

HERCULES 6 GRAPHICS SYSTEM

USER MANUAL



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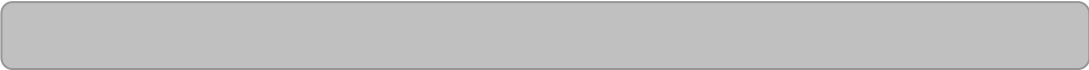


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1.0 Introduction

Hercules 6 is a fully integrated front-end graphics system for various Protec Fire detection Control Panels and Detectors.

A series of graphics screens show the position of all addressable devices and provides a visual indication of their status. An easily used selection system permits rapid selection of a particular screen. To help locate particular devices large areas are broken down into a series of sub screens. The location of a device during an Alarm, Fault, Disablement and Test condition is further enhanced by flashing cross-hatched sections indicating the area containing the active device.

Generally, a secure data network transfers control commands and data between alarm panels. One or more of these panels translates all these signals and transmits them to a PC running the Hercules 6 software. The PC processes this system information and displays it. Multiple panel systems require only one such interface for full system information.

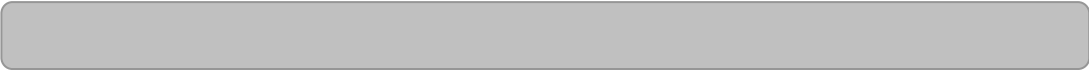
When several networks of panels are used Hercules 6 is configured to handle these as if they are one system but allows no interaction between networks.

Events generated by individual devices are displayed indicating their precise location. Other events can be displayed on the 'event logging system' (els) window when enabled. All events are logged in the System Log that is easily displayed and searched. The log can be backed up for archive and analysis purposes. Printer options allow the printing of the log as required.

The system is monitored such that any connection failure between the Alarm Panel and the PC is broken both systems will show fault.

The system can be made up of any combination or number of systems from X600, X500, X400, X300 fire alarm control panels, CirrusPro Insipient Fire Detectors or DigiLite Emergency Lighting Test and Monitor System.

When connecting to CirrusPro and DigiLite, these are purely Ethernet based and therefore require local network access.



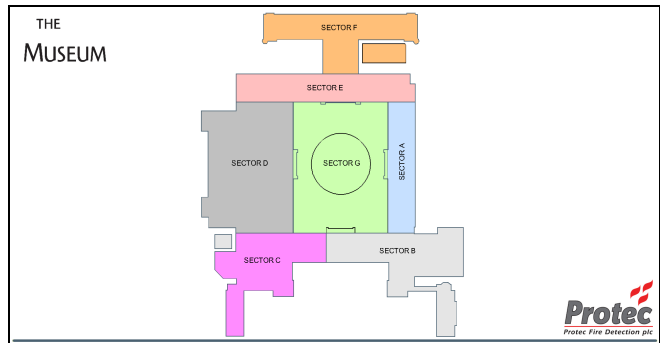
2.0 Navigating Through the System

At the top right of the display are the three Navigation buttons.

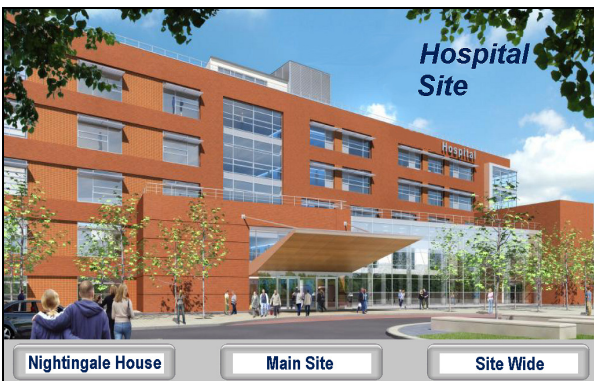


Home, Expand Image to available space and Up/Back

With Hercules 6 running the screen shows the home page, which is generally a plan of the site or a pictorial representation of the site.



Example Site Plans



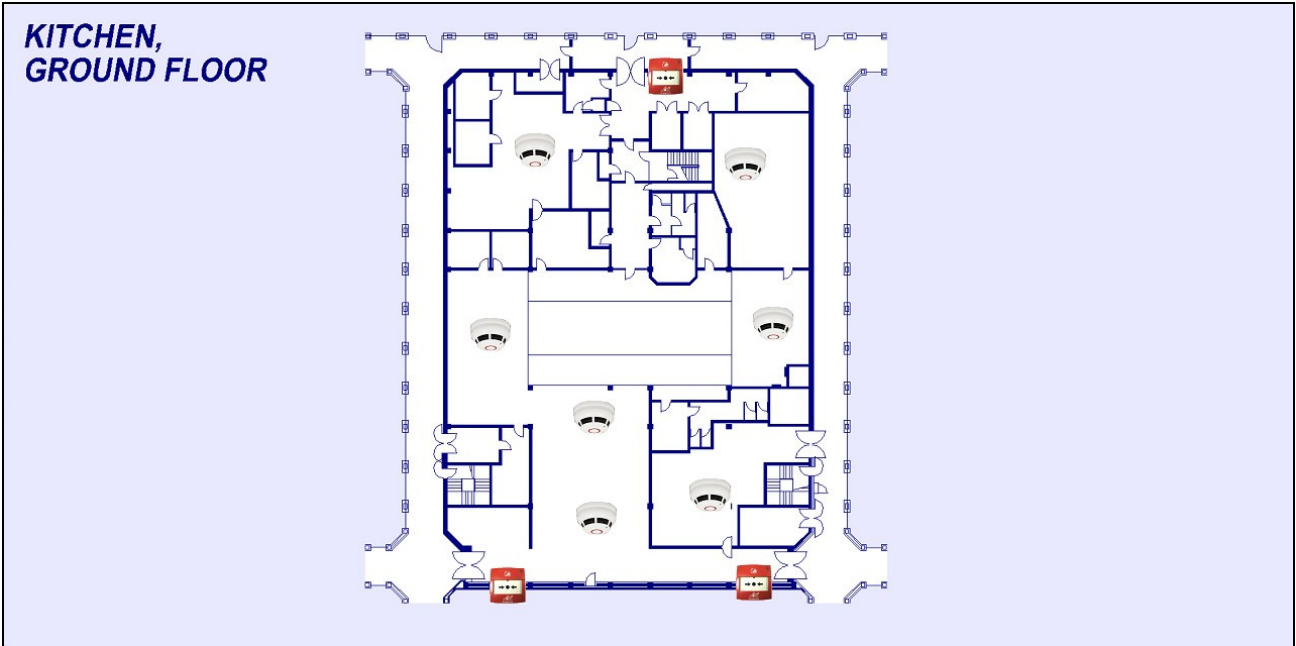
Example Pictorial Images

These examples show the top-level image of the site. This is where the Home button will point.

