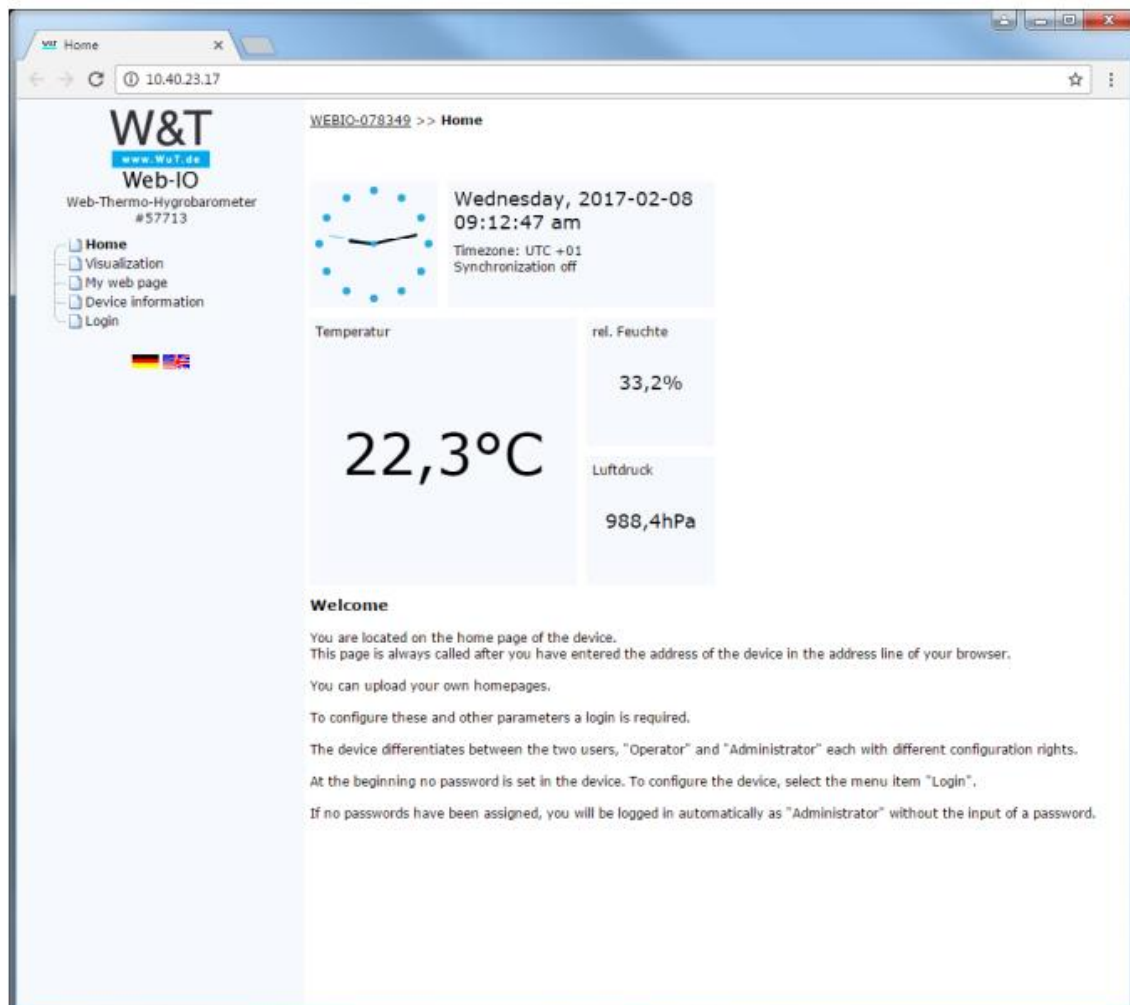
Ethernet interface The Web-Thermometer incorporates an IEEE 802.3-compatible network interface.

Configuration Using Web-Based Management

The remaining configuration is done using the web page of the device. To open this, enter the assigned IP address in the address line of your web browser:

http:// <IpAddress>

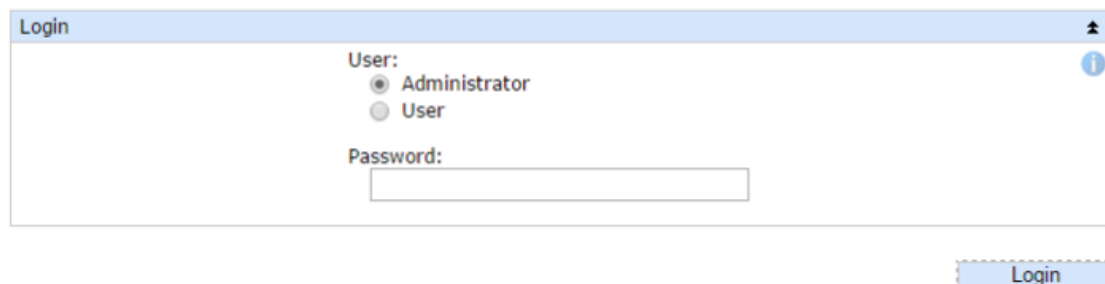
Home



Log in

[WEBIO-07255D](#) >> **Login**

Login



The Login dialog gives you access to the device configuration. The device differentiates between an administrator and a standard user with different access rights. As shipped the device has no password configured. Select the administrator or user and click on “Login”. The menu tree with all the configuration parameters is now shown. To get additional information about the respective configuration parameter, click on the Info button on the right border of the corresponding parameter.



Basic Settings

This configuration area is where you make all the settings needed for the various operating modes.

[WEBIO-078349](#) >> **Basic-Settings**

Basic-Settings

Here you are able to set the basic configuration.

Network	Set the network basic parameters here.
Password	You may optionally set password protection for access to the configuration. You can set a password for an administrator user and for a standard user. The standard user has no access right to device system settings such as changing network parameters, etc.

Network

Here is where you set the network basic parameters. You can choose between automatic address assignment per DHCP or manual configuration of the parameters. If you wish to configure communication parameters with names instead of IP addresses in the further configuration, you can configure additional DNS servers here in addition to any DNS server which is assigned via DHCP.

HTTP or HTTPS

The default HTTP configuration for browser access is port 80. To change access to HTTPS or change the port, select Basic-Settings » Network in the navigation tree, and then select 36 W&T Protocol in Access for web services. All other settings relating to the display in the browser can be made under web pages. Setting the system ports and maintenance accesses The ports activated here facilitate maintenance and configuration. To meet specific security requirements, the ports could be disabled.

