

Siemens SPC

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1 IFTER EQU – integration and visualization software

IFTER EQU visualization allows to present, in a graphic and textual form, the elements of the followings systems: FAS, I&HAS, AC, CCTV, building automation and measuring devices. Visualization elements are located on architectural plans, geodetic plans or technological lines.

Client-server architecture allows to suit visualization specifically to the size of an object and makes it easy to manage scattered facilities. By using TCP/IP connection you can create various independent workstations, located in different parts of object or even in different objects. With the use of database, you are able to establish monitoring network and big monitoring centers, manageable from anywhere.



Rys. 1. Architektura systemu

Software was designed to be easily expanded with more objects and devices. Thanks to visualization, the system is easy to handle and easy to configure. User can choose to include default graphics or create his own.



You can control up to 4 monitors and adjust each visualization exactly to your needs (for each particular user). You can issue authorization individually for each user. In order to make his work easier and more "automatic", you can create schedules.

Schedules allow you to plan, control and manage the alarms and events, as well as control the state of integrated devices. You can also use it to manage access control.

You can create schedules for years ahead. One schedule can include an infinite number of users and alarm templates. You can also create any number of "special days". It can be bank holidays or any day chosen by the user who can define the name, time frame and colour of the special days.

Alarms and device events are logged. User can select which events will be saved on each log and which user will have access to those logs. Logged events can be coloured. When you confirm the alarm, the following information are registered by the system: time when event occurred, time of confirmation, who confirmed it and the comment attached to this alarm (if required). You can define a list of extra procedures which the operator has to complete before confirming the alarm.

In order to make monitoring easier, IFTER EQU offers the following solutions:

- graphic and textual warnings regarding alarm states;
- acoustic signal of the alarm state;
- presentation of the state of elements;
- defined alarm procedures;
- silent alarm sent to monitoring center, bypassing a workstation;
- dynamic display of a location where the alarm occurred
- device integration, making connections between them;
- preview: from general to detail;
- work automation acquired with schedules;
- customized visualization.

These are some of the most essential advantages of the product:

- language settings: you can select your local language;
- SQL database from Oracle: it allows you to use client-server technology to present the state of integrated systems, to steer and configure on multiple computers simultaneously;
- you can configure the communication server for computers and other devices. Server can be put in service mode: it means you don't need monitor, keyboard or a mouse to run it;
- we are an independent company, which means IFTER EQU supports various devices produced by multiple companies – therefore we can adjust our product specifically to the client's needs and expectations;
- integration allows to link various devices and create connection between them;
- you can easily adjust layout to your needs and support visualization with 4 monitors or touch panels;
- you can present the state of any device on any preview. This way you can recreate the real location of devices, as well as their function. You can present the state of security systems and building automation devices on one preview;

- Also, you are able to easily manage access control to the steering you can edit user's authorization and add a password;
- Variety of alarm types makes an appropriate reaction easier and quicker. In case of intrusion, tamper, bypass or disarming, the user can follow pre-established protocol and add comments from templates;
- Automation is easily-handled due to variety of solutions, such as scripts, schedules, graphs, thresholds and patterns.

2 Visualization

Communication is conducted via TCP/IP.

System logs are updated with events downloaded from the control unit. There are a couple ways the operator can proceed:

- confirm the alarm, the time of operation will be saved in the system

.

- conduct a pre-planned procedure for the particular alarm or event (optional)

- leave a comment: might be entered by the operator or selected from the list of default comments

Visualization allows you to display states and statuses in a graphic, accessible form.

- partition: no communication, disarming, arming part A, arming part B, arming, alarm, failure

- lines: no communication, disarming, open, arming, alarm, failure, omission, bypass

- outputs: no communication, activated, deactivated

When the state of element changes, it's automatically reflected in the icon representing it. You can de

sign you own graphics or used these available in the system. You can define a different color for each state separately.

Visualization also allows for a direct management and steering.

- partition: arm, disarm, delete the alarm

- line: bypass, omission, finish bypass, finish omission
- 5

- output: deactivate, activate

These elements can be controlled:

- manually: by the mechanism of access levels you can authorize an operator to implement certain changes in the system

- via special scripts, activated upon the alarm

- automatically, in accordance with the schedule

Each user you create in the database, will be assigned with a specific authorization and access level. Every action of the user will be logged in the system. This way, you can control each operator.

You can use special scripts to monitor the state of integrated elements. This way, you are able to define what kind of action shall be undertaken when the certain alarm occurs.