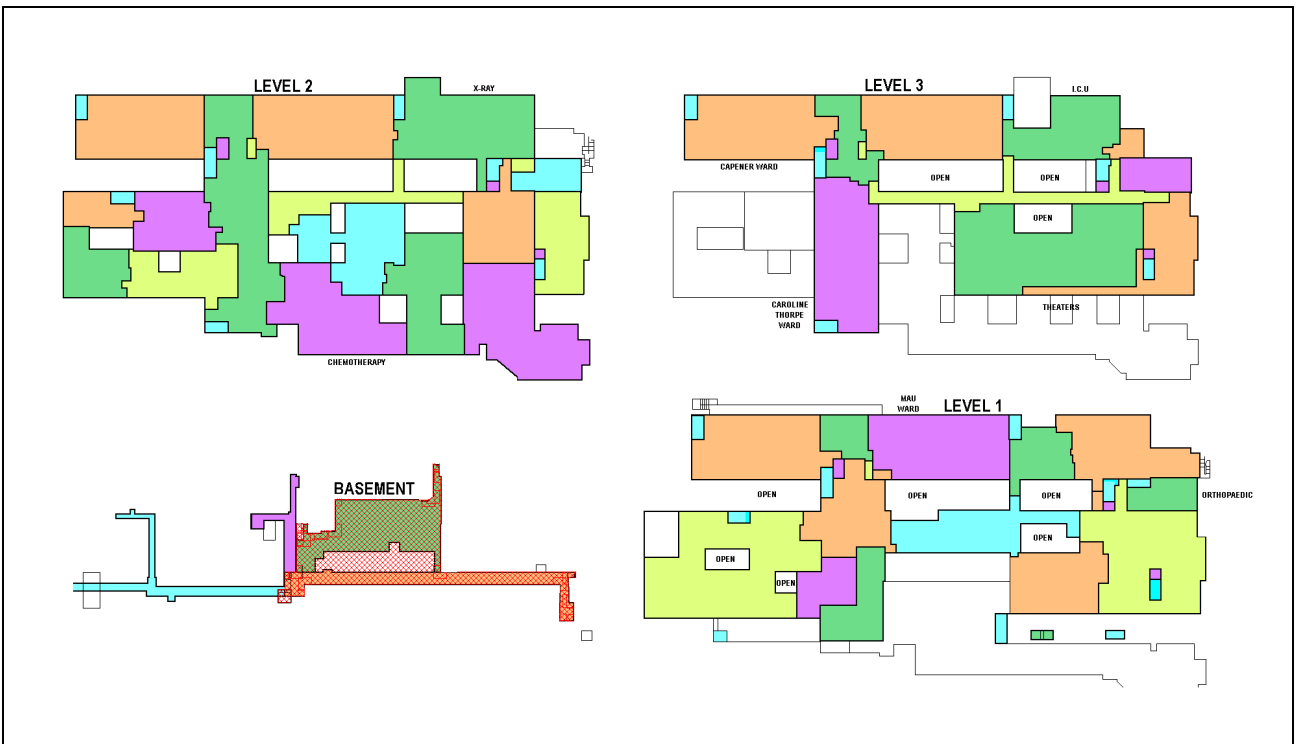
On these plans are 'links' to more detailed plans or images. When the mouse moves over a link the pointer changes to a finger.



Clicking on a link displays a more detailed representation of the area. A small area will go straight to the plan showing the devices.



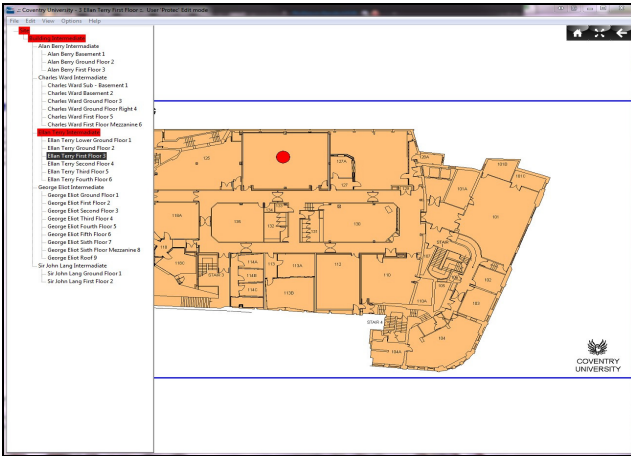
Large areas are further split up even further.



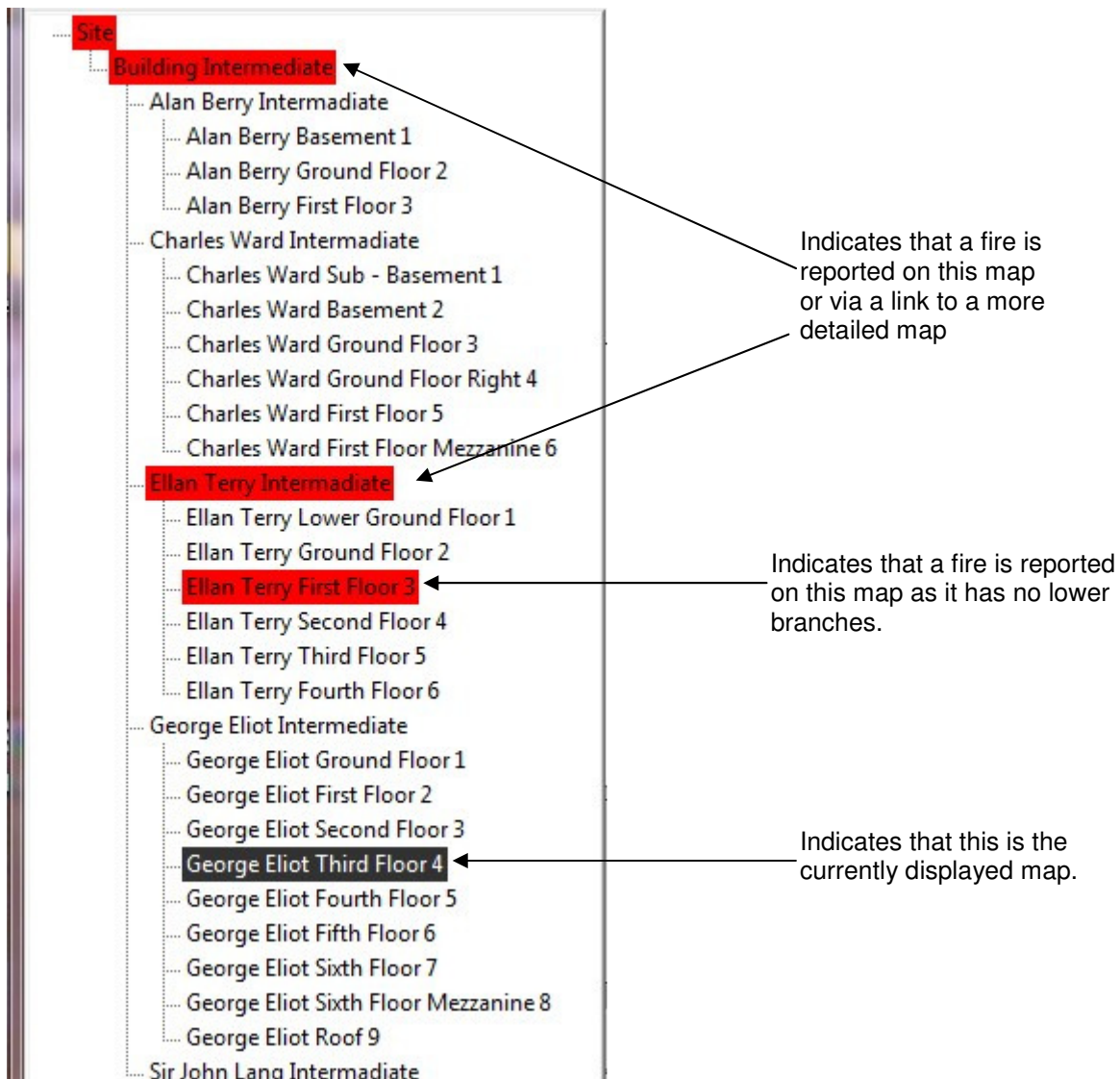
Each coloured area is a link to a more detailed plan. Notice the area in the basement indicating Fire condition.