Password

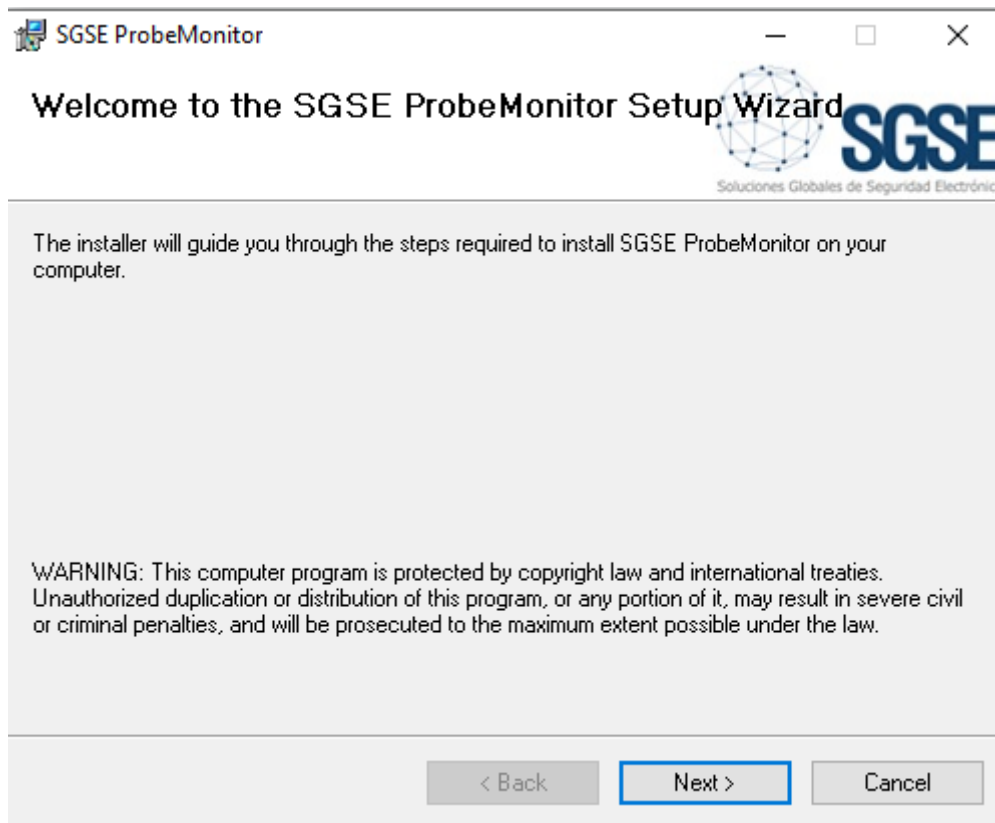
Set up optional password protection for access to the configuration. You can set a password for an administrator-user and for an operator-user. The operator-user has no access rights to system settings for the device, such as changing network parameters etc.

If you assign an administrator password, it must be stored for IP address changes via WuTility or firmware updates

c

Plugin installation

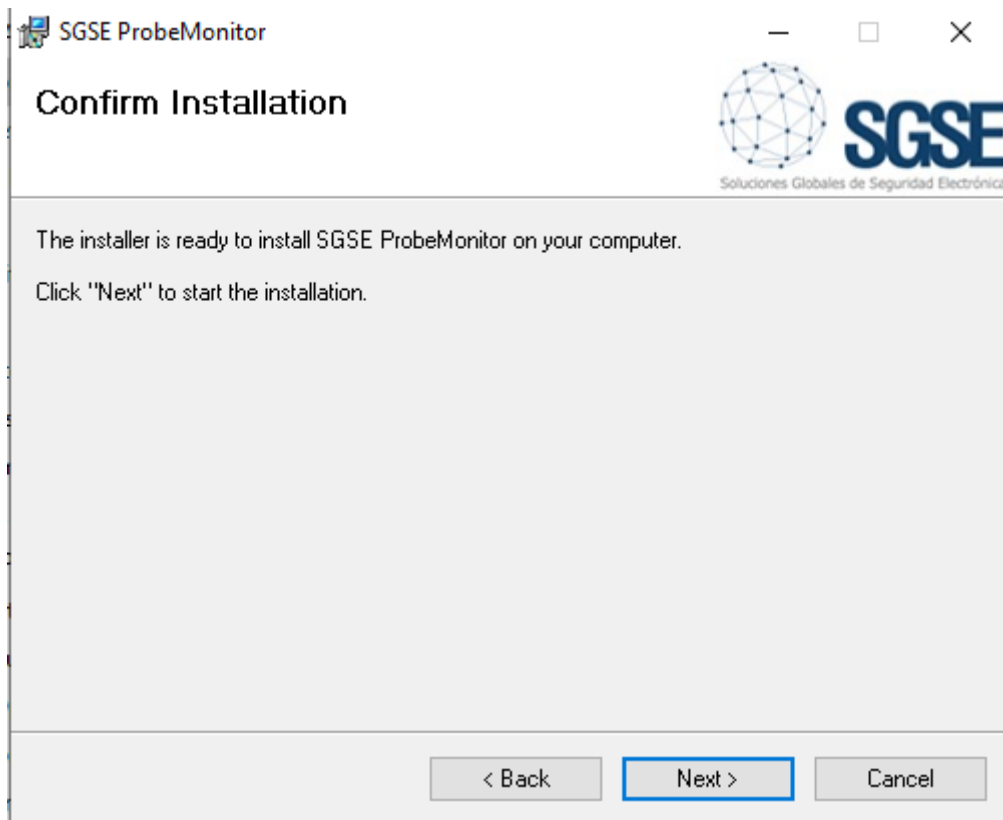
To install the plugin, simply execute with administrator rights the installer "SGSE-XOLogic_Installer.msi" provided by SGSE. The process is automatic. Throughout the different screens of the installer, we will only have to accept the End User License Agreement, a mandatory condition to be able to use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



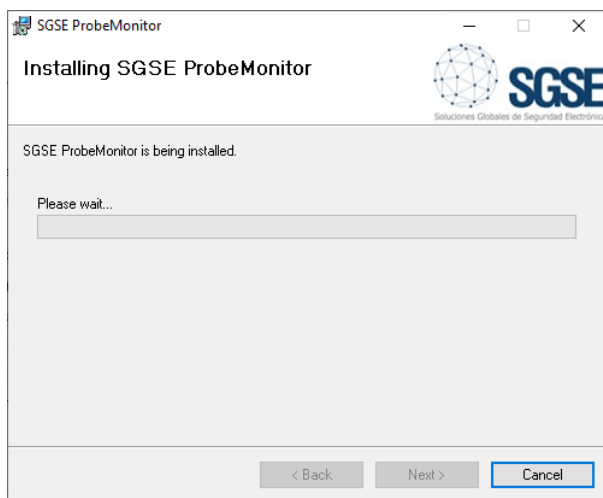
Click "Next >" to start the installation process.



