



ENTERPRISE 2006
GRAPHICAL USER INTERFACE
FOR 1019 MONITORING AND CONTROL SYSTEMS

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USER GUIDE

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RIPRODUZIONE VIETATA

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RIPRODUZIONE VIETATA





ENTERPRISE 2006 GRAPHICAL USER INTERFACE FOR 1019 MONITORING AND CONTROL SYSTEMS

1 INTRODUCTION:

ENTERPRISE 2006 is a fully integrated graphical and text user interface for use with 1019-series fire panels. Whether the installation comprises a single panel or up to 99 networked panels, Enterprise provides an integrated graphical mimic with full alarm management and panel control capability. The pyramidal conception of the programme, with a simplified user-configurable menu, permits to provide information promptly and display combined text and graphics which can be quickly and easily understood by an operator rather than an engineer. Messages, graphics and controls are displayed at the same time without frequent popping up and down or overlapping, text is shown in large characters with a colour coded background. Enterprise 2006 has been designed and generated in compliance with EN 54-2 Standard - "Fire Detection and Fire Alarm Systems – Control and indicating equipment"- Section 13 (software engineering requirements).

2 RELEASE:

Enterprise 2006 Release 1.0 dated 28/12/05
Warning: this release works with Windows-XP environments only.

3 MAIN FEATURES:

The main features of ENTERPRISE 2006 are the following:

- Supervision of up to 99 1019 control panels
- STAR or local LAN connection to the units
- Windows XP multi-tasking operating system
- Customizable operator message for each event
- Full password protection and multiple operator levels
- Event log with sorting by event type and date
- Real time on line event management and historic information system
- Real time monitoring of control panels' status via integrated remote panel display
- Manual event printout
- Sensor analogue values display
- Modular design for optional combined control of fire detection, fire extinguishing, intrusion detection, video-surveillance and access control systems (with separated management)
- Encrypted configuration files
- Overview map maintains a view of wider areas whilst selecting the individual graphical maps
- Available in English, Italian and Russian language

4 SYSTEM HW/SW MINIMUM REQUIREMENTS:

ENTERPRISE 2006 requirements are the following:

CPU	\	Pentium IV o higher
RAM		>/ 256 Mbyte
HARD DISK		>/ 1 Gbyte
FLOPPY DISK		3.5" 1.44 Mbyte
CD-ROM		
KEYBOARD		IBM compatible
VIDEO SVGA		1024x768 or more
MOUSE		Microsoft compatible
ONE USB		2.0 PORT for hardware key (software licence)
ONE (1) SERIAL PORT or MULTISERIAL PORT		when more than one control units have to be supervised
ONE (1) 10/100 ETHERNET CARD		

ENTERPRISE 2006-requires as a minimum Windows-XP Professional operating system.

5 PROGRAM SETUP:

Enterprise is supplied in a CD with a hardware dongle to plug in the USB port of the supervision computer. Each dongle presents a unique digital signature that is recognized by Enterprise, therefore, the software allows its correct operation.

To install the program, insert the CD and follow the instructions on screen. Once installed, the software will be autorun. If the hardware protection key is foreseen its installation will be checked before program execution and in case of loss of protection key the following message will be displayed: "KEY-CODE NOT FOUND". If the key is removed during program runtime the system will work with limited functions as signalling unit only.

6 SOFTWARE STRUCTURE:

6.1 Main page

Since Enterprise has been developed for integrated safety and security systems, the main page of the programme shows the list of the systems under supervision:

- Fire Protection (Detection and Suppression);
- Intrusion Detection;
- Videosurveillance;
- Access Control;
- Technological.

Each section is accessible by pressing the icon corresponding to each sector (see Figure 1).



Figure 1: Enterprise 2006 Main page

Fire Protection: the sliding toolbar indicates the available event types: Alarm, Prealarm, Fault, Isolation. Clicking the window MANAGEMENT the graphical page-list will be automatically displayed. In the event of alarm, prealarm, fault or device isolation the relevant icons will be coloured, meaning that at least one device is assuming an active status. Clicking on the icon it is possible to open all the active event type pages.

Intrusion Detection: when an intrusion protection system is installed, Enterprise gives access to the graphical pages through the MANAGEMENT icon of the sliding bar. The available event types are: Alarm, Fault, Tamper, Exclusion. Again, clicking on the coloured icon (i.e. active event) will lead to the pages with active events.

Videosurveillance: this section allows the control of the video surveillance cameras (live video, playback, search, record, zoom, play forward, etc.), in order to monitor the system under supervision in the case of alarm, pre-alarm, fault, tamper from the safety/security devices.