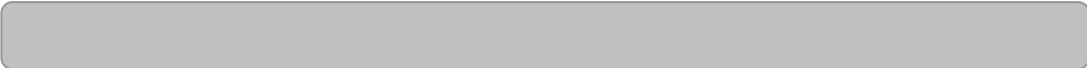
2.0.1 The Tree View

When the mouse pointer is moved to the left hand side of the graphics window the tree structure of all the images is displayed. This incorporates an indication of the state of the system.



The tree can be used to navigate to any map by clicking its name.





2.1 Operation

Generally, the Hercules Colour Graphics System (Hercules) interfaces with Protec Fire Alarm Control Panels (Panel) using the industry standard RS232 communication system. The protocol (communication language) has been custom designed to allow the passing of data between the fire alarm control panel and the PC. The protocol is available on request. The Panel sends all Fault and Alarm information to Hercules and can respond to Silence, Evacuate and Reset commands from Hercules amongst others.

The Panel sends change of state information or, if nothing has changed, an empty message is sent as an 'I am here' message. This is acknowledged by Hercules, which waits for the next message. When no new information is available from the control panel the empty message is sent every 5 seconds or so. When an event occurs, this is sent immediately.

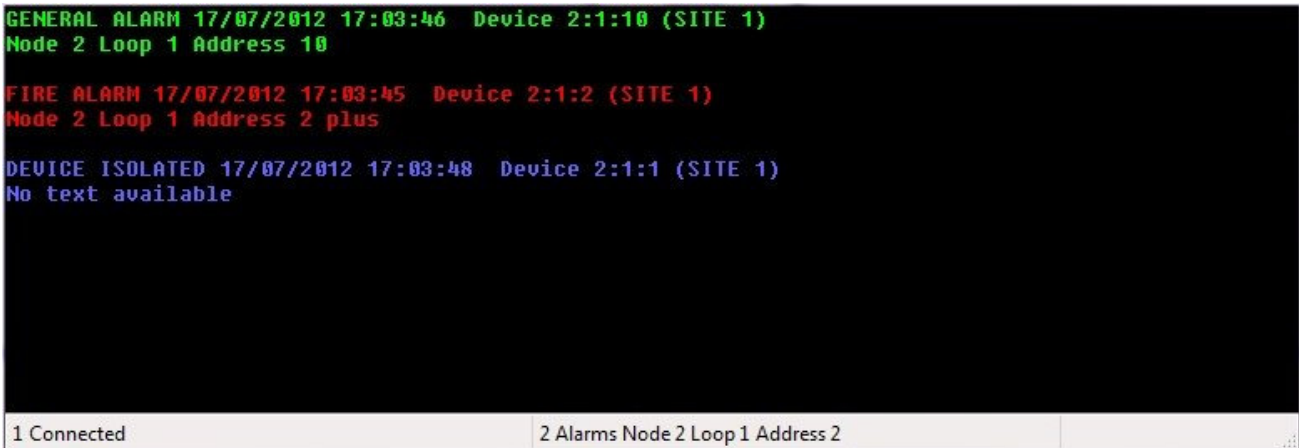
Every event has error checking information within the message that is used to confirm that the received data is correct. If Hercules has not acknowledged the data, the Panel will send the same event again until correctly acknowledged.

Usual device specific events are:

FIRE	RED
GENERAL ALARM	GREEN
DAMPER	BLACK
PRE ALARM	MAGENTA
ADDRESS FAULT	YELLOW
DEVICE ISOLATED	BLUE

These are the default colours. Other colours can be selected during set up.

All events, including system events that are not device related, are recorded in the system log and on the event logging system (els) area (if enabled). Clicking on events on the els area takes the graphics to the affected map.



Certain actions are password protected. There are multiple users with passwords with the varying access rights. Users actions are logged, along with the time and date.

By default the following are created :

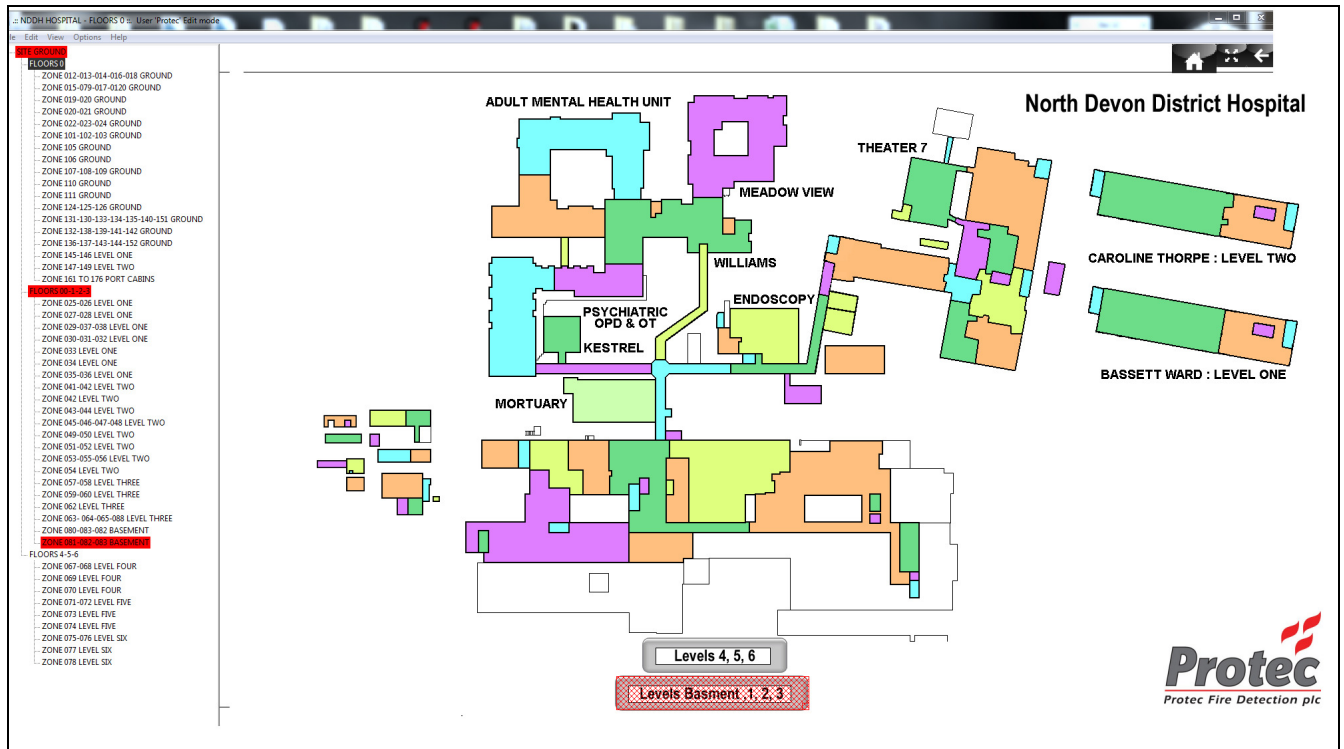
Username	Password	Level
admin	password	15
user	password	2

See Appendix 1 for details of Action Vs Levels.