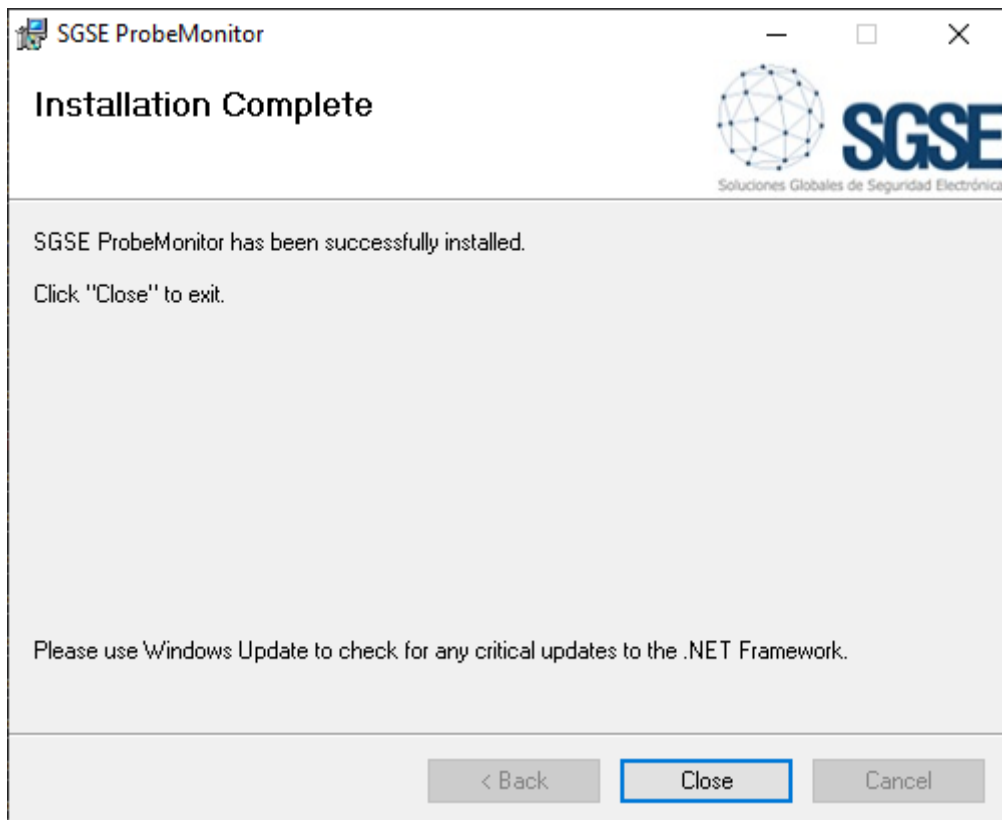
You will have to read and accept the End User License Agreement in order to proceed with installation.



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](#)

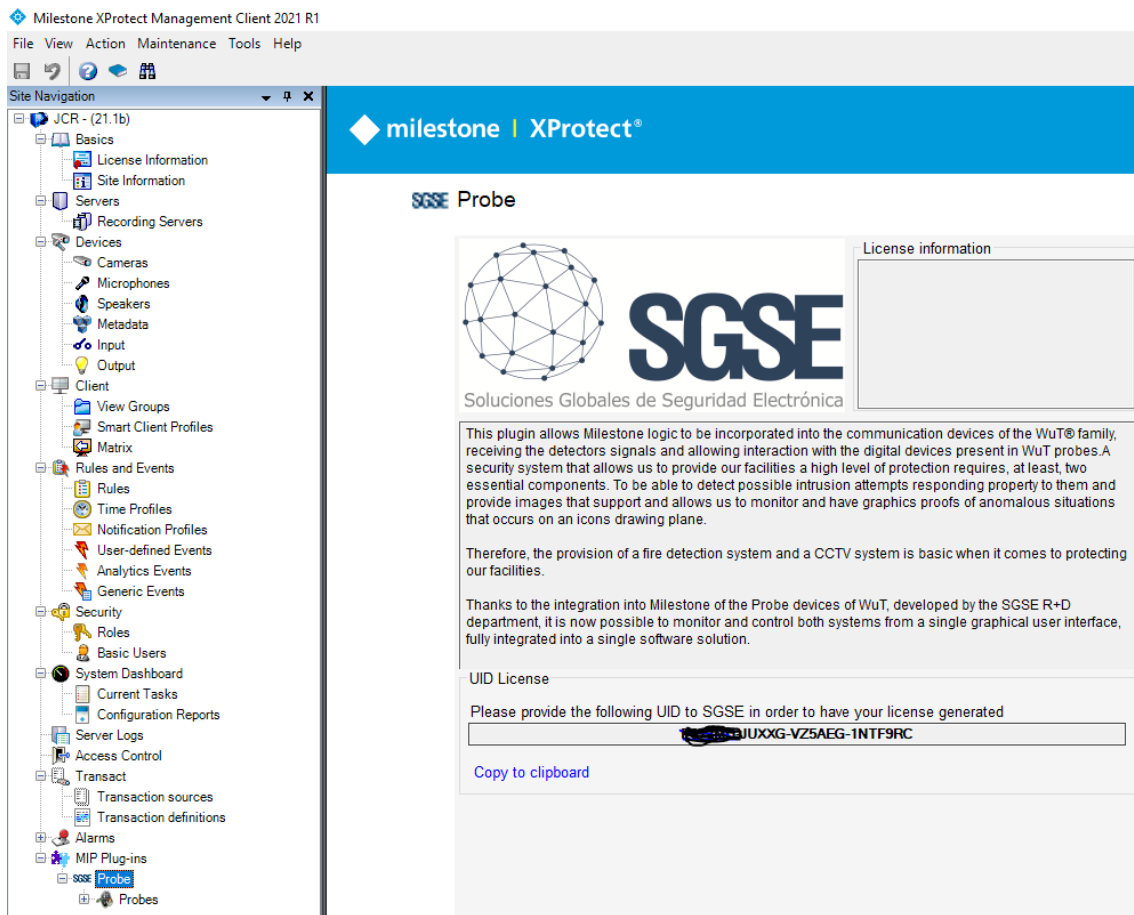
The plugin needs a license to run. Each panel must be licensed. These licenses are generated by SGSE. The procedure to obtain the license file corresponding to the acquired license is described below.

In order to generate the license, you must provide the corresponding UID. This UID is an unique identifier to which the license is in bound.

To get this code, you have to run XProtect® Management Client 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.



milestone | XProtect®

SGSE Probe

License information

SGSE
Soluciones Globales de Seguridad Electrónica

This plugin allows Milestone logic to be incorporated into the communication devices of the WuT® family, receiving the detectors signals and allowing interaction with the digital devices present in WuT probes. A security system that allows us to provide our facilities a high level of protection requires, at least, two essential components. To be able to detect possible intrusion attempts responding properly to them and provide images that support and allows us to monitor and have graphics proofs of anomalous situations that occurs on an icons drawing plane.

Therefore, the provision of a fire detection system and a CCTV system is basic when it comes to protecting our facilities.

Thanks to the integration into Milestone of the Probe devices of WuT, developed by the SGSE R+D department, it is now possible to monitor and control both systems from a single graphical user interface, fully integrated into a single software solution.

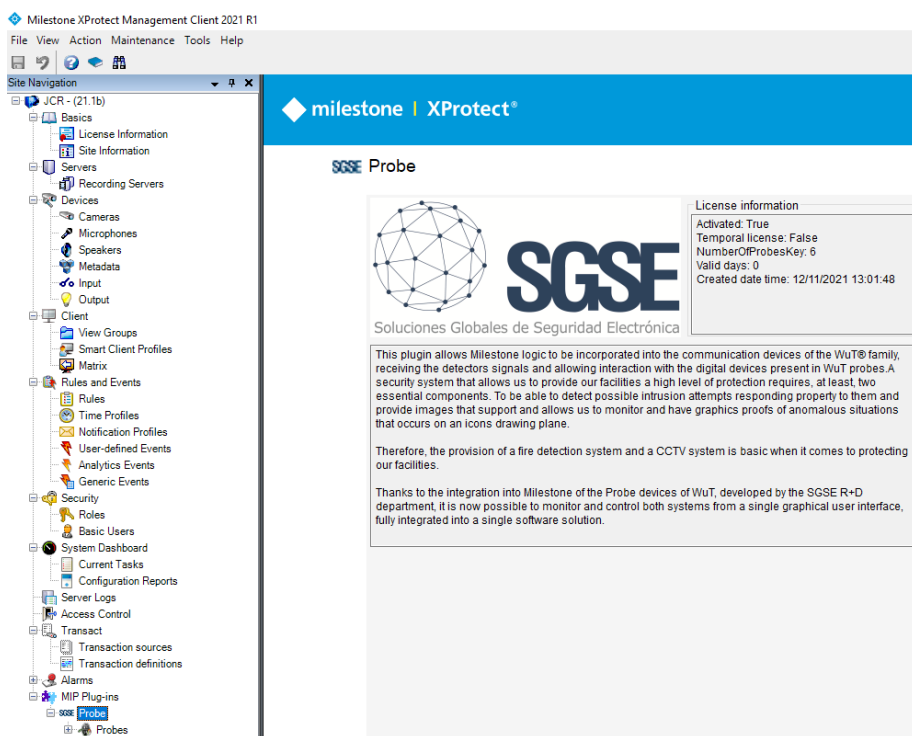
UID License

Please provide the following UID to SGSE in order to have your license generated

XXXXXXXX-VZ5AEG-1NTF9RC

[Copy to clipboard](#)

