

Soluciones Globales de Seguridad Electrónica

SPC MONITOR

Installer and User Manual



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1. Document versions

Version	Date	Author	Changes in the version
1.0	07/2020	SDA	First version (English)



2. Introduction

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

This solution consists of a plugin that allows to monitor and interact with Vanderbilt SPC intrusion systems, from the user interface and the working environment of the XProtect[®] platform, by <u>Milestone</u>.

In this way, the monitoring of the intrusion system is available together with the advantages of the XProtect[®] VMS for video and alarm management. CCTV and intrusion in a single interface.



3. Solution architecture

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



Through the Ethernet network, the plugin gets ready to accept connections from SPC intrusion panels. The SPC intrusion panel must be configured to communicate with the plugin as an ATP (Alarm Transmission Path) in an ATS (Alarm Transmission System). The basic panel configuration needed to work with this plugin will be described later in this document.

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

- Send commands to the panel
- Ask the panel for the status of some elements (areas, zones, outputs)
- Receive notifications when intrusion events occur at the intrusion system.



4. Installation

To install the plugin, simply execute with administrator rights the installer "SPC Monitor Installer.msi" provided by SGSE or downloaded from the Milestone Marketplace. 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.

🕼 SPCMonitor Plugin	_		×
Welcome to the SPCMonitor Plugin Setup	Wizard	SC SC	
The installer will guide you through the steps required to install SPCMo	nitor Plugin c	on your cor	nputer.
WARNING: This computer program is protected by copyright law and i Unauthorized duplication or distribution of this program, or any portion of or criminal penalties, and will be prosecuted to the maximum extent pos	international of it, may resu ssible under t	treaties. ult in sever he law.	e civil
< <u>B</u> ack <u>N</u>	ext >	Cano	cel

Click "Next >" to start the installation process.



🛃 SPCMonitor Plugin		_		X
License Agreement		Soluciones Gi	SG obales de Seguridad	SE Eectrónica
Please take a moment to read the licen: Agree'', then ''Next''. Otherwise click ''O	se agreement now. If Cancel''.	you accept the terms	below, click '	"
End-User License Agreemer	nt (EULA) of SPC	Monitor Plugin		^
This End-User License Agreeme (the "User") and Soluciones Glo This EULA agreement governs yo software ("Software") directly fr Electrónica (SGSE) or indirectly t	nt ("EULA") is a leg obales de Segurida our acquisition and om Soluciones Glo chrough a Solucion	al agreement betw d Electrónica (SGS) d use of our SPC Mo obales de Segurida es Globales de Sej	veen you E). onitor Plugir Id guridad	~
◯ I <u>D</u> o Not Agree	● I Agree			
	< <u>B</u> ack	<u>N</u> ext >	Cancel	

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

🕼 SPCMonitor Plugin	_		×
Confirm Installation	Soluciones G	SC Scales de Segur	
The installer is ready to install SPCMonitor Plugin on your computer.			
Click "Next" to start the installation.			
< <u>B</u> ack <u>N</u>	ext >	Cano	cel

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.

	Control de cuentas de usuario ¿Quieres permitir que esta aplicación de un anunciante desconocido haga cambios en el dispositivo?	×			
	D:\TFS\SPC Monitor\Main\SPCMonitor Solution\SPCMonitor Installer\Release \SPCMonitor Installer.msi				
	Origen del archivo: Unidad de disco duro en este equipo Mostrar más detalles Sí No				
⊮ spcma	ation Complete	S	×		
SPCMonit	Solutiones Globa or Plugin has been successfully installed.	iles de Se	guridad Electrónica		
	e to exit.				
	Se to exit.				
Please use	ser to exit. Windows Update to check for any critical updates to the .NET Framewo	rk.			

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



5. Licensing

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.

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[®] Management Client after installing the plugin and go to the corresponding menu item (*MIP Plugins > SPC Monitor*).