2.2 An Event

When Hercules receives a new event, the system indicates this by flashing the relevant section of the Site Plan and sounding an audible alert.

The procedure is the same irrespective of the event type:

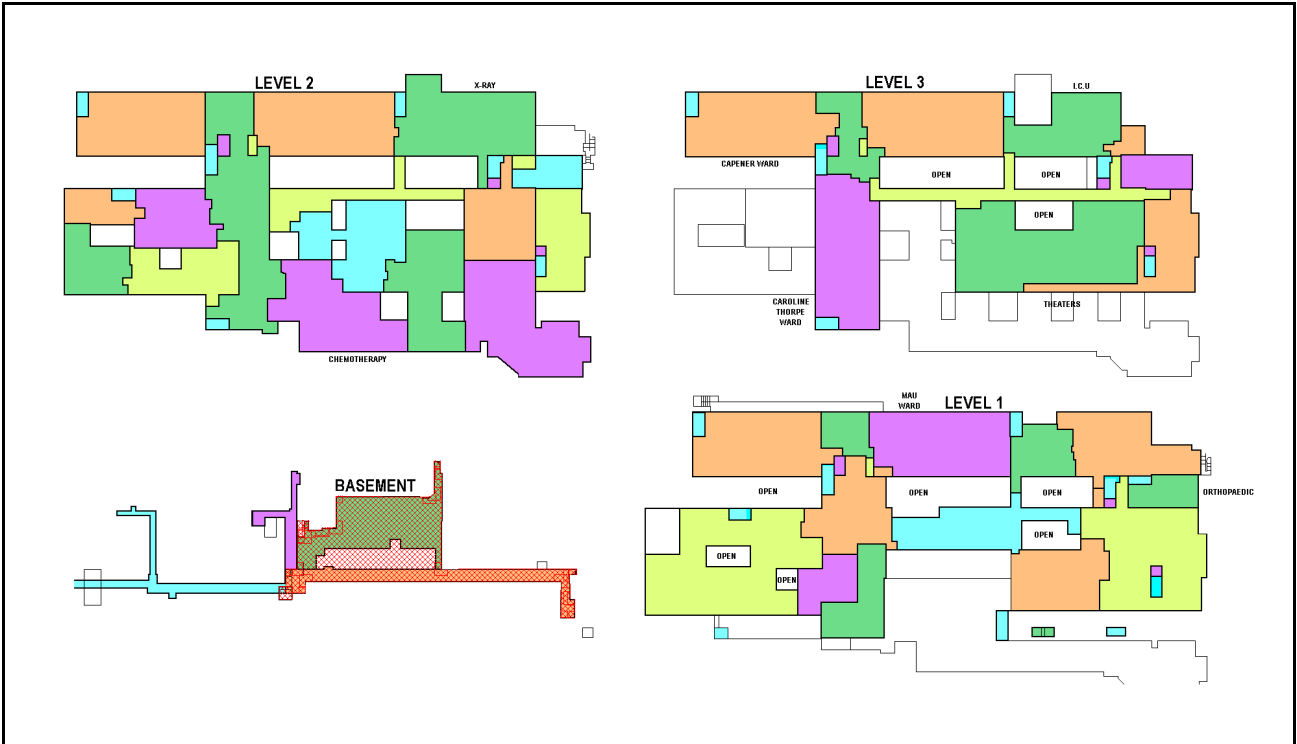


Follow the Flashing Links to the Cause of the Event

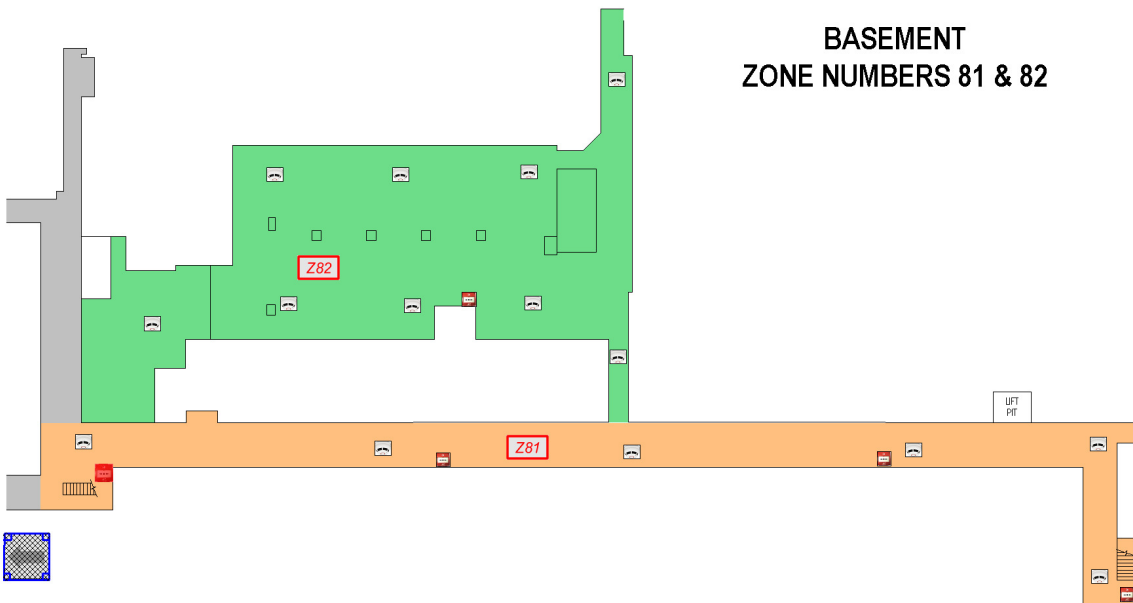
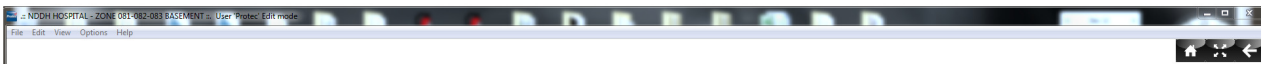
This is shown with the appropriate colour cross hatch showing the affected area, in this case RED indicating a Fire Alarm. Selecting this area, by clicking the left mouse button, shows more detail of the area (intermediate plan) or the location of the actual device if the most detailed map is displayed.