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



milestone | XProtect®

SGSE Probe

License information

SGSE
Soluciones Globales de Seguridad Electrónica

This plugin allows Milestone logic to be incorporated into the communication devices of the WuT® family, receiving the detectors signals and allowing interaction with the digital devices present in WuT probes. A security system that allows us to provide our facilities a high level of protection requires, at least, two essential components. To be able to detect possible intrusion attempts responding properly to them and provide images that support and allows us to monitor and have graphics proofs of anomalous situations that occurs on an icons drawing plane.

Therefore, the provision of a fire detection system and a CCTV system is basic when it comes to protecting our facilities.

Thanks to the integration into Milestone of the Probe devices of WuT, developed by the SGSE R+D department, it is now possible to monitor and control both systems from a single graphical user interface, fully integrated into a single software solution.

Activated: True
Temporal license: False
NumberOfProbesKey: 6
Valid days: 0
Created date time: 12/11/2021 13:01:48

5. Configuration

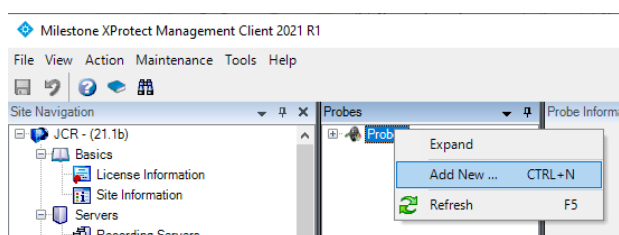
The plugin has been designed to simplify as much as possible its configuration process, so that the start-up is as simple as possible for the installer.

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

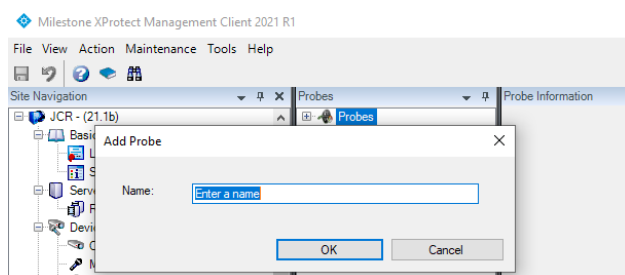
Set up a PROBE

To set up a PROBE in Milestone, the procedure is extremely simple.

Select Add new



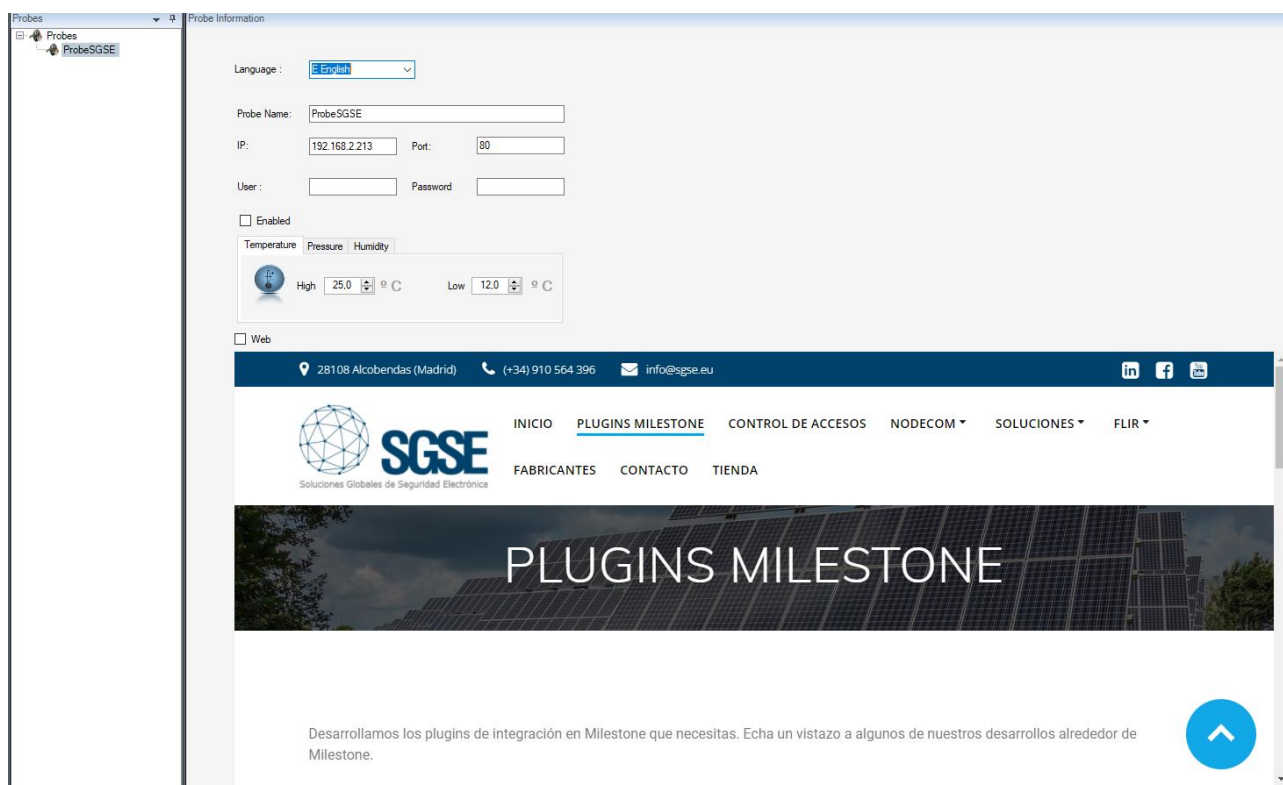
After click “Add new” write the assign a name to the PROBE Panel and click OK (Submit).