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 "Licencia.lic" into the plugin folder. By default:

C:\Program Files\Milestone\MIPPlugins\SPCMonitor\

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



Once the license is applied, the Management Client interface will show the license information:



Workstations (only SmartClient)

To generate the UID in a workstation where you don't have XProtect[®] Management Client, but you will be only using SmartClient instead, you will have to use the SGSE tool, "UID Generator" to obtain the UID.

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.

The connection is actively established by the SPC intrusion panel using the FlexC[®] protocol, so it will have to be configured to establish a connection with the plugin, and the plugin will have to be ready to accept and confirm this connection.

6.1 SPC Panel configuration

In order to communicate with the plugin, it has to be configured as an ATP of an ATS in the SPC configuration. We will give a brief overview of the specific configuration needed to communicate with the plugin. For further information on installation, setup, and configuration of the SPC panel please contact your SPC provider.

- 1) Add an ATP to an ATS
- 2) Configure ATP:
 - a. Set "RCT URL or IP Address" with the Milestone Event Server IP
 - b. Set "*RCT TCP Port*" with the port in which the plugin will be listening for this panel to connect.

RCT Identification		
RCT ID	1	The unique ID of the RCT (e.g. RCT ID of SPC ComXT) (1-99999999)
RCT URL or IP Address	192.168.1.50	URL or IP address of the RCT (e.g. SPC ComXT)
RCT TCP Port	52000	The TCP Port of the RCT (e.g. The TCP Port that SPC ComXT is listening on)

- c. Select the communication interface "Ethernet"
- d. Select the ATP category "Cat 5 [Ethernet]"

ATP Interface		
Communications Interface	Ethernet	 Interface used by ATP for communication
ATP Category	Cat 5 [Ethernet]	Select the The ATP category

- 3) In the "ATP Advanced configuration":
 - a. Select Encryption Key mode "Fixed Encryption"
 - b. Set the fixed encryption key. It must match the encryption key configured at the plugin (64 hexadecimal digits).

6.2 Plugin configuration

Set up a panel

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

You just have to assign a name to the panel, to identify it in the system, and configure the needed parameters to allow the panel to connect to the plugin over Ethernet. The connection is established by the SPC Panel, and the needed parameters are the following, that must match the parameters set at the panel:

- Local IP address at which the plugin will listen to the panel
- Local port in which the plugin is listening for incoming connection



- Fixed encryption key (64 hexadecimal characters). Must match the Fixed Encryption key configured at the panel.
- Management user with rights to operate and retrieve configuration
- Password of the user configured

SPC Panels 🗸 🗸 🕂	Información de S	SPC Panel	
SPC Panels	Nombre:	spc4300	
		Habilitado 🗹]
	Panel config	guration	
	Local IP	Address:	192.168.1.50
	Listening	Port:	52000
	Encryptic	on Key:	00112233445566778899AABBCCDDEEFF00112233445566778899AABBCCDDEEFF
	Manager	ment User	Engineer
	Manager	ment Password	****

After saving changes, the plugin will automatically listen to a FlexC connection from the panel and, if everything is properly configured, it will accept the connection and import the panel configuration (areas, zones, outputs), and the state of each element (areas, zones and outputs).

The plugin will automatically create in Milestone the items corresponding to the areas, zones, and outputs of the panel. These items will be accessible from the interface of Management Client.

We can see the download process information in the Event Server MIP Logs.

Zone sensor type

The plugin allows you to select the type of sensor used in each zone. This will change the icon of the zone, so that the operator can get the most complete information about the intrusion installation from the SmartClient map.

The available sensor types are the following:

- Volumetric (PIR) Default value
- Seismic
- Glass break
- Magnetic contact
- Panic button

Alarms definition

This plugin adds some event definitions to Milestone, corresponding to the events that the panel sends.

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 SPC Monitor Events group, and define the item(s) from which we want this event to be considered an alarm.