It is possible to have Silence and Reset controls; these are enabled or disabled when the system is commissioned. The controls only affect the areas of the system with the fire condition as they are only available when double clicking on a device in a fire condition. The controls perform the same function as the Panel buttons.

The following shows an Intermediate stage indicating floors of the building involved.



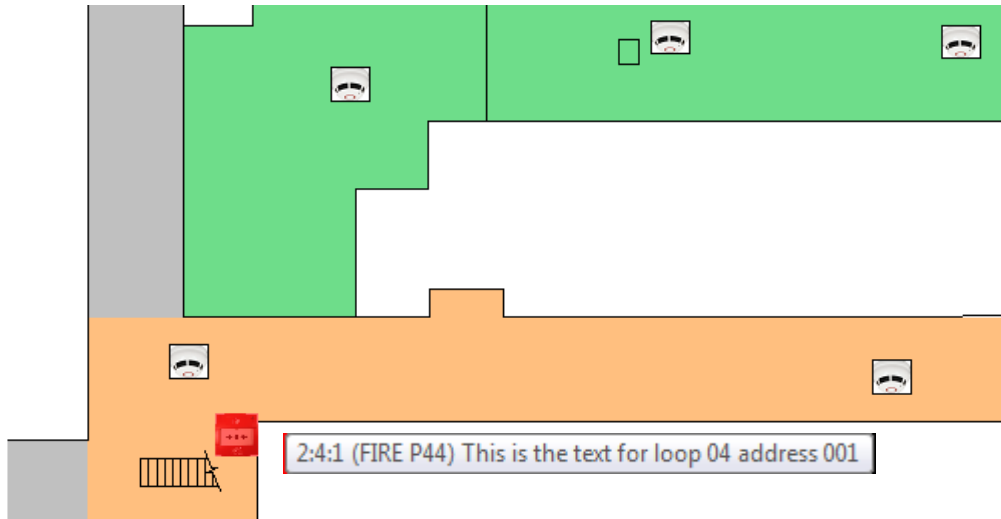
The intermediate stages are not always necessary and, in these cases, the display will go from the site plan to the location of the device.



The device itself will be pulsing the colour of the 'type' of event, in this case RED indicating a Fire Alarm, until the accept button is pressed. All accepted devices and links stop flashing.

The lower line shows the status of the fire alarm system.

Placing the mouse cursor over the device will display the Node Loop and Address numbers and text for that device.



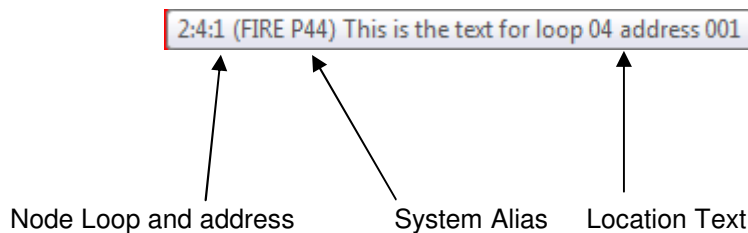
This enables the use of the Left mouse button to get further information about a particular device.

Note that Left mouse button function is available at any time irrespective of the state of the device.

If the system is displaying a different map when a new event occurs, Hercules indicates this by Pulsing the Home Icon and indicating on the tree view on the left of the screen. This tree view is available from all the maps of the system.

It is possible to have Silence and Reset controls; these are enabled or disabled when the system is commissioned. The controls only affect the areas of the system with the fire condition, as they are only available when double clicking on a device in a fire condition. These perform the same function as the Panel buttons. By only allowing these controls from an active device helps ensure that the correct network is only affected by these controls.

Hovering the mouse pointer over the device displays some basic device information as shown above.



System Alias is set up when the site is first created and is used to identify different networks of panels when connected.

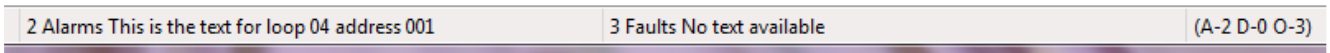


2.3 Other Indications

The status line has 2 sections, the first (left hand side) show the number of networks connected:



The remaining status information totals the fires and faults and scrolls through them:



Number of alarms
and the associated location text

Number of faults
and the associated location text

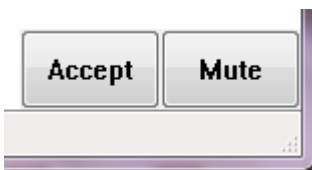
Totals
Alarms

Disablements

Others

The status line can be programmed at set up to be on either or both the graphics window and the els window

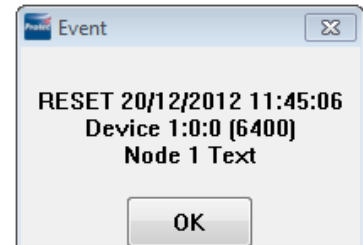
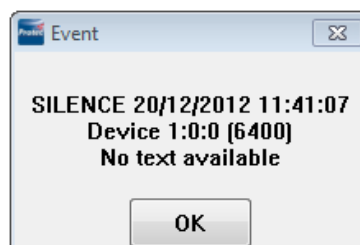
The Accept and mute buttons are displayed when there are new events that have not been accepted or muted:



Mute – silences the PC sounds (if programmed)

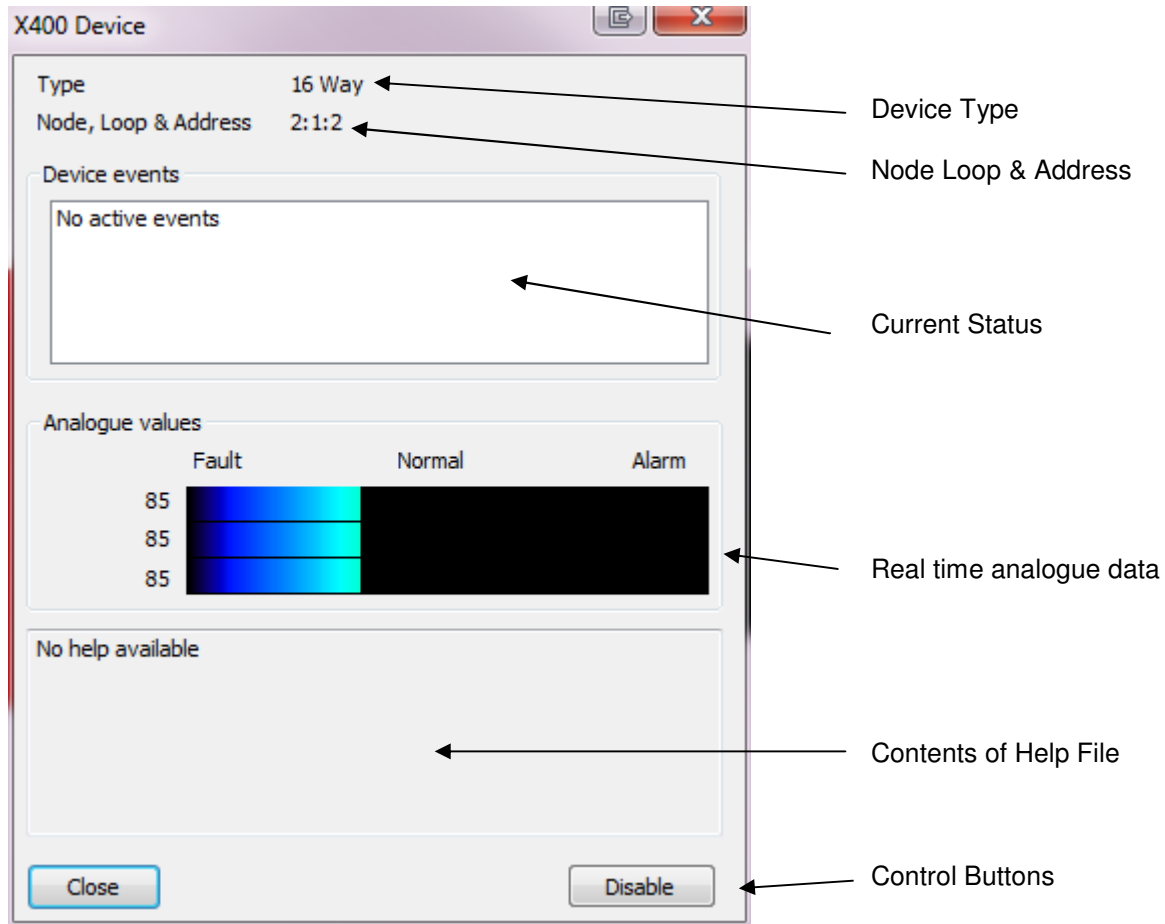
Accept – stops all flashing indications and (if programmed to do so) sends Accept request to the network which mutes the system.

