

## Soluciones Globales de Seguridad Electrónica

# **NODECOM®**

Installer and User Manual



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## 1. Document versions

Version	Date	Author	Changes in the version
1.0	10/2019	JCR	First version (English)
1.1	11/2019	SDA	Initial revision.



## 2. Introduction

The purpose of this document is to explain the operation, installation and use of the software solution called "*Nodecom*".

This solution consists of a plugin that allows to monitor and interact with 4 digital inputs/4 digital outputs devices included in the <u>Nodecom<sup>®</sup> solution</u>, from the user interface and the working environment of the platform XProtect<sup>®</sup> of <u>Milestone</u>.

In this way, we add to the power of XProtect<sup>®</sup> VMS system the capability of monitoring and interacting with Nodecom<sup>®</sup>, network cabinets deployed within the CCTV and security system, making use of its events, alarms and rules system.



## 3. Solution architecture

The architecture of the solution is described in the scheme below:



Through the Ethernet network, the plugin establishes communication with configured devices (Nodecom<sup>®</sup> cabinets).

Once the communication is established, it imports the signal status configuration and keeps the communication channel open to:

- Send commands to the devices
- Ask the devices for the status of elements (inputs, outputs)
- Receive notifications when the status of inputs/outputs change



## 4. Installation

To install the plugin, simply execute with administrator rights the installer "NodecomLogic\_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.

🕼 Nodecom Logic Plugin		_		×
Welcome to the Nodecon	n Logic Plugi	n Setup Wiz		
The installer will guide you through the sta computer.	eps required to insta	II Nodecom Logic Pl	ugin on you	r
WARNING: This computer program is pr Unauthorized duplication or distribution o or criminal penalties, and will be prosecu	otected by copyrigh f this program, or an ted to the maximum	t law and internationa y portion of it, may res extent possible unde	l treaties. sult in sever r the law.	e civil
	Cancel	< Back	Next	>

Click "Next >" to start the installation process.

🛃 Nodecom Logic Plugin		_		×			
License Agreement		Soluciones Gil	SG stales de Segurida	<b>SE</b> d Electrónica			
Please take a moment to read the license agreement now. If you accept the terms below, click "I Agree", then "Next". Otherwise click "Cancel".							
End-User License Agreer	ment (EULA) of Nodecom	Plugin		^			
This End-User License Agreen and Soluciones Globales de S This EULA agreement governs ("Software") directly from Sol indirectly through a Solucione	nent ("EULA") is a legal agreeme eguridad Electrónica (SGSE). ; your acquisition and use of our luciones Globales de Seguridad es Globales de Seguridad Electro	ent between yo Nodecom Plug Electrónica (SGSE) au	 gin software SSE) or thorized	r") ~			
● I Do Not Agree	◯ I Agree						
	Cancel	< Back	Next >	•			

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



🕷 Nodecom Logic Plugin		_		×
Confirm Installation		Soluciones	SC Stobales de Segur	SE
The installer is ready to install Nodecom Lo	gic Plugin on you	r computer.		
Click "Next" to start the installation.				
	Cancel	< Back	Nex	t >

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.

🕼 Nodecom Logic Plugin		_			×
Installation Complete		Soluciones	Globaler	<b>SC</b> de Seguri	SEE ad Electrónica
Nodecom Logic Plugin has been successf	fully installed.				
Click "Close" to exit.					
Please use Windows Update to check for a	any critical updates	s to the .NET Fram	ework		
1	Cancel	< Back		Clos	e

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



## 5. Licensing

The plugin needs a license to run. Each Nodecom<sup>®</sup> cabinet must be licensed. These licenses are generated by SGSE. The procedure to obtain the license file corresponding to the acquired license is described below.

#### A. Getting a UID

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

To get this code, you have to run XProtect<sup>®</sup> 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.



Please provide this UID to SGSE, and you will get your license file generated.



#### B. Applying the license

Please copy the license file into the plugin folder. By default:

```
C:\Program Files\Milestone\MIPPlugins\NodeCom\
```

In case you are working with a XProtect<sup>®</sup> version where you don't have Management Client, but Management Application instead, then you will have to copy the license file to the next folder too:

C:\Program Files (x86)\Milestone\MIPPlugins\NodeCom\

After applying the license, Event Server must be restarted so that changes take effect and we can use the plugin.



See below the result after applying the license.

#### C. Workstations (only SmartClient)

To generate the UID in a workstation where you don't have XProtect<sup>®</sup> Management Client, you will have to use the SGSE tool, "UID Generator".

Please, contact SGSE to get this tool.



## 6. 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.

#### A. Set up a Nodecom<sup>®</sup>

To set up a Nodecom<sup>®</sup> cabinet in Milestone, the procedure is extremely simple.

Select "Add new ... "



After clicking "Add new...", write the name you want to give to the Nodecom<sup>®</sup> cabinet and click "Ok".