	Propiedades		~ 7
I	Definición de alarma		
I	Habilitar:		
I	Nombre:	SPC alarm	
	instructiones		
ctivador			
Evento activ	vador:	SPC Monitor Events	
uentes:		Area_Alarmed	
		Area_FullSet	
Periodo de a	activación	Area_PartSetA	
Perfil ter	mooral	Area_PartSetB Area_Unknown	
enirter	nporal.	Area_Unset	
🔵 Basado	en evento:	Output_Clear	
		Output Set	
		Output_Unknown	
Acción del o	operador requerida	Panel_Connected Panel_Disable	
imite de tie	internet in the second s	Panel_Disconnected	
Linnice de lie	anpo.	Panel_Enable	
Eventos act	ivados:	Zone Bypass	
		Zone_Disabled	
Otro		Zone_Set Zone_Tamper	
Cámaras relacionadas:		Zone_Trouble	
		Zone_Unknown	
Mapa relaci	onado:	Zone_Onset	
	Eventos activados por alarma:		Seleccionar
I	Cerrar automáticamente alarma:		
	Alarma asignable a administradores:		

Rules: events

Those 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:

- Area fully set
- Area partially set A
- Area partially set B
- Area unset
- Zone alarm
- Zone bypass (inhibited/isolated)
- Zone tamper
- Zone trouble



Gestionar regla		_		\times
Nombre:	SPC Rule			
Nombre: Descripción: Activo: Seleccionar el tip Realizar una a Realizar una a Calizar una a Realizar una a Realizar una a Realizar una activativa Editar la descripo Realizar una acció de dispositiva	SPC Rule Seleccionar un evento X Image: Seleccionar un evento Image: Seleccionar evento Image: Seleccionar evento Image: Seleccinar (SPC Monitor Evento) <			
	Aceptar Cancelar			
Ayuda	Cancelar < Anterior Siguiente	e >	Finaliza	r

Rules: actions

With the actions defined by the plugin, Milestone can interact with panels when a defined rule is triggered.

We can define rules to trigger the following actions on panels:

- Set all areas.
- Silence panel bells
- Unset all areas.
- Set panel date and time
- Clear all alerts on the panel
- Full / partial A / partial B set an area
- Unset an area.
- Set / clear an output (mapping gate)
- Inhibit a zone
- De-inhibit a zone
- Isolate a zone



- Deisolate a zone
- Restore a zone

Manage Rule				_		×			
Name:	SPC Rule	e Action							
Description:									
Active:	\checkmark								
		Step 3: Action	IS						
Select actions to per	rform								
On <site> trigger</site>	r <user-def< td=""><td>ined event></td><td></td><td></td><td></td><td>^</td></user-def<>	ined event>				^			
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Silence all bells	on SPC <p< td=""><td>anel></td><td></td><td></td><td></td><td></td></p<>	anel>							
Unset all areas of	on SPC <pa< td=""><td>inel></td><td></td><td></td><td></td><td></td></pa<>	inel>							
Sync date and tir	me on SPC	<panel></panel>							
Clear all alert fro	om SPC <pa< td=""><td>anel></td><td></td><td></td><td></td><td></td></pa<>	anel>							
Full set SPC <ar< td=""><td>rea></td><td></td><td></td><td></td><td></td><td></td></ar<>	rea>								
Set Part A SPC <	<area/>								
Set Part B SPC <	<area/>								
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Set SPC <output< td=""><td>></td><td></td><td></td><td></td><td></td><td></td></output<>	>								
Inhibit SPC <zon< td=""><td>ie></td><td></td><td></td><td></td><td></td><td></td></zon<>	ie>								
Deinhibit SPC <	zone>								
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Deisolate SPC <	'700e'>								
Restore SPC <z< td=""><td>one></td><td></td><td></td><td></td><td></td><td>~</td></z<>	one>					~			
		1 10 10 X							
Edit the rule descrip	otion (click	an underlined item)							
Perform an action on	Perform an action on <u>Area_Alarmed (SPC Monitor Events)</u>								
	from <u>All Areas</u>								
1									
Help	col	< Pack	Nexts		Finish				
neip n	Cel	< <u>D</u> ack	ivext >		rinish				

Role permissions

The plugin allows you to interact with SPC panel elements based on roles permissions applied to Milestone user. In particular, the possibility to interact with elements can be limited by using the specific permission.