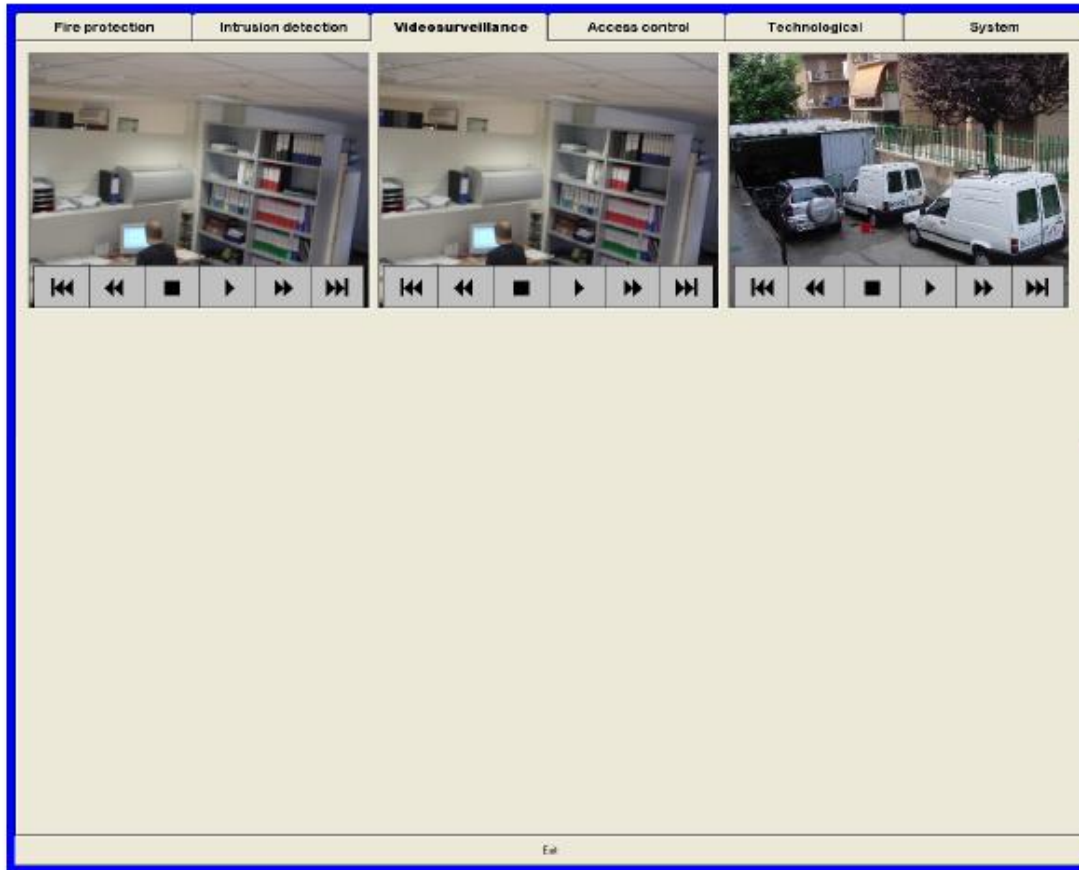


Figure 2: Enterprise 2006 management of videosurveillance systems

Access control: this section (currently under development) is thought to control the access of authorized personnel and prohibit entry of unauthorized persons. Enterprise integrates Spazio Italia serial protocol to provide optimal protection of facilities and buildings via a combination of terminals, sub-terminals and control panels.

Technological: This function must be enabled during software configuration phase and permits the supervision of process control signals. Clicking this window the "technological" page will be then displayed. During this phase it is possible to execute macro control functions for enable/disable or activation/reset on pre-configured zone groups.

6.2 MANAGEMENT:

Clicking MANAGEMENT window will give the access to the graphical pages of the program