There are 8 types of alarms in this integration:

Partition:

- alarm
- arm

Line:

- alarm
- failure

Output:

- alarm

There is also possible to design an alarm without logging it in the system. Operator can set the alarm which only purpose will be to initiate certain steering process. When logs are disabled, there are no procedures or comments to fill.

Go to Alarm delivery on the explorer tree.

IFTER EQU CCTV OPC SNMP ENTERPRISE no	restrictions - ochrona - [Explorer]		Income Million Million Mark
🕸 Start Window Help			
Settings Alarm delivery	H - P R 🖪 🗊	number: 3	
Alarin delivery	Name	Description	Delivery
	Polon	Szablon systemowy dla centrali przeciwpożarowej	ochrona/ochrona
O Alarm points	przejscia		ochrona acc/ochrona acc
Alarm procedures	Siemens SPC	System template for I&HAS control unit	ochrona/ochrona monitoring/monitoring ochrona acc/ochrona acc

Select a proper alarm and go to settings. Choose Delivery tab.

Alarm delivery	
General Delivery	
6	
Station name	Delivery name
ochrona acc	ochrona acc
monitoring	monitoring
ochrona	ochrona
	OK Cancel

After selecting an alarm, go to settings

You will see the list of options for alarm delivery. Remember to unselect the third option - Save in active alarm logs after the alarm – if you don't want to log alarms.

Alarm delivery properties	
The following settings allow you to choose after-alarm procedures and to establish the time of realizing this procedures by switching on the right schedule. IFTER EQU workstation ochrona acc	 Start the program Activate alarm point associated with the device Save in active alarm logs after the alarm System signal after the alarm Play audio file after the alarm Open graphics E-mail after the alarm SMS after the alarm Maksymalizuj program przy przyjściu alarmu (domyślnie pokazywany w tle)
ochrona acc Schedule:	Pokaż okno programu na pierwszym planie przy przyjściu alarmu
Not selected	
E-mail configuration After what SMS congifuration 00:00	: time do you want to switch off message recurrence:
	OK Cancel

You can assign an alarm point to each alarm. Alarm points are connected with steering outputs. This way, you can steer an output as a reaction to alarm from any other element or to any kind of event from other integrated systems.

3 Configuration

3.1 Start

In order to configure Siemens SPC, you need the application – SPC Pro.



Reveiver ID- ID for IFTER EQU workstation

Receiver address – address from IFTER EQU computer

receiver port - UDP port connected with IFTER EQU

🕐 SPC Pro V3.5.0 - [Ustawienia komunik.	- EDP]			
🕐 Plik Opcje Zaawansowane Pom	oc			
SIEMENS				
Ogólne Komunikacja Ustawienia centrali	a - ustawienia EDP (Enhanced Data Protocol)			
Komunikacja 1	3	listawienia FDP (w	centrali SPC)	
Porty szeregowe				
2		Aktywne	×.	Aktywe EDP
		ID urządzenia	1000	Unikalne ID tego urządzenia
Konfiguracja modemu		Port UDP	50000	Port do odbioru paketow up (domysine subuku)
3		Ograniczenie rozmiaru pakie		Insta salund do ponounal transmisi nianohulardinnano zdarzania
Ustawienia SMA		Zdarz Timeout	10	Maks, Iczba ponownych transmisi (5-199)
2		Liczba prób	10	Maks. liczba prób wybierania przed blokadą modemu (1-199)
		Opóźn. wybier	30	Czas przed ponownym wybieraniem po nieudanej próbie (1-199 sek.)
Ustawienia EPD		Blok. wybier.	480	Interwał wybierania po osiągnięciu maks. liczby prób połączenia (sek.)
		Opcje Rejestracji Zdarzen		
SPC Pro/SPC Safe			Status komunikacji 📝 Polecenia EDP 📝	
A			Zdarzenia A/V	
Ust. Zdalnei Obsługi			Użycie Klawiatury	
الله الله الم				
CEI-ABI				
81				
Utawiania siaci				
over the second				
Zaawansowane				
OBJEKT : 2 [WAPLEWO]	Język : Język niestandardowy			



UDP port - port connected with SPC unit

4 Create Siemens SPC integration

Find Integration in the explorer. On the right, you can find a group of buttons to navigate

W celu utworzenia integracji Siemens SPC należy odnaleźć gałąź **Integracja** w ustawieniach Eksploratora.