If a user belongs to a group or has a role which has no "Manage" permission over an element, then this user will not be able to operate that item (arming, disarming, bypassing...).



Role Settings 🗸 4	L
MIP configurations	
E-sse SPC Monitor]
En IN SPC Panels	
Areas	
····· Outputs	
Security settings for: Area	
Read status	
Unset Ara	
]
U Servers 🔛 Matrix 🥥 Alarms 🖟 Access Control 🔄 LPR 🎦 MIP	*



7. Operation

SPC Monitor plugin allows you to monitor and interact with panels. Every action is performed from the SmartClient, which is the standard user interface in XProtect[®].

The operator can send commands to:

- a) The panel itself
- b) An area
- c) A zone
- d) An output (mapping gate)

A. Event/Alarm viewer

From the standard XProtect[®] events and alarms viewer, alarms and events coming from the intrusion panels can be viewed and managed.

Eventos <i>Personalizado (filtro aplicado)</i> 🗙 Borrar filtro						
🖼 Hora 🔹	Mensaje		Fuente	ID		
14:32:51 08/07/2020	Zone_Alarm		Window 1	80286		

B. Maps

The icons corresponding to panels, areas, zones, and outputs can be added to a XProtect® map.

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





Colour	Sample	Meaning
Green		Standby . The zone is OK, it is not armed and there is no problem. No intrusion alarms can be triggered.
Orange		Standby . The zone is OK and armed. An intrusion alarm can be triggered.
Red		Alarm. The zone is in alarmed status.
Blue		Bypass . The zone is either inhibited or isolated.
Magenta		Tamper . The zone is in tamper status.
Yellow		Trouble . The zone is in trouble status.
Gray	Ì	Unknown . The zone status is unknown, or the zone is disabled in Milestone.

*The same colour logic applies to other detector icons.

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



This way, you can:

- Panel
 - o Set all partitions
 - Unset all partitions
 - Silence panel bells
 - Restore all alerts (if enabled)



- Area
 - o Set
 - Partially Set A
 - Partially Set B
 - o Unset
- Zone
 - o Inhibit
 - o De-inhibit
 - o Isolate
 - Deisolate
 - Restore
- Output
 - o Set
 - o Clear

C. WebClient and Milestone Mobile

These interfaces do not support al the plugin functionalities, like the custom panel management interface or maps.

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



8. Troubleshooting

Integrated systems

In case the integration does not work, please confirm the panel and its firmware version to be plugin compatible. According to Vanderbilt documentation, firmware of the SPC panel must be:

• FW 3.6 or higher.

Previous SPC panel firmware versions are not compatible with FlexC[®] protocol integration. For more information about FlexC[®] compatibility with other SPC models, please ask your SPC provider.

Compatibility has been tested with FW 3.8.5 on a SPC 4300 panel. Compatibility is not granted if a different firmware version is used. Although later firmware versions should work properly, compatibility with each specific firmware version should be tested.

Required equipment

The panel must be equipped with an Ethernet connection in order to be able to connect to Milestone plugin. Ask your SPC provider for more information.

Other

- The panel does not establish communication.
 - Please check panel ATS and ATP configuration.
 - Please check fixed encryption key.
 - Please check listening port configured.
- Map shows black circles with white crosses instead of expected icons.
 - When the panel is created in Milestone, items are new in the system, so icons related to deleted items must be deleted from the map and added again.
- Commands do not work.
 - The panel status may prevent commands. Please check the Milestone MIP logs for a response message and error code.
- In case of communication failure, please restart XProtect[®] Event Server.

More info

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