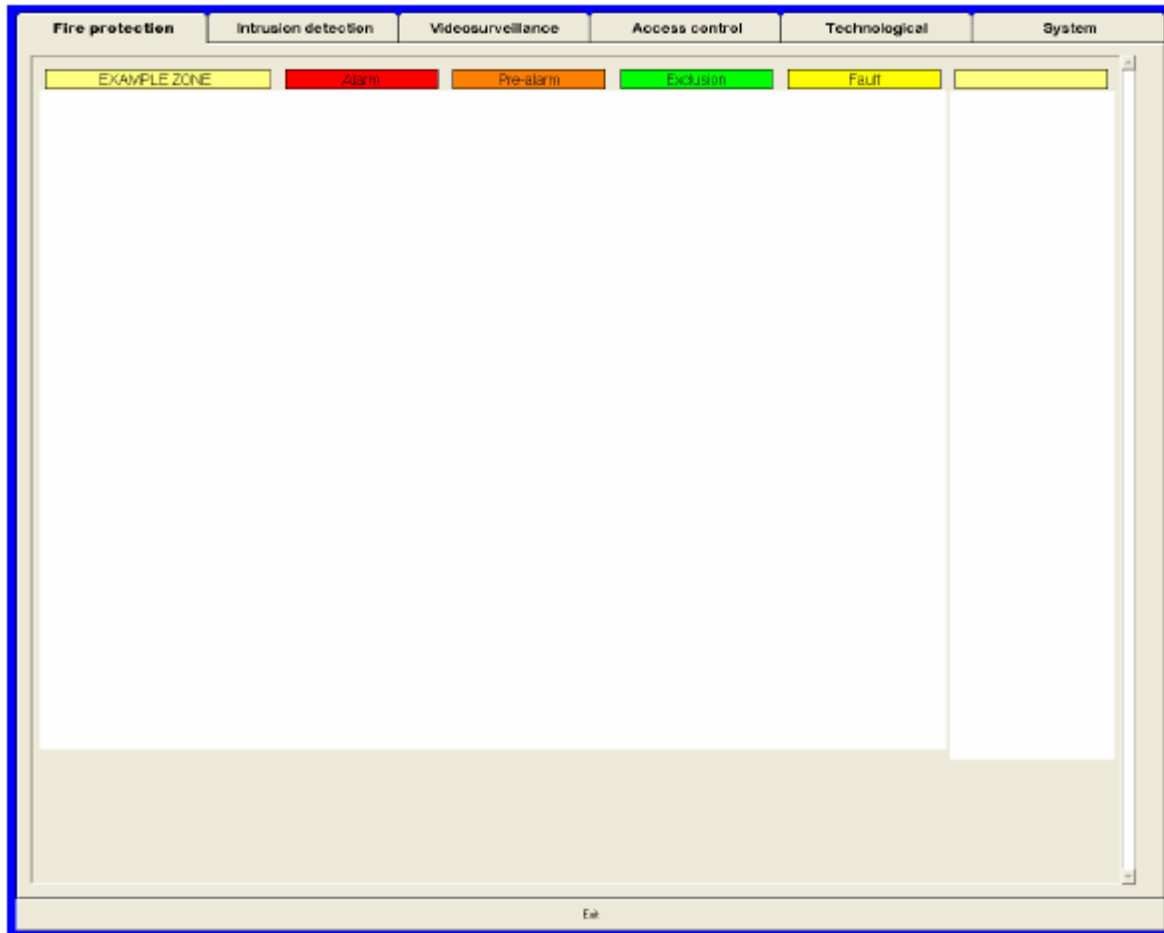


Figure 3: Management section of fire protection

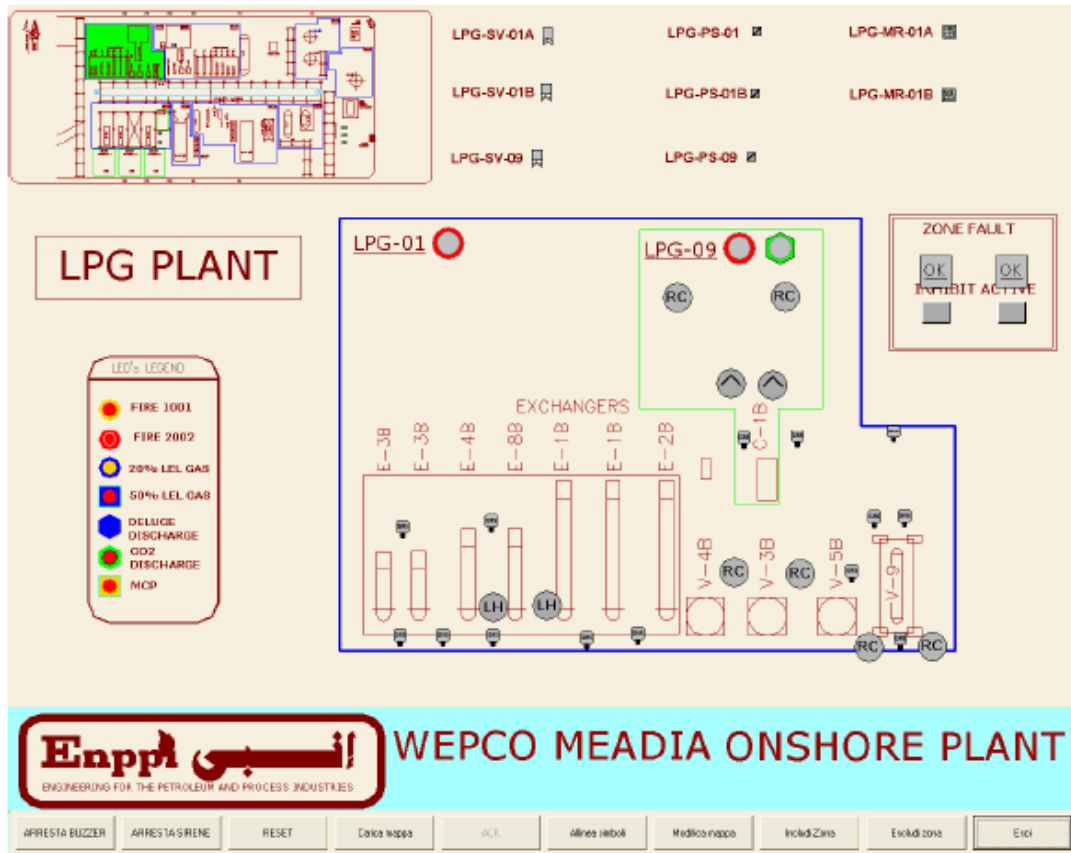


Figure 4: Fire protection graphical page

Once the map is selected, it is possible to carry out the following operations:
 enable/disable single points or entire zones of the fire protection system;
 enable/disable single points or entire zones of the intrusion detection section;
 display the analogue value of the devices (when allowed by device type);
 silence the safety sirens (for 1019 control units only);
 edit the graphic maps/layout (if the function is enabled).

The icons corresponding to the devices are coloured according to their current status as follows:

DEVICE STATUS	COLOUR
Device missing	Dark green
Device disabled by the operator	Light green
Device disabled by time zones	Magenta
Warning/pre-alarm	Amber
Tamper	Amber
Alarm	Red
Fault	Yellow
Normal	Background colour (grey)

Table 1: Correspondence device status-device colour

The operations permitted on the devices depends on the access level of the operator. In particular, Enterprise has been designed to perform sophisticated tasks on the devices, such as the individual control of the zones with a simple right click on the symbol (see Figure 3).

