invensys
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## InTouch® Client Application

# Operations Server and Viewer

Help Manual

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# Operations Viewer and Server Help Manual

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# 1 WELCOME

## 1.1 INTRODUCTION

Operations Viewer & Server are supplied as part of the EurothermSuite software solutions.

- **Operations Viewer** provides a defined interface via Wonderware InTouch and allows data distribution across geographical and organisational boundaries.
- **Operations Server** provides server connectivity between the LIN control network and the plant enterprise network.

Applications can be deployed across the network, and simple-to-implement distribution features eliminate the need to duplicate data within each node.

The complete system is defined and built within a **Project Namespace** and stored in a project relational database.

## 1.2 OPERATIONS VIEWER

### 1.2.1 Operations Viewer features

Operations Viewer software is designed to present data to the whole range of plant personnel – such as operators, engineers, supervisors, and managers – in a fast and meaningful way. Consisting of a pre-engineered Wonderware InTouch client application, the simple-to-use display structure provides a rapid and intuitive HMI.

The operator view is based on a defined screen format of three areas, comprising:

**Alarm banner.** Permanent view of the last two alarms and any alarm group with a current alarm. Clicking on the alarm group displays the summary for that plant area.

**Current display.** Displays current mimic and popup windows with operator fascias, engineering point pages, and online help.

**Soft function keys.** Provide one-click selection to:

- **Overview.** Direct access to a specified display page.
- **Process Cell.** Fast access to display pages defined as process cell overview pages.
- **Operator Groups.** Each operator can build groups of tag fascias from a common tag browser.
- **Point Page.** Selects engineering point pages with additional popup windows including help and tag edit functionality.
- **Alarm History.** Displays all alarms and events with filter buttons to limit view. All alarms are stored directly into a relational database, which can be viewed and queried online.
- **Trends**. Accesses real-time and historic trends. Operators can configure up to eight points per trend group, and all data can be trended and viewed. Optionally, with Information Manager, trend data is available with a Microsoft SQLServer™ relational database.
- **Security Login.** User login restricts access to displays and tag writes. Supports autologout.
- **Display Navigation.** ‘Previous’, ‘Next’, ‘Up’, ‘Down’ buttons allow navigation around the user mimics in a predefined order.
- **Last / Mimics.** Redisplays the previously displayed mimic, and allows a particular mimic to be selected from a menu for display. Mimics can be built using all features of Wonderware InTouch as well as additional special icon wizards.

## 1.3 OPERATIONS SERVER

### 1.3.1 Operations Server features

Operations Server structure has a client/server architecture with specialised interfaces to provide fast and efficient alarm and real-time data transfer from control nodes to HMI screens. Operations Server provides direct connection to the control network supporting Ethernet TCP/IP stack, ARCnet and serial connections. Control network protocol support includes Eurotherm LIN and Modbus.

**High performance I/O server.** Access to all control data is available via FactorySuite 2000 SuiteLink I/O server. Optionally, data is also available via OPC and DDE. All tag block data is accessible with a software licence limiting the maximum number of blocks accessible at one time to 75, 150, 300, 1000, 2000, or 4000.

- **Alarm provider.** An alarm provider controls the distribution of all block alarms to provide alarm banner and summary displays, alarm printing, and alarm history. Support for master/backup server functionality is available. Diagnostic displays are in-built.
- **Configuration.** All configuration and system data is defined within the project database, removing the need for any duplication of configuration at the HMI nodes.
- **Data integrity.** With access to data quality and server watchdog indication, automatic data failure is displayed on the operations viewer screen.
- **Data security.** All write access to control data is handled at the server, which uses the defined security setup to authorise allowed access.
- **Computer configuration.** Easy-to-configure multiple computer node systems are achieved by defining computer names and functions (client or server).
- **System control.** Utilities start up and shut down the complete application. Deploy and synchronise techniques allow remote nodes to be controlled.
- **LINOPC.** Manages all client access to the control network and includes OPC server functionality, allowing access from any third-party OPC client.
- **High availability mode.** It is recommended that the system be configured to run in High Availability mode, which causes the operations server to run as a service. This means that communications with the instrument network are maintained for as long as the relevant pc is powered, so that data and alarm logging functions (for example) can continue even whilst the user is logged out. It also means that these functions are automatically started as a part of the operating system's boot-up procedure when the pc is powered up. There is no user interface associated with High availability mode - it runs entirely in the background.