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:

Screen is divided in three different parts:

- Connection parameters of Probe .
- Sensors values for create actions in the platforms; two indicators value Low and High are the target to evaluated, when this values are over taken platform execute the actions and or alarms programmed.
- View Screen ;



Language :

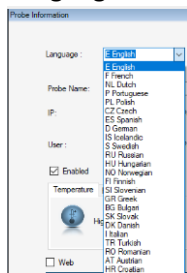
Probe Name:

IP: Port:

User : Password

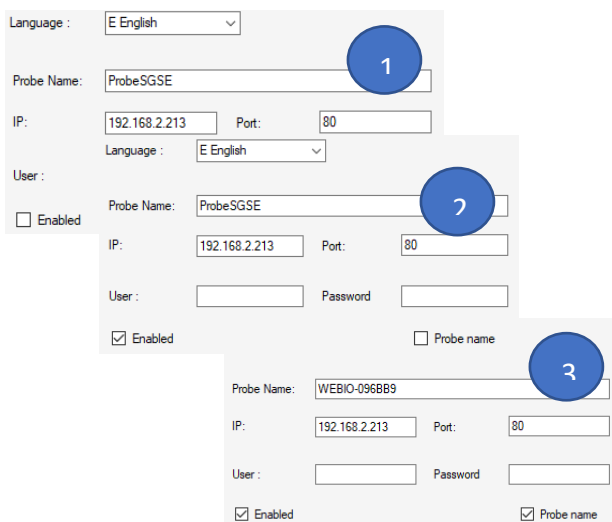
☐ Enabled

- Language: change the labels of the parameters to the language selected.



- Name of the PROBE panel; You can write or you can read from the Probe when all parameters are fill in and the communications with the Probe is active/correct.
- Listening port; see step “Configure the primary IP for alarm report” in the [“Ethernet module”](#) section

- IP address assigned to the PROBE panel; see step “Configure the PROBE panel IP address” in the “[Ethernet module](#)” section.
- Client port; see step “Enable the PROBE panel control” in the “[Ethernet module](#)” section.
- Listening port; see step “Configure the primary IP for alarm report” in the “[Ethernet module](#)” section.
- Client port; see step “Enable the SIA control” in the “[Ethernet module](#)” section.
- Password; this is for protocol communication.
- User; this is for protocol communication.
- Enable; Active or de-active the communication. If you click “enabled button” and the communication with the probe is ok a new check box is showed in the plugin offering the possibility of capture the name of the probe, the name probe has in its memory.



Language : E English

Probe Name: ProbeSGSE

IP: 192.168.2.213 Port: 80

Language : E English

User :

☐ Enabled

Probe Name: ProbeSGSE

IP: 192.168.2.213 Port: 80

User : Password :

☒ Enabled ☐ Probe name

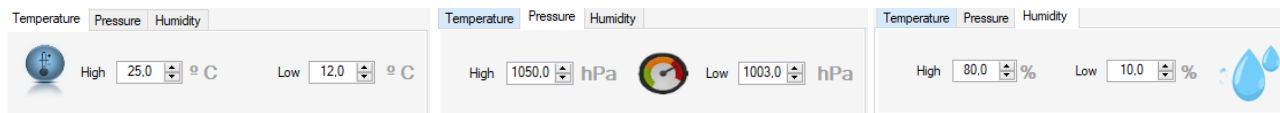
Probe Name: WEBIO-096BB9

IP: 192.168.2.213 Port: 80

User : Password :

☒ Enabled ☒ Probe name

Now is turn to stablish the control levels high and Low in the respective sensors of temperature, pressure and humidity. Check the levels and select the correct one you consider best suited to your needs.



Temperature Pressure Humidity

High 25.0 °C Low 12.0 °C

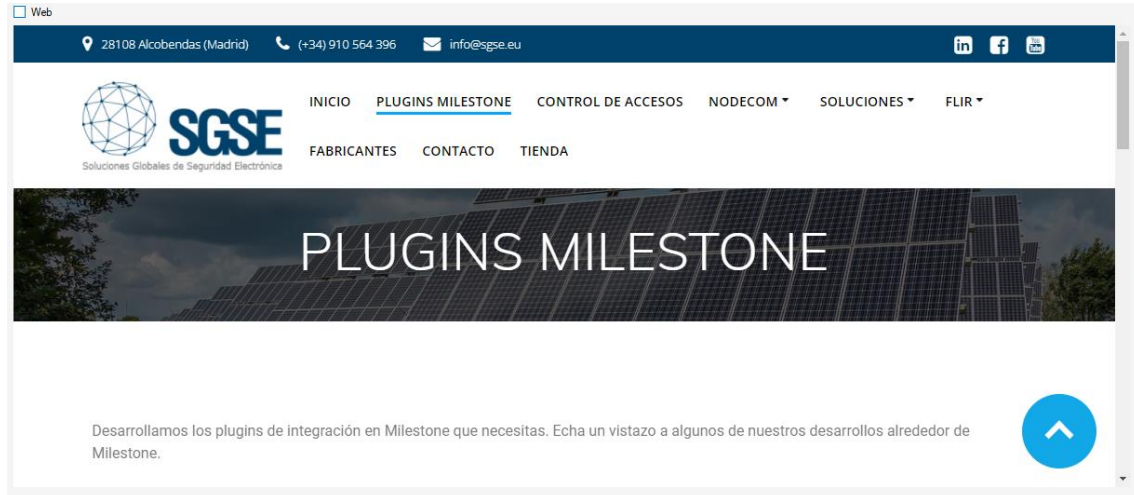
Temperature Pressure Humidity

High 1050.0 hPa Low 1003.0 hPa

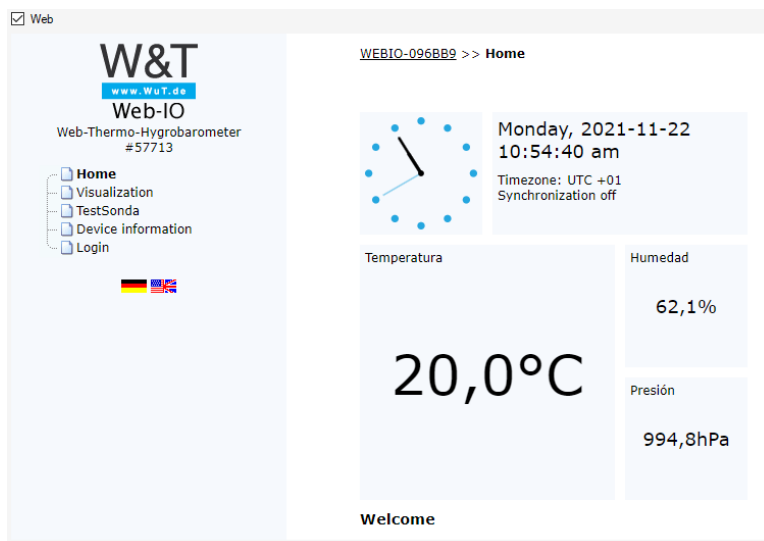
Temperature Pressure Humidity

High 80.0 % Low 10.0 %

In the last part of this screen you can see a check button “Web” that permit you connect with the probe if all parameters are ok (ip, port,...).

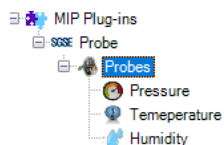


In the last part of this screen you can see a check button that permit you connect with the probe if all parameters are ok (ip, port,...). When you click the screen change and show you the probe, from this moment, you can parametrizes the probe, changing all valuers, parameters, names and so on from our plugin.