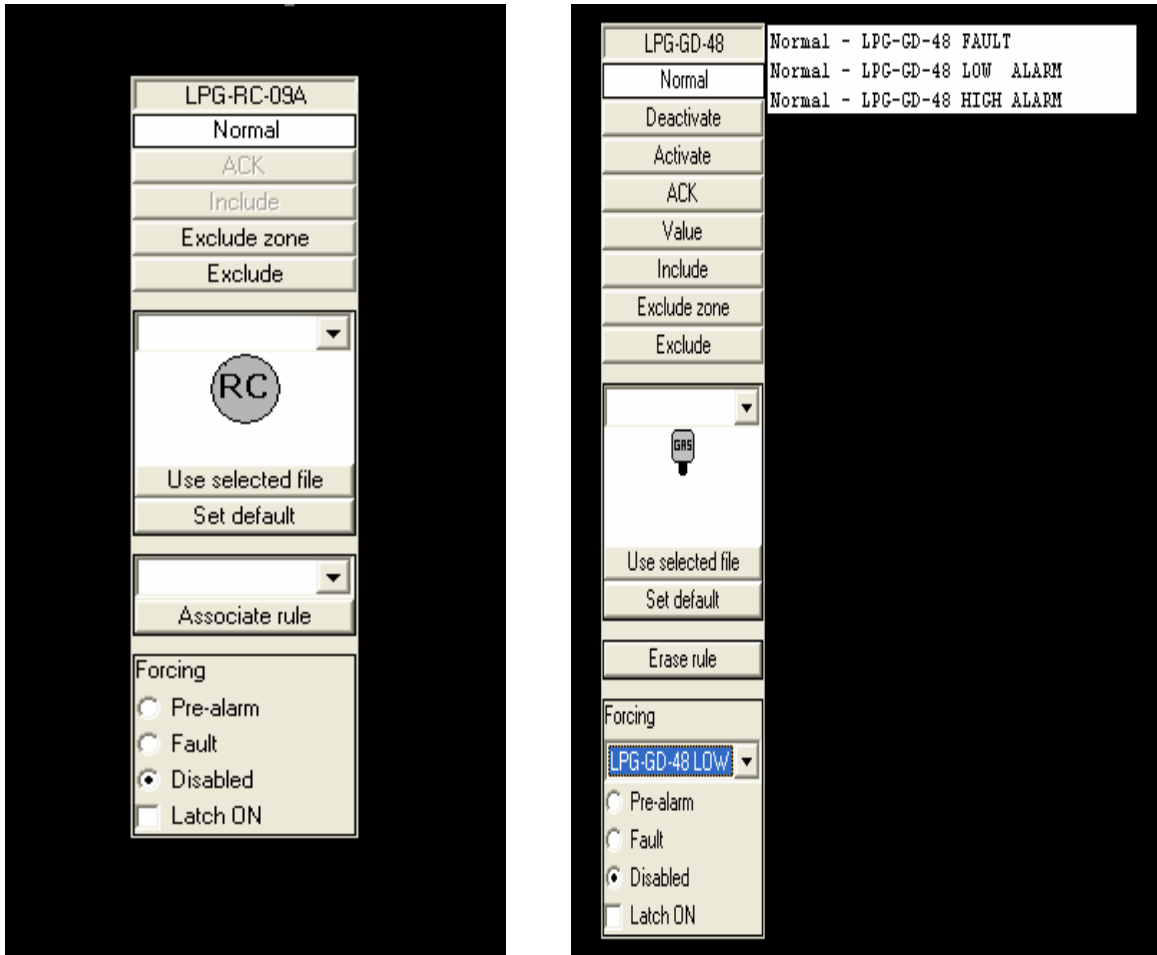


Figure 5: Examples of the right-click menus of devices in fire protection section (sensor-on the left- and rule-on the right)

After right-clicking on the sensor, the operator is allowed to include/exclude the device, exclude/include an entire zone, ack an alarm, change the device icon and force a condition, depending on the access level of the operator (see Table 1). In the case of an actuator, the operator is allowed to activate/deactivate, ack, change the actuator icon, exclude/include and force a condition.

The “associate rule” function is accessible at Level 3 (system administrator) and permits to define a group of zones under the same icon, controlling a logic rule through the status of each individual device.

Level	Authorisations
0	Include/exclude the device, include/exclude an entire zone, activate/deactivate, ack, change icons, force a condition, associate/erase rule, edit map, align symbols, load new maps
1	Include/exclude the device, include/exclude an entire zone, activate/deactivate, ack, change icons, align symbols, load new maps
2	Include/exclude the device, include/exclude an entire zone, activate/deactivate, ack
3	Ack an alarm/prealarm condition

Table 2: Enterprise 2006 multi-level password protection

To enable/disable the entire zone, it is also possible to click on the window ISOLATE/DEISOLATE, then select the window ZONE. If the operation has been accepted (authorised at Level 0 only) all points will be lighted according to Table 1.

In the intrusion detection section, the operations permitted on the devices are similar to fire protection, with pre-alarm being replaced by tamper. To enable/disable a security zone, click the window SET/UNSET and then select the window ZONE. If the operation has been accepted all points will be lighted according to the Table 1.

Sirens

In the case of active event, the sirens can be silenced following one of these procedures:

1. Click on “Silence Sounders” button in Enterprise main page;
2. Click on “Silence Sounders” key in the graphical page;

Analogue value

To display the analogue value of a sensor, right-click on the symbol and select VALUE command;

The relevant analogue value of the device will be displayed on a small window.

If the analogue value is not available, Enterprise will generate an error message.

The analogue value visualisation is possible with the following sensors only:

Sensor type	Measuring unit
Smoke sensor	Perc. of obsc.
Heat sensor	°C
Combustible gas detector	% L.E.L
Toxic gas detector	ppm
Generic 4-20 mA transm.	mA

Editing maps and symbols

If the access level is 0 or 1, maps can be modified in the graphical map page by selecting the command MODIFY MAP. A graphical editor will then appear with the bitmap version of the graphical page. After modifying the map and saving it, press “CONFIRM CHANGES” button; this will update the graphical page after entering the user password.

As stated before, symbols’ icons can be changed by right-clicking the symbol (Access levels 0 and

1) and selecting the pull down menu above the icon. This will show an icon list with all the symbols available in the programme.

To change an icon location, click on ALIGN SYMBOLS in the graphical page, then left-click the icon and drag it to the desired position with the mouse. Once the symbols are aligned, select “CONFIRM ALIGNMENT” to make changes effective. To abandon the operation, just press CANCEL in the password window.

6.3 Panel simulator

Enterprise 2006 has been designed to provide the panel status to a remote supervisor in order to allow an effective interaction with 1019 panels. In particular, the main page of the programme “remotises” the panel keyboard with the relevant functions, i.e. Reset, Silence Buzzer, Silence Sounders, Delay, Override, Evacuate (see Figure 6).



Figure 6: Panel simulator in the home page

Level-3 users are only allowed to interact with 1019 panel via Panel Query function, while other may select any of the options.

6.4 Panel communication diagnostics

For each Panel under supervision, this field shows a select button and two information labels: the button contains the panel name and permits to select which unit the Panel simulator refers to. The labels indicate respectively the Panel type and its connection status (green means correct communication, yellow “NO COM” message on black background stands for no communication between host and Panel CPU).