Event boxes are displayed when there are any events that do not affect devices programmed on the graphics



2.4 Device Information

Double clicking on any device displays the device information window:



This shows a device in the normal state (no current events) with no allocated Help file. The system has been set up to allow disablement of devices. The Disable button becomes Normalise when the device is already disabled.

The analogue values are requested at the time the window opens so there is a short delay before these are displayed. Note that these are not always available and if not displayed within 10 seconds will not be displayed.

Active device

The screenshot shows a window titled "X400 Device" with the following content:

- Type: 16 Way
- Node, Loop & Address: 2:1:1
- Device events: FIRE ALARM
- Analogue values:

	Fault	Normal	Alarm
220	Blue	Green	Red
220	Blue	Green	Red
220	Blue	Green	Red
- Out of hours - keys available in the Lodge
- Control Buttons: Close, Silence, Reset, Disable

Annotations on the right side of the image point to the following elements:

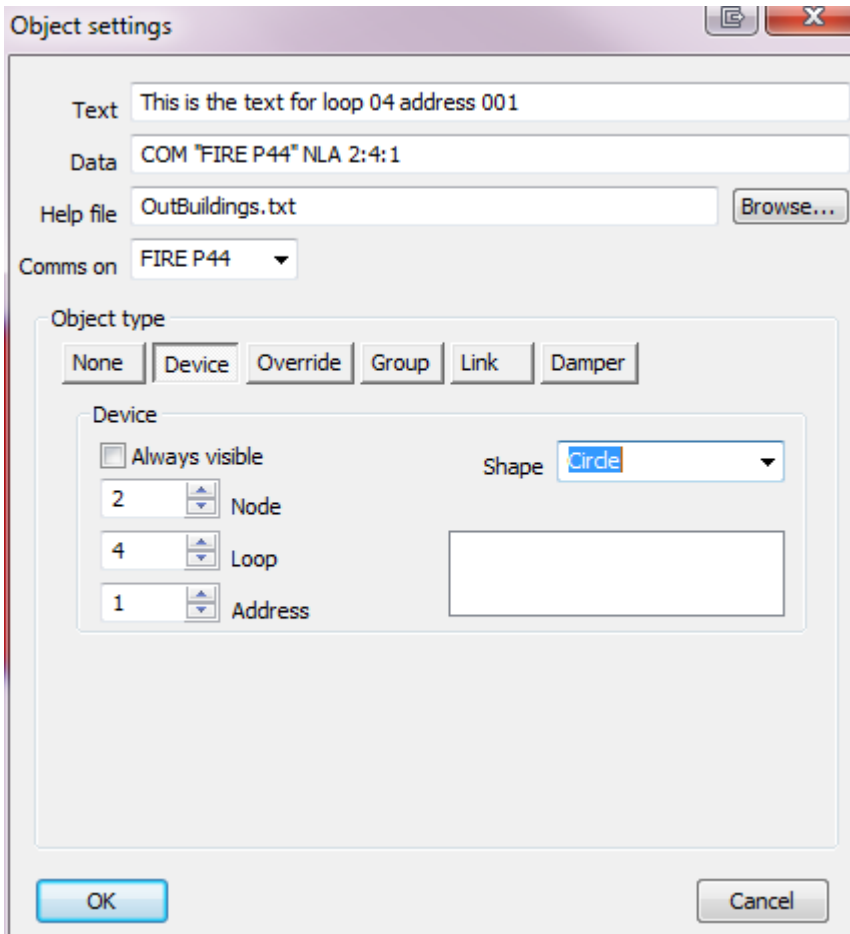
- Device Type (points to "16 Way")
- Node Loop & Address (points to "2:1:1")
- Current Status (points to "FIRE ALARM")
- Real time analogue data (points to the analogue value bars)
- Contents of Help File (points to the "Out of hours" text)
- Control Buttons (points to the "Close", "Silence", "Reset", and "Disable" buttons)

This shows a device in the Fire state with the details from the Help file displayed.

Notice that the Silence and Reset controls are now visible. These controls may not be enabled at all for the system or not available at the current log on level.

2.4.1 Editing or Creating Help Files

Clicking the Right mouse button on a device will result in a window as shown below.



These options are not available at most user levels as they are set up options.

To edit or add a text file click on browse on the Help File line.

Navigate to the desired Help File Folder (it is recommended that this is kept within the site data folder on the desktop).

New files are created by right clicking in the navigation window and selecting New – Text Document

This creates a file called New Text Document.txt

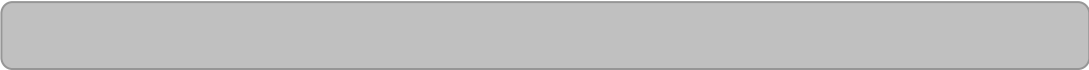
Rename this as required – this is now an empty file that can be edited as follows:

Edit an existing file by right clicking on the filename and selecting edit (do not double click as this will accept the Help file and you will need to click Browse again)

This opens Windows Notepad and allows the editing of the file as required.

When the editing is finished save the file.

Ensure that the required file is highlighted and click Open the browse window.



This file is now allocated to the device.

Allocating an existing file – click browse – highlight the file required and click Open.