Add Nodecom				×
Name:	Enter a name			]
		ОК	Cancel	

Once you have assigned a name to the Nodecom<sup>®</sup> cabinet to identify it in the system, you just have to configure the needed parameters to establish the connection between plugin and Nodecom<sup>®</sup> cabinet over Ethernet:

- IP address of the Nodecom<sup>®</sup>'s input/output device.
- Port in which it is listening for incoming connections
- User
- Password



Milestone XProtect Management Cli	ient 2019 R2		:	X
<u>File Edit View Action Tools H</u> elp				
🗄 🦻 😧 🗢 🏛				
Site Navigation 🚽 📮 🗙	Nodecoms 🚽 🕂	Nodecom Info	ormation 👻	<b>,</b>
E DESKTOP-L4TA1QN - (13.2a)	🖃 🔄 Nodecoms			
🕀 🛄 Basics	Nodecom	Name:	Nodecom	
🗄 🕕 Servers				
🗄 ኛ Devices		ID.	102 100 1 45 Pate as	
🕀 🖳 Client		IP:	192.168.1.45 Port: 80	
Rules and Events				
🗄 🐗 Security		User:	root Password: 00000000	
🗄 🕥 System Dashboard				
Server Logs		🖂 Enable	ed	
Access Control				
🕀 🛃 Transact		Inputs		1
🕀 🧏 Alarms				
🖃 😭 MIP Plug-ins				
S68€ SGSE - Galaxy Monitor				
- SSSE Nodecom Logic				
Outputs		Outputs		
Inputs				
E Sector Televised				

After saving changes, ( , ) the plugin will automatically create in Milestone the items corresponding to the digital inputs and the digital outputs of the Nodecom<sup>®</sup>. These items will be accessible from the interface of Management Client and available to be used as source of events and object of actions.

It will be needed to restart Event Server and then the plugin will try to connect automatically with the Nodecom<sup>®</sup> cabinet and, if everything is properly configured, it will import the Nodecom<sup>®</sup> status (inputs, outputs).



#### B. Alarms definition

This plugin adds some event definitions to Milestone, corresponding to the events that the Nodecom<sup>®</sup> cabinet sends. These events are triggered when an input is opened or closed, and when an output is activated or deactivated.

Properties		<b>▼</b> ₽	Nodecom events ~
Alarm definition			
Enable:			
Name:	Nodecom input 1		~
Instructions:		~	Input_Close Input_Open
Trigger			Output Activated
Triggering event:	Nodecom events	~	Output_Activated
	Input_Close	~	Output_Deactivated
Sources:	Nodecom	Select	
Activation period			Select Sources X
Time profile:	Always	~	
O Event based:	Start:	Select	Type inter.
	Stop:	Select	Groups Servers Selected:
Operator action required			All Inputs
Time limit:	1 minute	~	e-U DESKTOP-L4TA1QN
Events triggered:		Select	Add
Other			
Related cameras:		Select	e-S Input2 Remove
Related map:		~	inputs inputs
Initial alarm owner:		~	
Initial alarm priority:	High	~	
Alarm category:		~	OK Cancel
Events triggered by alarm:		Select	
Auto-close alarm:			
Alarm assignable to Administrators:			

Each event can be defined in Milestone as an alarm. You just have to go to "Alarm definition" section, within Management Client, create a new alarm whose triggering event is an event from the "*Nodecom Events*" group, and define the item(s) from which you want this event to be considered an alarm.



#### C. Rules: events

These events can also be used to trigger Milestone rules. Just create a new rule and select as "Triggering Event" one of the events from those added by the plugin.

The events that plugin adds currently are:

- Input\_Close
- Input\_Open
- Output\_Activated
- Output\_<u>Deactived</u>

escription:				
	Manage Rule		-	
	Name:	New Nodecom Rule		
Active	Description: Sel	ect an Event	×	
finition:	Active:	😽 Events		
	Select the rule Perform an Perform and Edit the rule d Perform an act from <u>devin</u>	Hardware     Devices     External Events     External Events     Gother     Gother     Society Contents     Analytics Events     Nodecom Logic     Nodecom events     Input_Close (Nodecom events)     Input_Close (Nodecom events)     Output_Activated (Nodecom events)     Output_Deactivated (Nodecom events)		
		OK Ca	ncel	



#### D. Rules: actions

With the actions defined by the plugin, Milestone can interact with Nodecom<sup>®</sup> cabinets when a defined rule is triggered.

We can define rules to trigger the following actions on Nodecom<sup>®</sup> cabinets:

- Enable Nodecom <output>
- Disable Nodecom <output>

ule Informatio	on							
Name:	Manage Rule					-		×
	Name:	New Rule 002						
Description:	Description:							
	Active:							
			Step 3: Action	ıs				
	Arm partially	o perform y all the partitions of pane	el <panel></panel>					~
Active	Enable Nod	ecom <output> lecom <output></output></output>						~
Definition:	Edit the rule des	scription (click an underli	ined item)					
	Perform an actio	n on EMERGENCIA						_
	Enable Nodeco	m output <u><nodecom ou<="" u=""></nodecom></u>	tput>					
Select Tar	gets							×
Targets:				Selected:				
	All Outputs All Outputs on Output1 Output2 Output3 Output4	Nodecom	Add  Remove					
					ОК		Cancel	



## 7. Milestone Smart Client

If the plugin created the items successfully in Milestone, configurator user will able to drag and drop these items (Nodecom<sup>®</sup> cabinet, inputs and outputs) to a map in the Smart Client application:



If a Milestone alarm is triggered from an event coming from one of the plugin items, operator user will see the origin of the alarm with a blinking red circle; also, the icon will change its state.