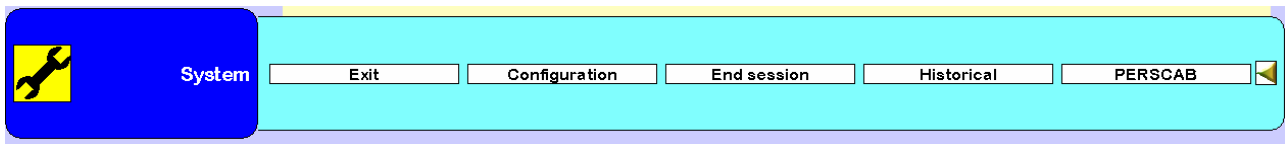
6.5 Date and time window

The upper right screen window shows system date and time. Events will be logged with system date and time.

6.6 Password window

If required, a password window will appear over other programme controls; when this window is shown, other options will not be available. If no user is logged, the window allocates the users list and the password field.

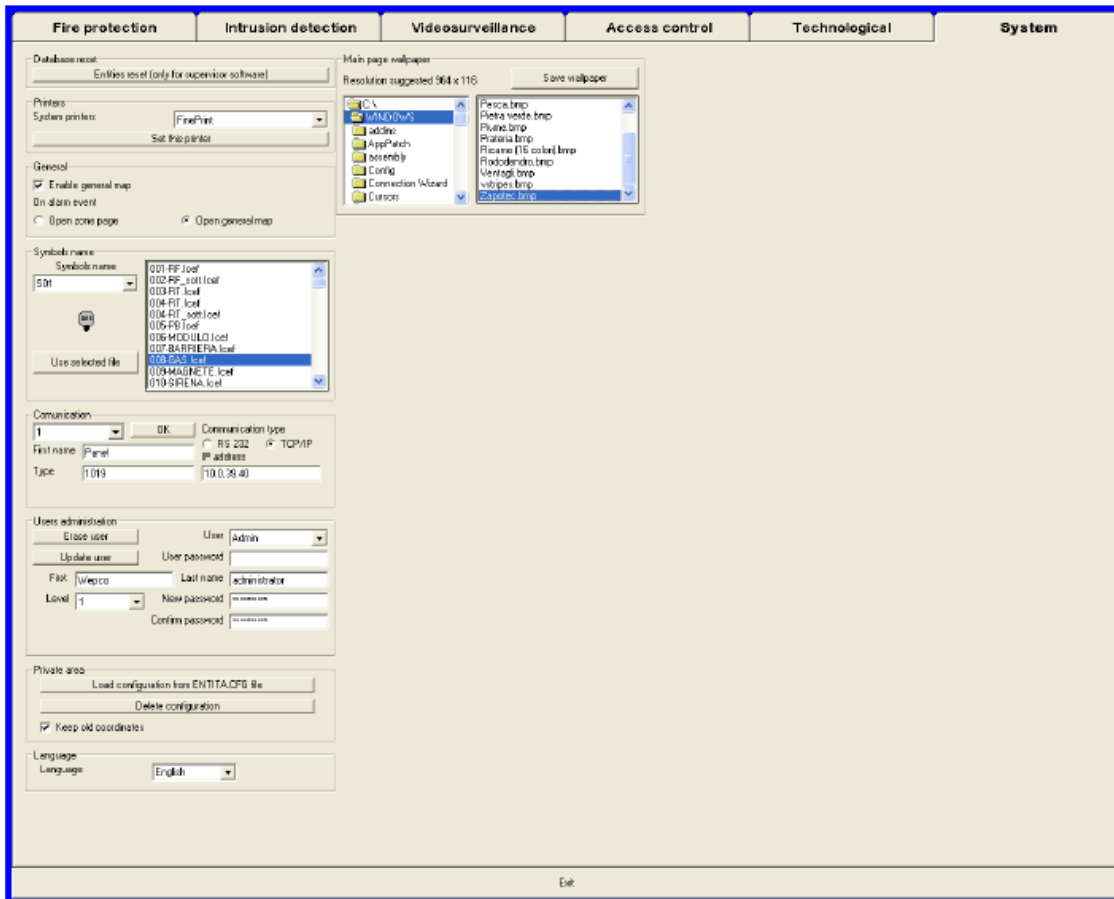
6.7 System



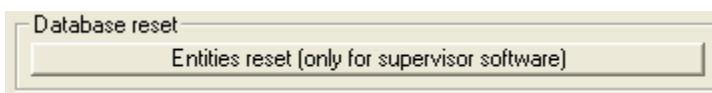
SYSTEM sliding bar contains the commands for exiting the programme and/or ending a session, entering the event list and the configuration page (for Access Level 0 only).