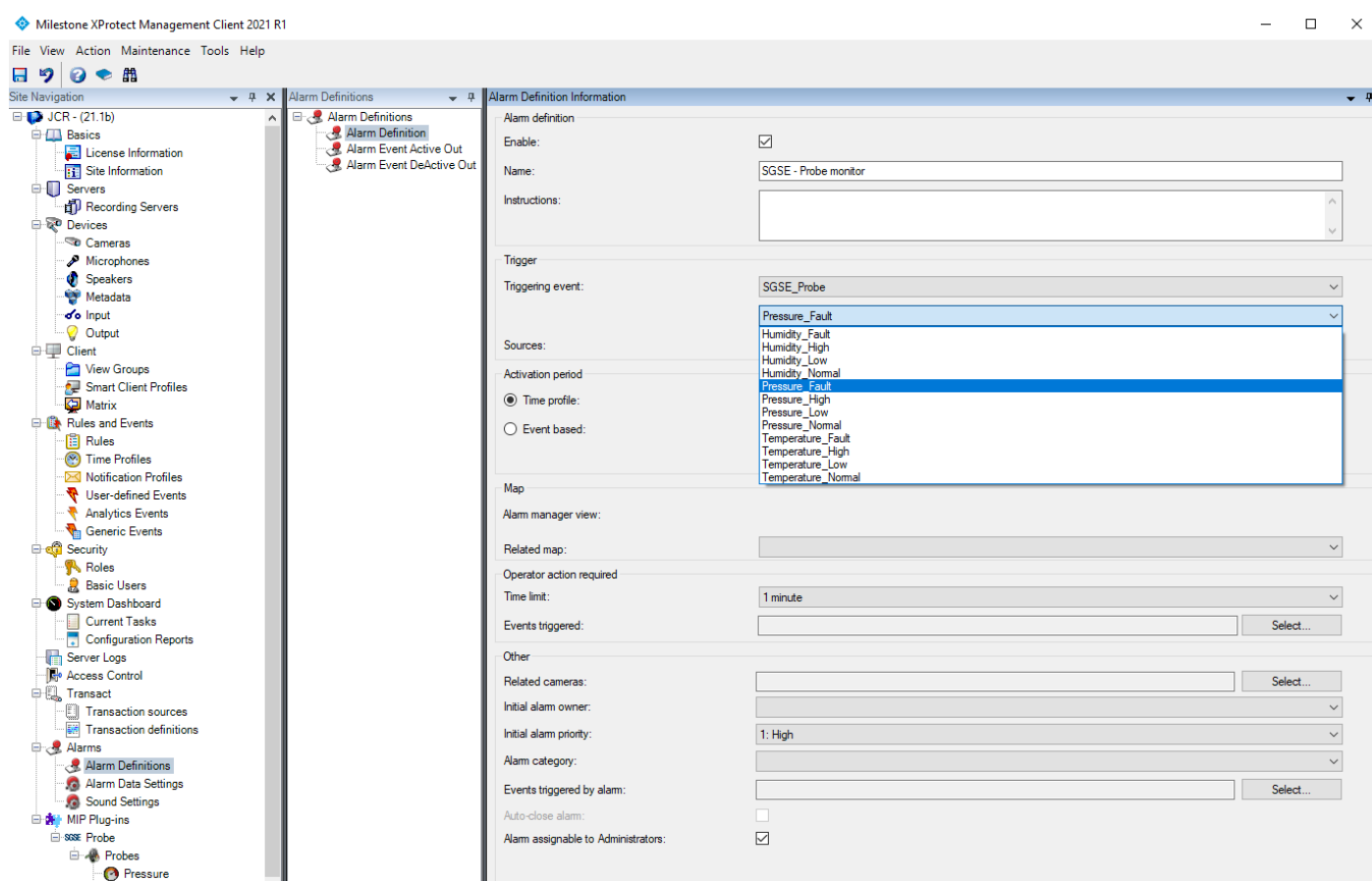
After saving changes , the plugin will try to connect automatically with the PROBE and, if everything is properly configured, it will import the PROBE sensors state of each element (temperature, pressure and humidity).

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



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 PROBE panel. Due this flexibility, configurator user can configure an alarm for each event he wants to have an alarm.



Milestone XProtect Management Client 2021 R1

File View Action Maintenance Tools Help

Site Navigation

- JCR - (21.1b)
 - Basics
 - License Information
 - Site Information
 - Servers
 - Recording Servers
 - Devices
 - Cameras
 - Microphones
 - Speakers
 - Metadata
 - Input
 - Output
 - Client
 - View Groups
 - Smart Client Profiles
 - Matrix
 - Rules and Events
 - Rules
 - Time Profiles
 - Notification Profiles
 - User-defined Events
 - Analytics Events
 - Generic Events
 - Security
 - Roles
 - Basic Users
 - System Dashboard
 - Current Tasks
 - Configuration Reports
 - Server Logs
 - Access Control
 - Transact
 - Transaction sources
 - Transaction definitions
 - Alarms
 - Alarm Definitions
 - Alarm Data Settings
 - Sound Settings

Alarm Definitions

- Alarm Definition
- Alarm Event Active Out
- Alarm Event DeActive Out

Alarm Definition Information

Alarm definition

Enable: ☒

Name: SGSE - Probe monitor

Instructions:

Trigger

Triggering event: SGSE_Probe

Sources:

- Pressure_Fault
- Humidity_Fault
- Humidity_High
- Humidity_Low
- Humidity_Normal
- Pressure_Fault
- Pressure_High
- Pressure_Low
- Pressure_Normal
- Temperature_Fault
- Temperature_High
- Temperature_Low
- Temperature_Normal

Activation period

☒ Time profile:

☐ Event based:

Map

Alarm manager view:

Related map:

Operator action required

Time limit: 1 minute

Events triggered:

Other

Related cameras:

Initial alarm owner:

Initial alarm priority: 1: High

Alarm category:

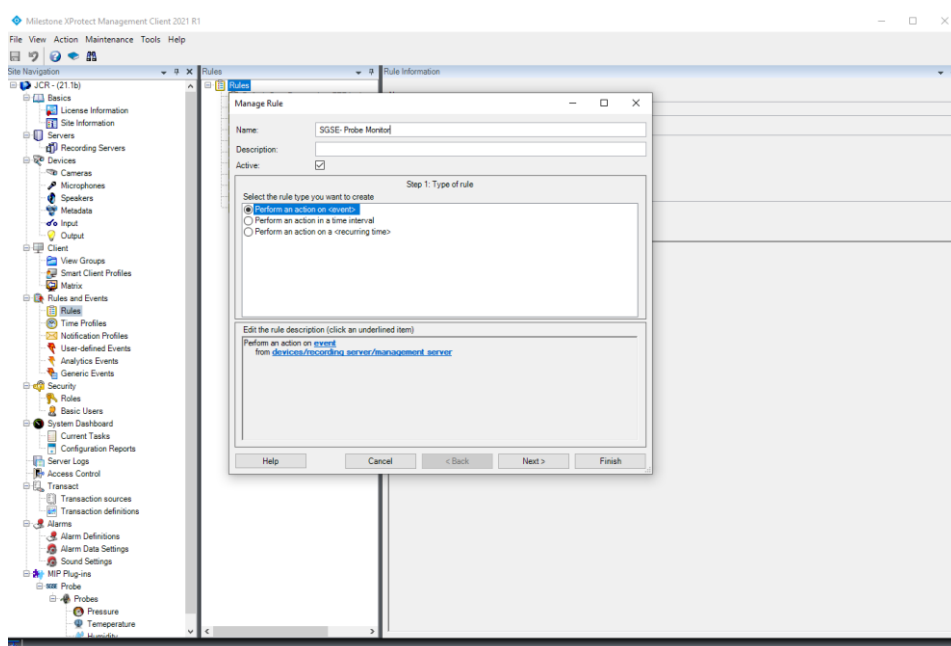
Events triggered by alarm:

Auto-close alarm:

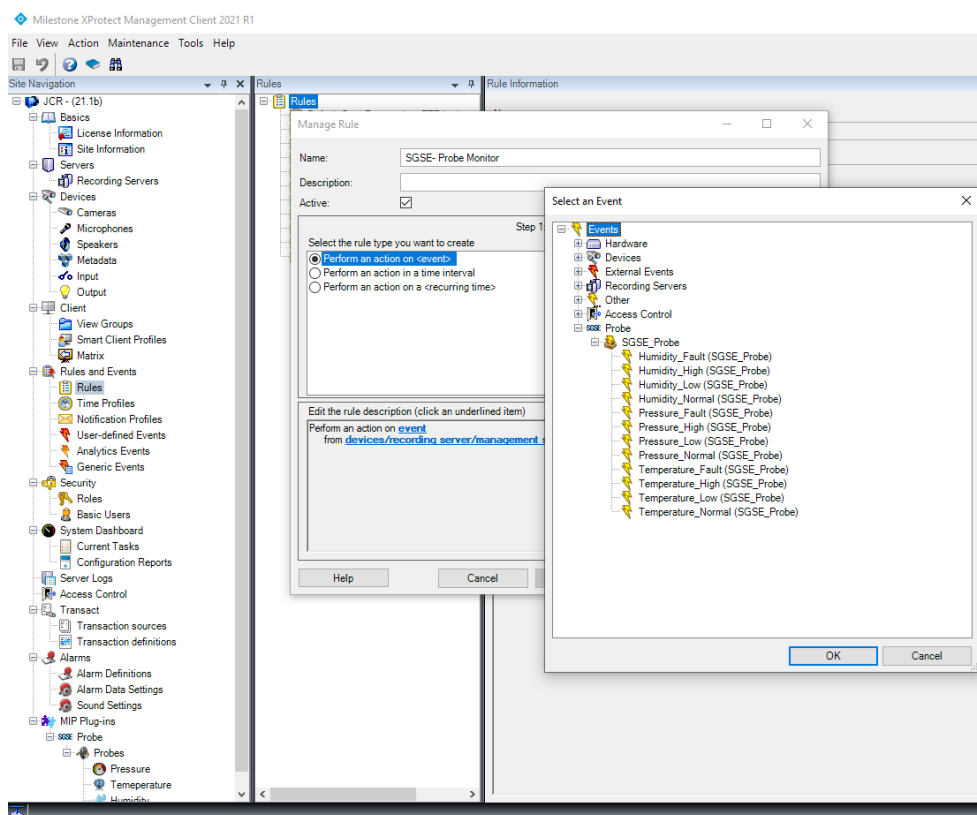
Alarm assignable to Administrators: ☒

5.1.2. Milestone rules

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



From the menu Perform an action on event you can select the status of your rule to perform.



5.1.3. Milestone Smart Client

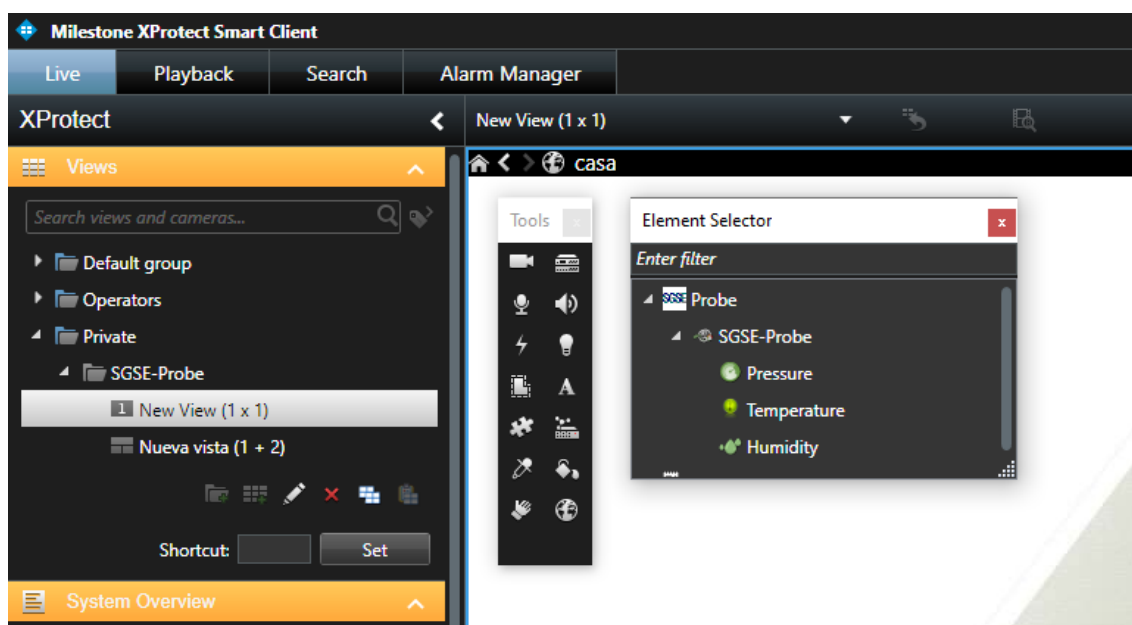
The plugin also allows us to retrieve the type of sensor parameterized in the monitor probe, so that the icon that is shown in the Map, which gives us the clearest interpretation of the probe installation.

AS follow you can see the different icons:

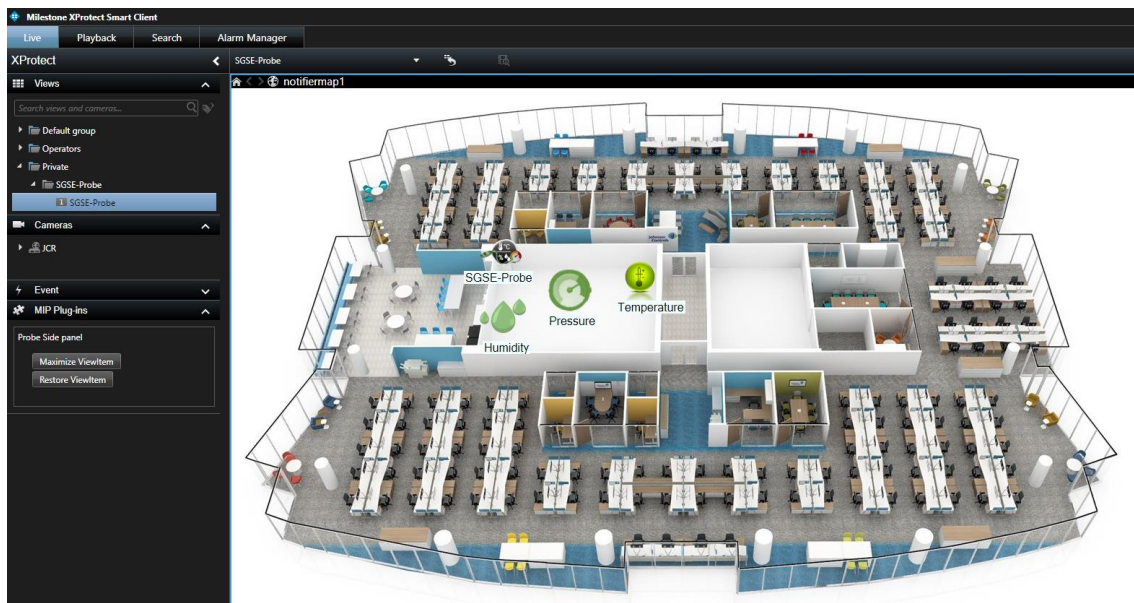
- Humidity
- Pressure
- Probe
- Temperature