Icon indications for digital inputs and digital output status:

Input Open	
Input Closed	
Output activated	<b>\$</b>
Output deactivated	-0'0-



#### A. Operation

Operator users are able to send commands to:

a) Outputs: change the status of the outputs.

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

The outputs have these commands available:

- Activate
- Deactivate



Nodecom<sup>®</sup> Logic plugin allows you to monitor and interact with Nodecom<sup>®</sup>'s signals. Every action is performed from the SmartClient, which is the standard user interface in XProtect<sup>®</sup>.

From SmartClient there are several options to monitor the status of the Nodecom<sup>®</sup> and its elements, as well as to interact with them.

#### B. Event/Alarm viewer

From the standard XProtect<sup>®</sup> events and alarms viewer, alarms and events coming from the Nodecom<sup>®</sup> cabinet can be viewed and managed.

Filtros rápidos	Alarmas Personalizado	(filtro aplicado)	✓ Borrar filtro		Informe	es	1-100 >
<b>T</b> Nuevo (9847)	🖂 Hora 🗸	Nombre de est	Mensaje	Fuente	Etiqueta	Propietario	ID 🖌
T En curso (0)	10:42:37 22/10/2018	Nuevo	Zona - En Alarma	ProSYS Plus	Zona Z001		78467
T En espera (0)	10:42:37 22/10/2018	Nuevo	Particion - En Alarma	ProSYS Plus	Particion P01		78466
Cerrado (0)	10:42:36 22/10/2018	Nuevo	Panel Alarma - Bateria	ProSYS Plus	Panel ProSYS Plus(192.168.2.199)		78464
	10:42:36 22/10/2018	Nuevo	Panel Alarma - Problema Campana	ProSYS Plus	Panel ProSYS Plus(192.168.2.199)		78465
	10:42:35 22/10/2018	Nuevo	Panel Alarma - Linea Telefonica	LightSYS	Panel LightSYS(192.168.2.198)		78463
Servidores	10:42:35 22/10/2018	Nuevo	Panel Alarma - Bateria	LightSYS	Panel LightSYS(192.168.2.198)		78462
A DESKTOP-JMP1H07	10:08:39 22/10/2018	Nuevo	Zona - En Alarma	ProSYS Plus	Zona Z001		78461
	10:08:38 22/10/2018	Nuevo	Particion - En Alarma	ProSYS Plus	Particion P01		78460
	10:08:37 22/10/2018	Nuevo	Panel Alarma - Bateria	ProSYS Plus	Panel ProSYS Plus(192.168.2.199)		78458
	10:08:37 22/10/2018	Nuevo	Panel Alarma - Problema Campana	ProSYS Plus	Panel ProSYS Plus(192.168.2.199)		78459
	9:27:02 22/10/2018	Nuevo	Panel Alarma - Linea Telefonica	el segundo	Panel el segundo(192.168.2.198)		78457
	9-27-02 22/10/2018	Nuevo	Panel Alarma - Bateria	el segundo	Panel el seoundo(192 168 2 198)		78456



#### C. Maps

The icons corresponding to Nodecom<sup>®</sup> cabinet, inputs and outputs can be added to a XProtect<sup>®</sup> map.

Each icon will show the state of the corresponding element according to the colour legend referenced above.



In addition, it will allow to interact with the element from its context menu (secondary button of the mouse).



In this way, you can:

- Activate an output
- Deactivate an output



#### D. WebClient and Milestone Mobile

These interfaces do not support the plugin functionalities, like maps.

However, alarms can be received from these two interfaces, if they have been defined in the Management Client. Interaction with Nodecom<sup>®</sup> cabinets can also be performed by making use of plugin actions and *User defined events*, that will appear to the user as buttons.



## 8. Troubleshooting

#### A. Integrated systems

In case the integration does not work, please confirm the Nodecom<sup>®</sup> I/O device and its firmware version to be plugin compatible. Integrated I/O systems are:

• WISE-4060/LAN

Tested firmware version for each I/O device is:

• WISE-4060/LAN: WISE-4000LAN\_vA114B04\_UT. 04-12-2018

Compatibility is not granted if a different firmware version is used. Although later firmware versions should work properly, compatibility with each specific firmware version must be tested.

#### B. Required equipment

In order to communicate with the Nodecom<sup>®</sup> cabinet from Milestone, it must be connected to Ethernet and be accessible from the machine where the XProtect<sup>®</sup> Event Server is installed.

#### C. Other

In case of communication failure, please restart XProtect<sup>®</sup> Event Server.

#### D. More info

For more info, please visit <u>plugin online information</u> or contact SGSE in the email address <u>info@sgse.eu</u>.