6.7.1 Configuration:

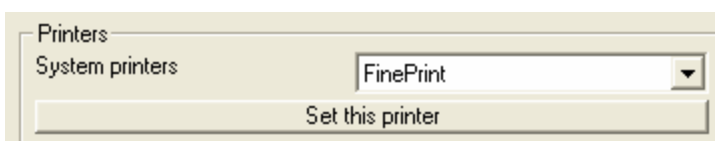
Below is an example of the configuration page; schematically, the operations that can be carried out are:



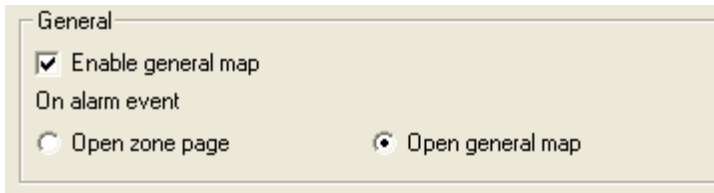
Database reset (only for system integrators and developers)



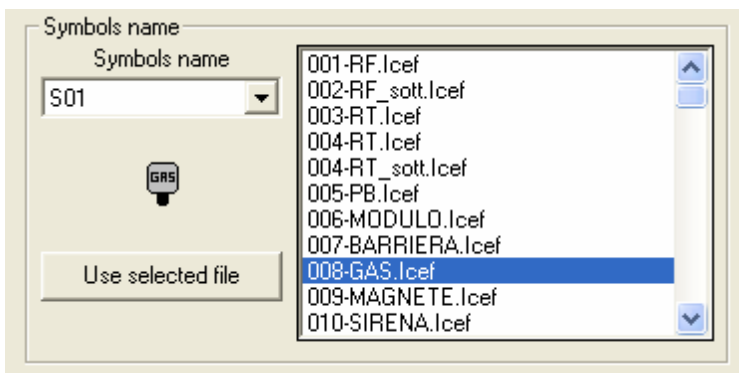
2. Printers: a pull-down menu indicates the printers available for printing out the event list.



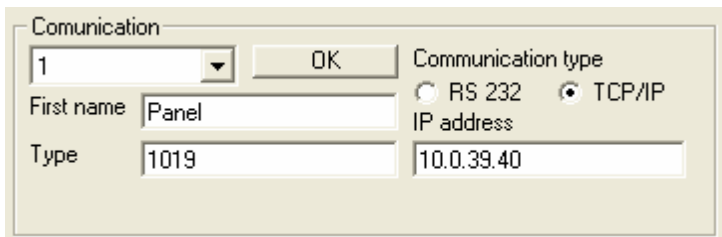
3. General: this section is studied for importing and setting an overview map of the buildings and facilities under protection, in order to make it more intuitive to interact with Enterprise 2006. This features can be enabled/disabled. In addition, an active event from the safety/security system may determine the sliding of the general map or the popping up of the graphical page relevant to the event.



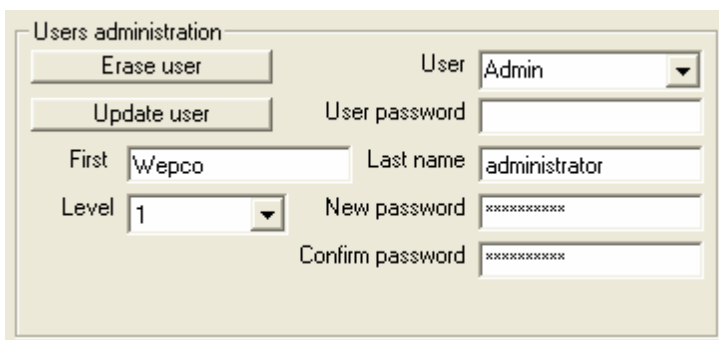
4. Symbols name: this function allows to associate default symbol icons to the correspondent symbol files.



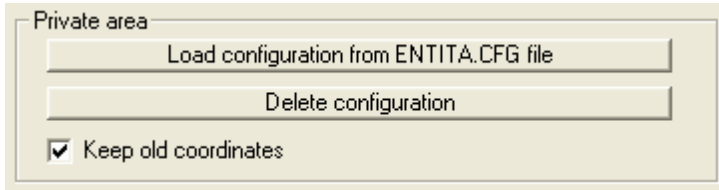
5. Communication settings: see picture below for selecting the configuration parameters of 1019 panel.



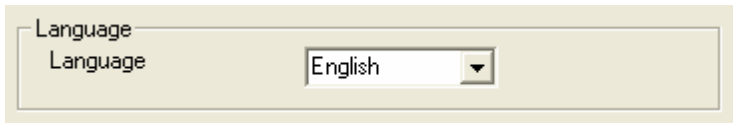
6. Users administration: this section (accessible at level 0 and 1 only) is thought for the configuration of usernames and passwords and for setting access policies.