If items were created correctly, configurator user will be able to drag and drop the items (temperature sensor, humidity sensor, pressure sensor, ...) in a map into the Milestone Smart Client:



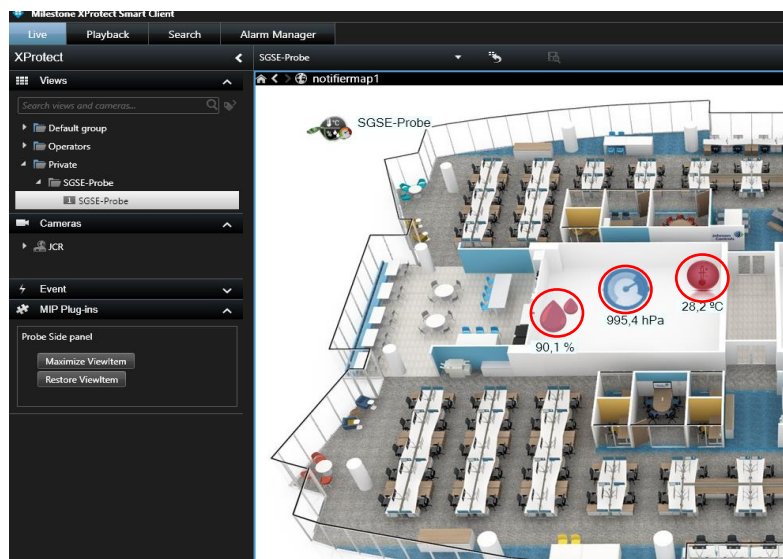
Creating a visual scenario to control the operations of PROBE Panel.



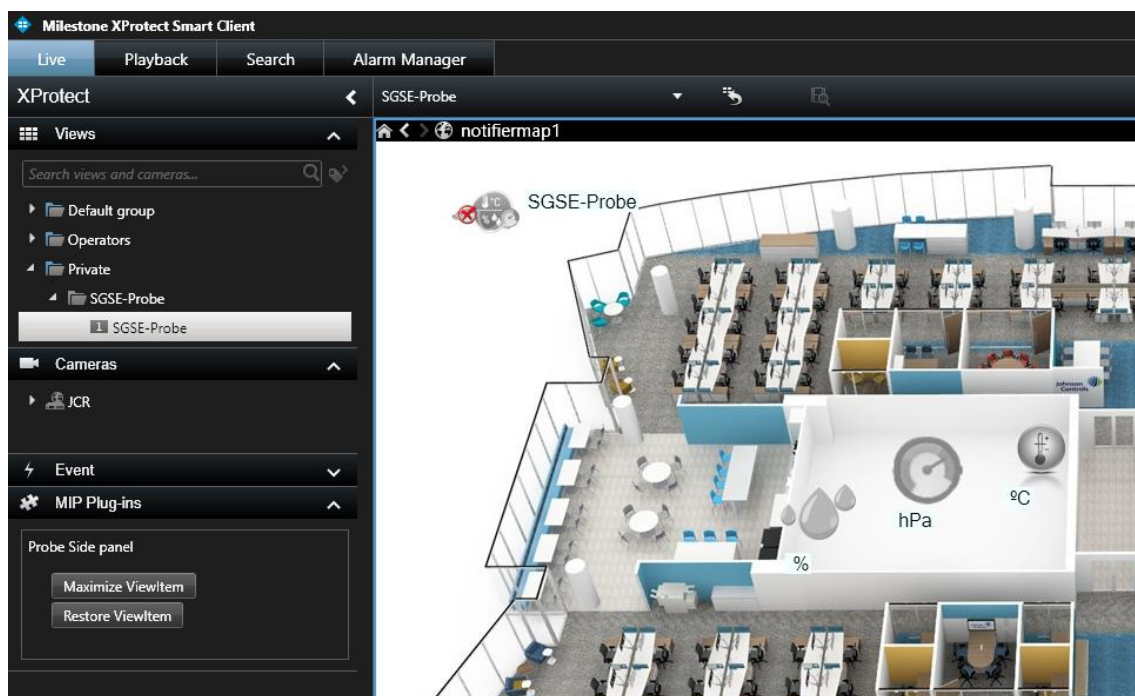
you can see in every moment the values read from the sensor.



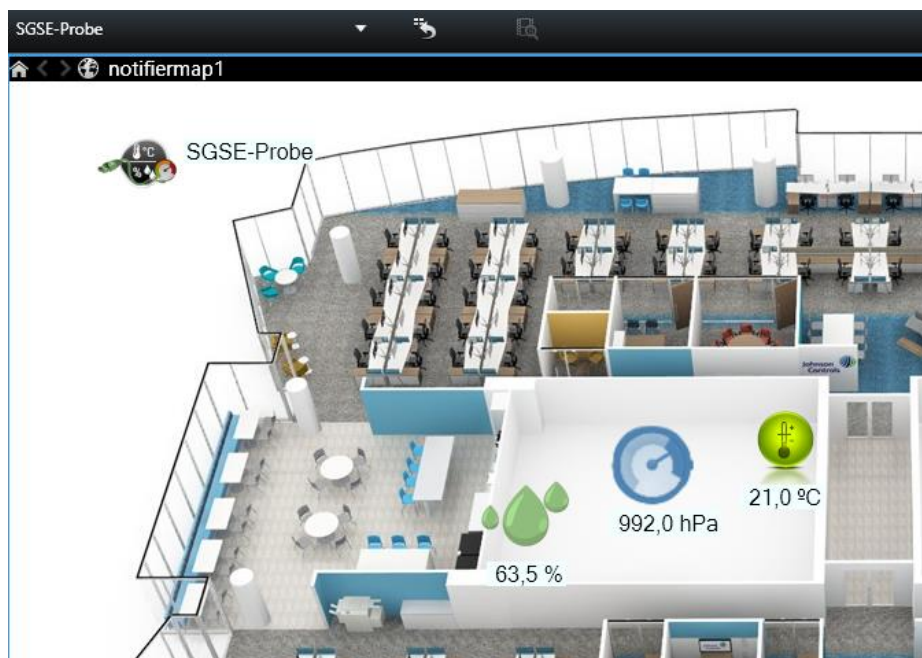
If an alarm is triggered, operator user will see that the source item of the alarm is marked with a blinky red circle:



When the communication between Milestone and Probe fault, sensors and probe show the status fault.



If the communication is reestablished again the icons go back to the current situation.



6. Troubleshooting

- The PROBE 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 PROBE 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 happens 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 alarms
Check that configurator user exited correctly from the engineer mode. Configurator user can also reset from the keypad (menu 51.17.1.1) or can for the reset unplugging power and battery.
Restart the Milestone Event Server and check the network.
- Name of the Monitor probe (plugin) no change when i used the check box "Probe Name"

Check the Ip, port, user, password and the communications between probe and Milestone.