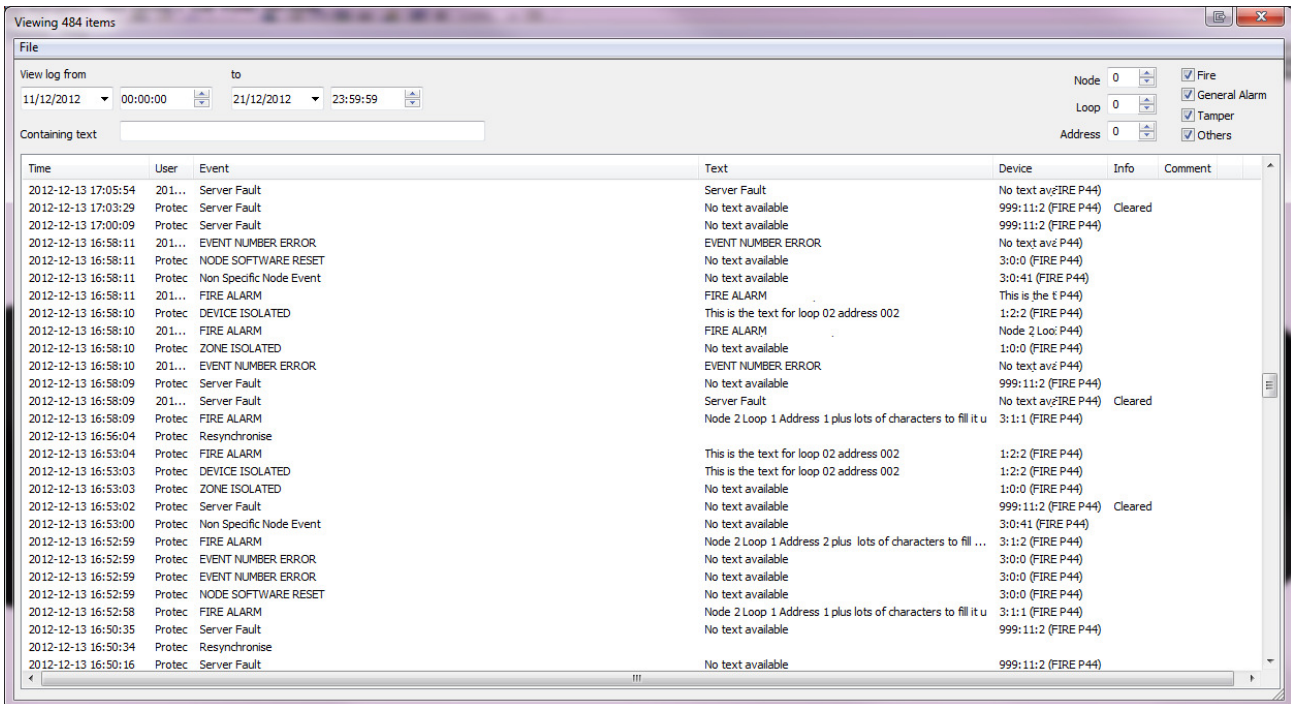
Filenames can be typed in by hand if required and do not require a full path if they are in the same folder as the system site file - SiteName.xml.

These files can be associated with any number of devices.

3.0 The Log

Every event received is logged in the Log. When a new event is received, it is entered into the log. The Log is viewed by clicking on the View Log in the view menu.

An example of the log display is shown below.



The log view is not updated while displayed but must be Closed and reopened to view the latest events.

The log can be searched using the scroll bars.

3.1 Event Filtering

Event can be filtered by various parameters

Date range by entering the dates into the following areas



Note that these default to the full range of the log whenever the log is viewed.



Event Types selected by checking the appropriate boxes for the required events

Fire
 General Alarm
 Tamper
 Others

Events Designation can be used by Node Loop and Address. Any value other than zero is used in the filter.

Node 0
Loop 0
Address 0

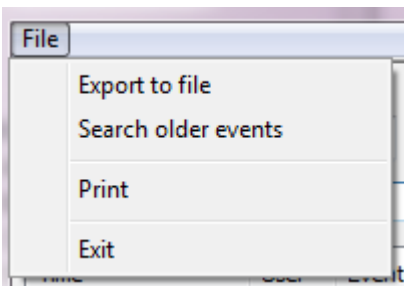
(Setting address to any value while leaving Node and Loop at zero will show all events on that address on all Loops on all Nodes)

Text within the location text can be used to filter the events. Any string entered will be used as a filter

Containing text

3.2 Log Options

Clicking File on the log screen shows



Export to file

Opens a window to create a backup of the log in CSV format

Search older events

Allows access to backup log files

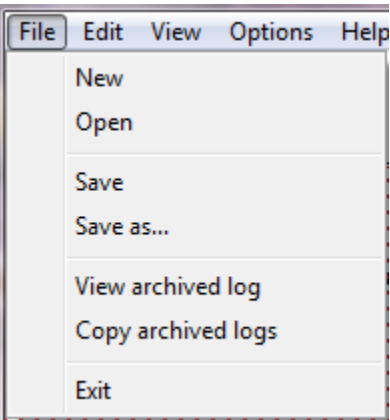
Print

Allows the printing of all the data currently shown in the log display. Use filtering to minimise the print run.



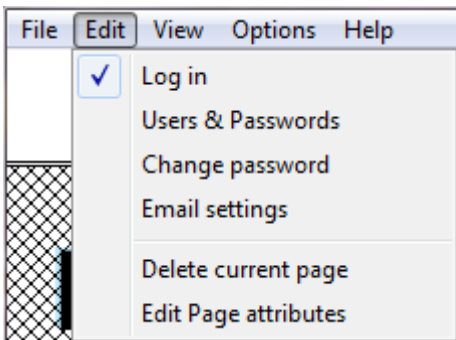
4.0 System Menus

File Menu



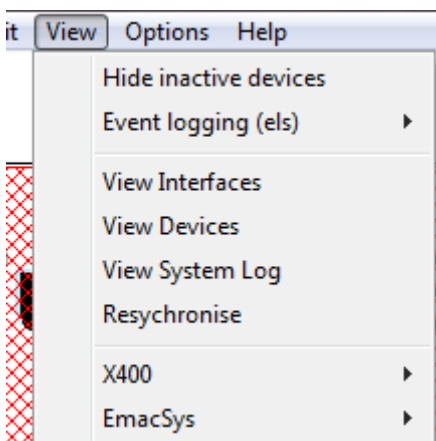
- Create New Site File (Edit Mode Only)
- Open existing Site File
- Save current File
- Open list of Archived Logs
- Backup Archived logs to another location
- Leave the Program

Edit Menu



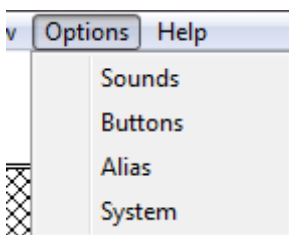
- Log On and Off
- Set up Username and passwords (See Section 5)
- Allows Current use to change own password
- Feature not supported at the time of writing
- Editing Options

View Menu

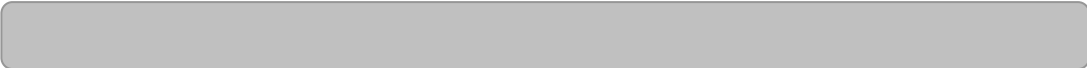


- Icons for non active devices are hidden or displayed
- Els System Options (Edit Mode)
- View Current interface status, Device List and System Log
- Synchronise with all networks
- Communication System Option (Edit Mode)