Po lewej stronie znajduje się lista elementów. Nad listą znajduje się pasek przycisków służących do zarządzania aktualnie otwartą listą:

Ò	Add	Click on it to open the Wizard where you can create new ele- ment.
ک	Delete	Click on it to delete an element. This action often requires con- firmation.
¢°	Settings	Open a new window where you can see and edit numerous setting regarding selected element.

Click Add to see the list of possible integrations. Select **Siemens/Vandrbilt SPC** and then **Next**.



Follow instructions in the next window

ſ	Adding Siemens SPC	C control unit	×					
	Enter bas	ic information about Siemens SPC inte	egration.					
	The name of control unit can be optional and it will be used to its localisation in the IFTER EQU system. The Description dialog box can be used for entering any text that will give additional information about this control unit. The default name can be left unchanged.							
		Not selected	Integration server					
		Siemens SPC	Name					
			Description					
			Next > Cancel					

Integration server – wybrać stację roboczą, która fizycznie będzie obsługiwała tę integrację.

Name - unique name for identification in the system

Description – additional information

Go next to define details:

	Adding Siemens SPC	contro	ol unit								x
	The below cetting a	ra daat	inad ta	Com	munic	ati	on settings.		port which	h control	unit
	is connected to.			Coning	jure m	s ue	ansmission. Ch	oose me	; port write	an control	unic
		IP add	dress 0	0	0	1					
Í		Statio	n port				Device port				
		5000	0				50000				
		Statio	n ID				Device ID				
		1					1000				
		Polling	9								
		1500									
		E Mu	ute the elete al	alarm arm							
							< Back	F	ïnish	Car	ncel

IP address – for SPC unit

The following settings are available in EDP settings of SPC Pro.

Station port – UDP port connected with IFTER EQU (EDP setup)

Device port – receiver port

Station ID - receiver ID

Device ID - ID of SPC unit

Mute the alarm – silent alarm

Delete alarm – remove alarm

4.1 General

Siemens – SPC properties	
General Alarms Communication	
The following settings will allow you to change basic parameters of integration with Siemens - :	SPC.
Server:	
ochrona 🔻	
Name:	
Siemens SPC	Swich on communication
Description:	_
Siemens SPC	
Access range:	
Default range For the whole integration	
Import configuration	
	OK Cancel

Server – select a computer for communication with control unit

Name - name for the unit

Description – additional information

Access range – events uploaded from the control unit will be under the defined access range

For the whole integration - all devices connected with the unit will use this particular

access range

Switch on communication – communication on or off

Import configuration - from TempFile.xml on Siemens SPC unit

4.2 Alarms

Siemen	s – SPC properties			×
Gener	al Alarms Communication			
	Definition of alarm	Function	4	Alarm point
1	Not selected -	Alarm		Not selected 👻
	Maturlated	Alaan		Neterland
	Not selected	Aiaini		Notselected
3	Not selected 👻	Alarm		Not selected 👻
4	Not selected -	Alarm		Not selected
5	Not selected 👻	Alarm		Not selected 👻
6	Not selected 💌	Alarm		Not selected
7	Not selected	Alarm		Not selected 👻
8 📄	Not selected -	Alarm		Not selected
				OK Cancel

Define up to 8 alarms and assign specific alarm points.

4.3 Communication

Siemens – SPC properties	×
General Alarms Communication	
133 255 255 IP Address of the device	
50000 Station port	
50000 Device port	
1 Station ID	
1000 Device ID	
1500 Frequency of polling	
Mute the alarm	
Delete alarm	
	OK Cancel

Here you can define the connection between control unit and your computer (workstation).

IP address - for SPC unit

The following settings are available in EDP settings of SPC Pro.

Station port – UDP port connected with IFTER EQU (EDP setup)

Device port – receiver port

Station ID - receiver ID

Device ID - ID of SPC unit

Mute the alarm – silent alarm

Delete alarm – remove alarm

5 Import

]gólne <u>Alamy</u> Komunikacja Poniższe ustawienia pozwolą Ci r Setwer: monitoring	na zmianę podstawowych parametrów integracji z sy:	stemem Siemer	18 - SPC.		
Nazwa:	(III) Otwinneis				53
Dpis: Siemens SPC	SPC	Pro ► Confi	gurations 👻 🗲	Przeszukaj: Configurations	4
Zakres dontępu: Zakres domyślny Import konfiguracji	Organizaj la recentracia Image: Dokumenty Image: Dokumenty	E	Nazwa Defaultxml Default200.xml inistallations.xml inistellations.xml inistellations.xml inistellations.xml inistellations.xml	Data n 2007-0 2016-0 2016-0	nodyfik 7-04 17 7-07 10 0-05 12 8-09 10 5-09 15
	Komputer Lysk lokalny (C:) Nowy (D:) Sieć	•	۲۱۱ - ۲۰۰		