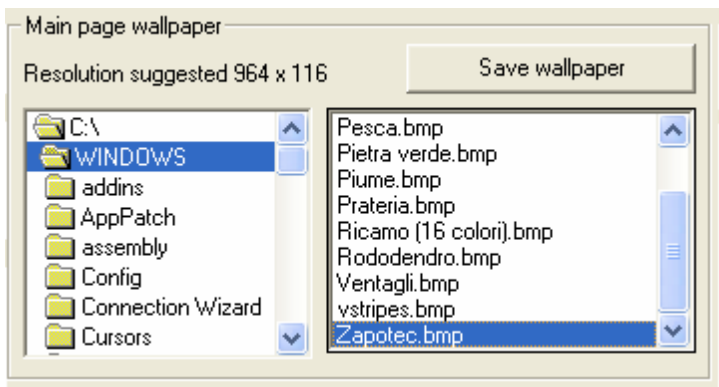
7. Private area (only for system integrators and developers)



8. Language settings; language available: Italian, Russian, English and French.



9. Main page wallpaper: see instructions below for importing a wallpaper file for the main page (.bmp format)



6.7.2 Historical:

First name	Last name	Level	Event time	Description
SV	Technician	0	22/02/2006 12:41:41	Session start
SV	Technician	0	22/02/2006 11:46:41	Application shut down
SV	Technician	0	22/02/2006 11:26:08	Communication error - CFG TCP error
SV	Technician	0	22/02/2006 11:27:44	Session start
SV	Technician	0	22/02/2006 8:43:28	Application shut down
SV	Technician	0	22/02/2006 8:54:02	Session start
		x	22/02/2006 8:54:02	Communication error - CFG TCP error
SV	Technician	0	21/02/2006 15:31:58	Application shut down
SV	Technician	0	21/02/2006 15:31:53	Communication error - CFG TCP error
SV	Technician	0	21/02/2006 15:31:38	Session start
SV	Technician	0	21/02/2006 15:31:18	Session start
SV	Technician	0	21/02/2006 15:18:17	Application shut down
SV	Technician	0	21/02/2006 15:15:52	Communication error - CFG TCP error
SV	Technician	0	21/02/2006 15:15:36	Session start
SV	Technician	0	21/02/2006 15:09:56	Application shut down
SV	Technician	0	21/02/2006 15:09:34	Communication error - CFG TCP error
SV	Technician	0	21/02/2006 15:09:19	Session start
SV	Technician	0	21/02/2006 11:06:29	Application shut down
SV	Technician	0	21/02/2006 10:53:23	Communication error - wrong alarm events (PG PLANT & PGBI-UPD4500' D)
SV	Technician	0	21/02/2006 10:53:17	Session start
SV	Technician	0	21/02/2006 10:49:14	Application shut down
SV	Technician	0	21/02/2006 10:48:51	Communication error - CFG TCP error
SV	Technician	0	21/02/2006 10:48:36	Session start
SV	Technician	0	21/02/2006 10:46:33	Application shut down
SV	Technician	0	21/02/2006 10:38:54	Communication error - CFG TCP error
SV	Technician	0	21/02/2006 10:38:44	Session start
		x	21/02/2006 10:38:38	Wrong password
SV	Technician	0	21/02/2006 10:38:19	Application shut down
SV	Technician	0	21/02/2006 10:38:04	Session start
SV	Technician	0	21/02/2006 10:35:58	Application shut down
SV	Technician	0	21/02/2006 10:32:05	Communication error - CFG TCP error
SV	Technician	0	21/02/2006 10:31:58	Session start
SV	Technician	0	21/02/2006 10:26:18	Communication error - CFG Error connessione TCP
SV	Technician	0	21/02/2006 10:25:05	Session start
SV	Technician	0	21/02/2006 10:24:28	Application shut down
SV	Technician	0	21/02/2006 10:24:13	Communication error - CFG Error connessione TCP
SV	Technician	0	21/02/2006 10:24:03	Session start

Once an event is acknowledged by the operator, it will be deleted from the event queue although it remains active in the event and graphical pages until reset have been made at the control unit. Event types present in the queue are relevant to the following status only:

- PREALARM/ALARM
- ACTIVE/DEACTIVE
- FAULT/TAMPER
- ISOLATION/DEISOLATION
- EXCLUSION/INCLUSION
- SYSTEM CONFIGURATION
- SYSTEM EVENTS

The event list might be sorted by time/date and event type, and can be printed out according to the printer settings defined in the “Printer” section.