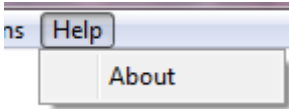
Options Menu



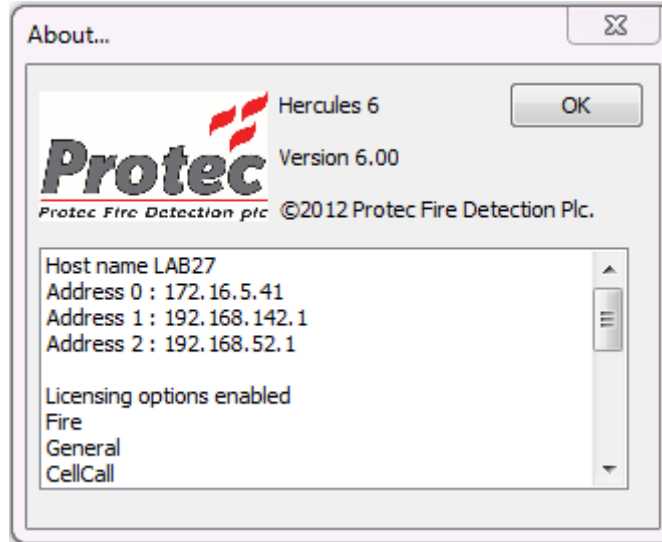
- Set Up: Sound (Edit Mode)
- Buttons (Edit Mode)
- Alias (Edit Mode)
- System (Edit Mode)



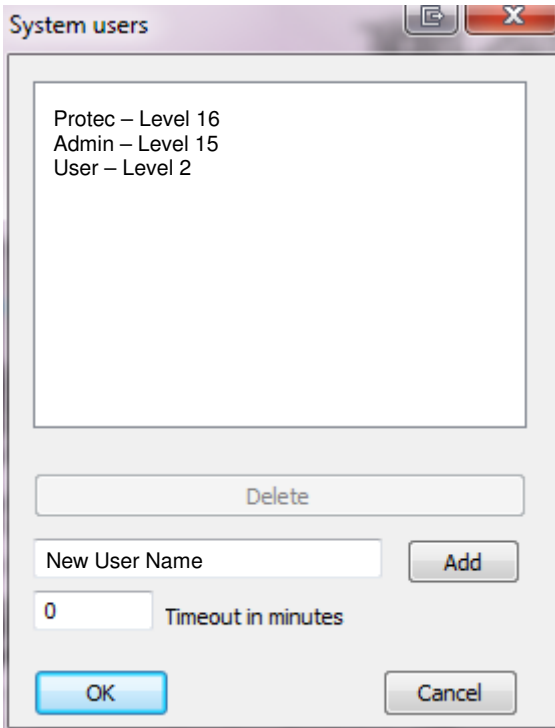
Help Menu



The About option displays the following window, this details information about Hercules such as Version and Revision numbers and the Date of writing.



5.0 Users & Password



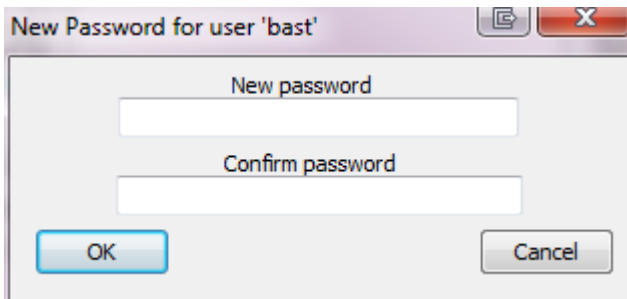
List of Current Users

Delete highlighted User

Add New user name

Automatically log out after set minutes (0 = Never log out)

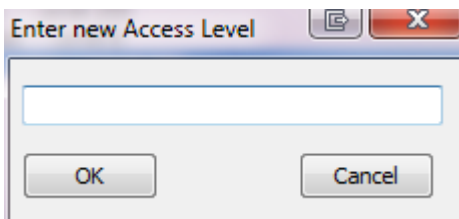
Pressing Add produces the following window



The password for the user must be entered into both fields and OK clicked.

The new user will now be in the list but with no permission level set.

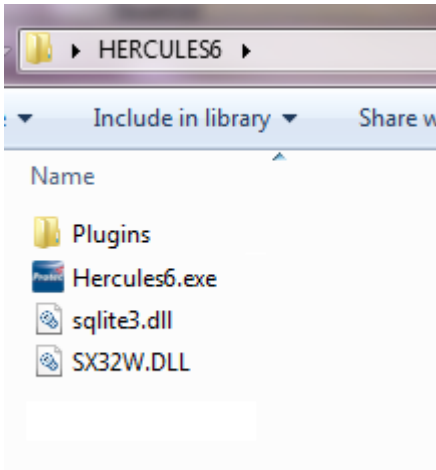
Double click on the user name to change the permission level.



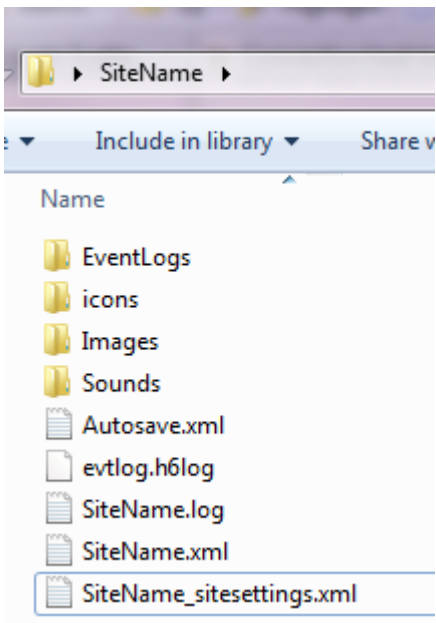
See Appendix 1 for details of access for different levels.

6.0 Folder Structure

The recommended location for the following folders is on the desktop. This way they are readily available to the user and engineer alike.



This is the running folder for Hercules 6, these files are required for the correct functioning of the application. It will be named something similar to 'V6001' indicating the version number of the Hercules 6 file.



This is the Site data folder. These folders and files will be set up when the site is created. Some are created when Hercules6 is first run.

7.0 Appendix 1 – Permissions

	No log on	Basic	Standard	Advanced	Administrator	Engineer
Level	0	1	2	8	15	16
Set time					x	x
Add user					x	x
Change own password		x	x	x	x	x
Accept		x	x	x	x	x
Email settings					x	x
View Log		x	x	x	x	x
Print Log				x	x	x
Disable device				x	x	x
Export log					x	x
Backup Log					x	x
Import Old Log					x	x
Edit mode					x	x
New, open, save, save-as					x	x
By Device type & network (FA, GA, TA)						
Buttons Allocation						x
Silence				x	x	x
Reset				x	x	x
System options						x
Windows Locked (if activated)	x	x	x	x		
Alias (System Connection)						x
Disablement					x	x
Set sounds					x	x
Event priorities						x
Event colours					x	x
View els if not already on					x	x
Quick Comment Edit					x	x
Import Text (pnames file)						x
Hide/View Inactive Devices			x	x	x	x
All Right Click Options						x
Help File Allocation					x	x

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