In order to import configuration, you need to go to **General** tam and select "Import configuration". You will see a new window, where you need to select a specific file: **TempFile.xml** – you can find it in the folder: SPC Pro\Configurations. Open your configuration and clik OK to cofirm. TempFile.xml is created when you upload configuration from the control unit to SPC Pro application.

6 Elements

6.1 Partition

Here you can see the list of configured partitions.



6.1.1 Add

Click Add button to open the following window:

Add a	partition	
	Enter basic information regarding partition	
	Name	
	Partition 4	
	A Trinish Cancel	

Type a name and a number to create new element.

6.1.2 Settings

Select a partition from the list and click on Settings button above to define multiple parameters.

6.1.2.1 General

Partition properties		X
General Alarms Schedules Association		
Name		
Partition 1	Connect with comera	
Device description		
Siemens SPC/	Integration	Camera
	Not selected	0
	_	
		UK Cancel

Name – unique name for easy identification

Device description – additional information

Access scope - events uploaded from the partition unit will be under the defined access range

Connect with camera – display footage from the selected camera upon the alarm

6.1.2.2 Alarmy

Partitio Genera	n properties			
	Definition of alarm		Function	Alarm point
V 1	Not selected]	Alarm	Not selected
2	Not selected 💌		Alarm 👻	Not selected
3	Not selected		Alarm	Not selected
4	Not selected		Alarm	Not selected
5	Not selected		Alarm	Not selected
6	Not selected		Alarm	Not selected
7	Not selected		Alarm	Not selected
8	Not selected		Alarm	Not selected
				OK Cancel

Define up to 8 alarms and assign specific alarm points. Functions available for this element: Alarm, Arm.

6.1.2.3 Schedules

Partition properties			— X —
General Alarms Schedules Association			
Name	Schedule/Trigger	Function	
Calendal III Sanati			
Not selected	n 🚽 🗖		
	V) 👗	
			OK Cancel

Here you are able to connect partitions and defined schedules of triggers.

6.1.2.4 Association

Partition properties	
General Alarms Schedules Association	
Associate gra	aphics and programs
Computer	Computer
Not selected	Not selected
Graphics	Program
Not selected	Not selected
Add Delete	Add Delete
Graphics associated with computers	Programs associated with computers
	OK Cancel

Assign graphics and applications which shall initiate upon the alarm. Select an element from the list and click Add to confirm. Click Delete to remove the link from the list.

6.2 Lines

See configured lines for Siemens SPC unit.



6.2.1 Add

Click Add button to open the following window:

Add a	line		x
		Enter basic information about the line	
	Name		
	Line 4		
	Line number 4	×	
	Partition		
		Ť	
		Finish	cel

Name - unique name for identification

Number – number for identification

Partition - location of the line

Click Finish to confirm.

6.2.2 Settings

Select a line and click Settings button to define various parameters.

6.2.2.1 General

General Alams Schedules Association Name Line 1 Device description Siemens SPC/Partition 1/ Access scopes Default range	Line properties		— X
Name Line 1. Device description Siemens SPC/Partition 1/ Access scopes Default range Partition Partition Register line OK Cancel	General Alarms Schedules Association		
Line 1 Device description Siemens SPC/Partition 1/ Access scopes Default range Partition Register line OK Cancel	Name		
Device description Siemens SPC/Partition 1/ Access scopes Default range Partition Register line OK Cancel	Line 1	Connect with camera	
Siemens SPC/Parition 1/ Access scopes Default range Partition Partition Camera O O Camera O O Camera Camera O Camera	Device description	Connect with Camera	
Access scopes Default range Partition Register line OK Cancel	Siemens SPC/Partition 1/	Integration	Camera
Access scopes Default range Partition Register line OK Cancel		Not selected	0
Default range Patition Register line OK Cancel	Access scopes		
Partition Register line OK Cancel	Default range		
Partition Register line OK Cancel			
Partition Register line OK Cancel			
Partition Register line OK Cancel			
Partition Register line OK Cancel			
Partition Register line OK Cancel			
Register line	Partition		
Register line	•		
OK Cancel	Register line		
OK Cancel			
			DK Cancel

Name – unique name for identification

Description – additional information

Access scopes - events uploaded from the line unit will be under the defined access range

Connect with camera - display footage from the selected camera upon the alarm

Partition – location of the line

6.2.2.2 Alarms

Line pro	operties		
Genera	Alarms Schedules Association		
	Definition of alarm	Function	Alarm point
V 1	Not selected	Alarm	Not selected -
2	Not selected	Alarm	Not selected
3	Not selected	Alarm 💌	Not selected
4	Not selected	(Alarm 👻	Not selected
5	Not selected	Alarm 💌	Not selected
6	Not selected	Alarm 💌	Not selected
7	Not selected	Alarm 👻	Not selected
8 🗐	Not selected	Alarm	Not selected
			OK Cancel

Define up to 8 alarms and assign specific alarm points. Functions available for this element: Alarm, Fault

6.2.2.3 Schedules

Line properties			×
General Alarms Schedules Association	ı		
Name	Schedule/Trigger	Function	
Schedule/Trigger Fu	nction		
Not selected	•	X	
			OK Cancel

Here you are able to connect partitions and defined schedules of triggers.

6.2.2.4 Association

Line properties	
General Alarms Schedules Association	
Associate g	raphics and programs
Computer	Computer
Not selected	Not selected
Graphics	Program
Not selected	Not selected
Add Delete	Add Delete
Graphics associated with computers	Programs associated with computers
	OK Cancel

Assign graphics and applications which shall initiate upon the alarm. Select an element from the list and click Add to confirm. Click Delete to remove the link from the list.

6.3 Outputs

IFTER EQU COMPAS CCTV OPC SNMP ENTE	RPRISE no restrictions - monitoring -	[Explorer]	
🔆 Start Window Help			
⊳	i < 🔸 🖌 🚺	number: 3	
	Integration	Output name	Description
Integration	Siemens SPC	Output 1	Siemens SPC/
▶ ● Bosch FPA	Siemens SPC	Output 2	Siemens SPC/
Siemens SPC	Siemens SPC	Output 3	Siemens SPC/
Partitions			
Lines			
Outputs			

See configured outputs for Siemens SPC unit.

6.3.1 Add

Click Add button to display the following window:

Name – unique name for easy identification

Number – unique number for easy identification

ſ	Add a new output - log
	Enter basic information about this output
	Name
	Output 4
	Output number 4
	Finish Cancel

6.3.2 Settings

Select an output and click Settings button to define various parameters.

6.3.2.1 General

Outputs properties		
General Alarms Schedules Association		
Name		
Output 1	Connect with camera	
Device description	Connect man camera	
Siemens SPC/	Integration	Camera
	Not selected	0
Access 200000		
		DK Cancel

Name – unique name for easy identification

Device description -additional information

Access scope -events uploaded from the partition unit will be under the defined access range

Connect with camera - display footage from the selected camera upon the alarm

6.3.2.2 Alarms

Outputs properties						
General Alarms Schedules Association						
	Definition of alarm	Function	Alarm point			
V 1	Not selected	Alarm	Not selected			
	Neterleted	Alam	Netesladed			
	Not selected	Aldini	Not selected			
3	Not selected	Alarm	Not selected			
4	Not selected	Alarm	Not selected			
5	Not selected	Alarm	Not selected			
6	Not selected 💌	Alarm	Not selected 💌			
7	Not selected	Alarm	Not selected			
8 📃	Not selected 👻	Alarm	Not selected			
			OK Cancel			

Define up to 8 alarms and assign specific alarm points. Functions available for this element: Alarm.

6.3.2.3 Schedules

Outputs properties					
General Alarms Schedules Association					
Name	Schedule/Trigger	Function			
Schedule/Trigger Function	1				
Not selected					
			OK Cancel		

Here you are able to connect partitions and defined schedules of triggers.

6.3.2.4 Association

Outputs properties					
General Alarms Schedules Association					
Associate graphics and programs					
Computer	Computer				
Not selected	Not selected				
Graphics	Program				
Not selected	Not selected				
Add Delete	Add Delete				
Graphics associated with computers	Programs associated with computers				
OK Cancel					

Assign graphics and applications which shall initiate upon the alarm. Select an element from the list and click Add to confirm. Click Delete to remove the link from the list.