  In order to maintain high availability, the system continuously monitors the health of the Operations server, and restarts it as soon as is possible after any problem has been detected.

  A configuration utility, launched either from the 'Check' tool or via the 'High Availability Config' item in the 'Program Files/Eurotherm/Utilities' menu allows the user to select 'Standard mode' or 'High availability mode'. If 'High availability mode' is selected, a (case sensitive) password is requested, for use when the user is logged off. The default password is EPABN148NN, but this might have been edited in 'Create Users & Groups' configuration, and in such a case, it may be necessary to seek assistance from the system administrator.

  After changing run mode the system must be re-started before the new mode becomes effective.

## 1.4 PROJECT NAMESPACE & RELATIONAL DATABASE

### 1.4.1 Integrated development environment

The complete system is defined and built within a Project Namespace and stored in a Project Relational Database. By distributing this database to each Operations Viewer and Server node, a simple and easy way of configuring a multi-node system is achieved.

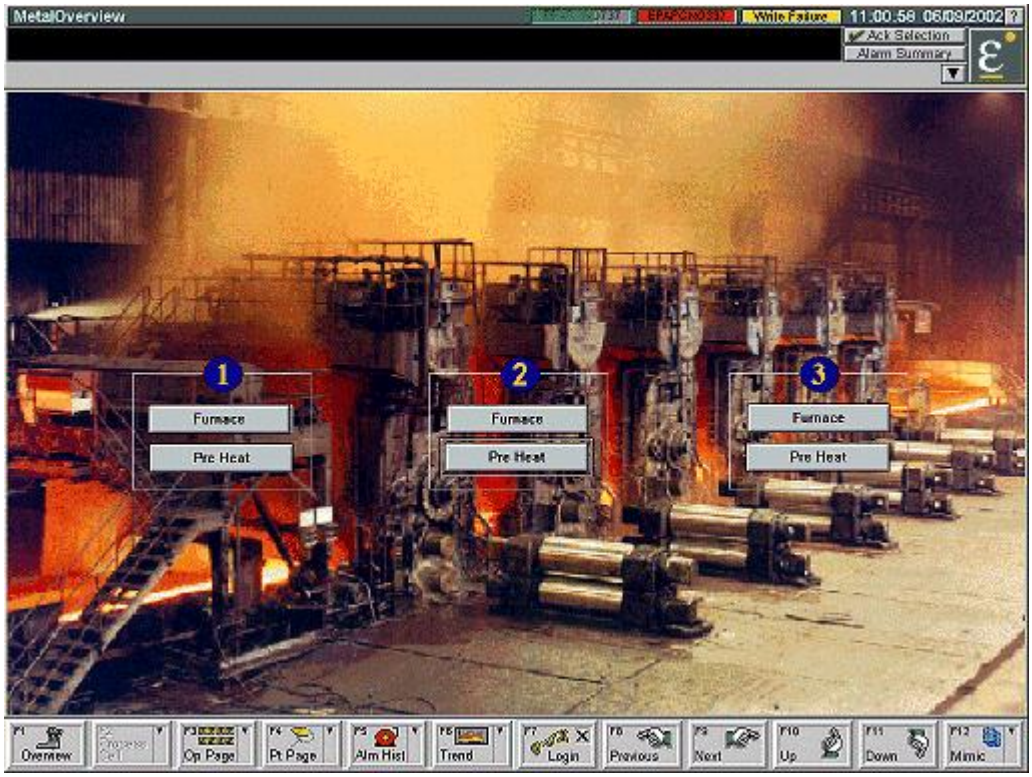
This integrated development environment provides:

- **Project Namespace (Environment).** Windows Explorer structure with defined files and folders. Allows more than one person to work on a project. The Operations Server runs a defined active project.
- **Single point of entry.** Use of configuration tools provides automatic update into the relational database.
- **Centralised tag list and browser.** List of all tags and associated data fields available in a number of different views – all tags, network, plant model, and alarm groups.
- **Plant model analysis and definition.** S88-based structured view of cells, units, control modules, and tags.
- **Security configurator.** Security definition of Groups and Users.
- **I/O allocator.** Assigns tags to 2500 I/O bases.
- **Comprehensive reports.** Configured from SQL queries and forms.
- **New project.** Creates different project shells. Plant Solutions project provides complete Wonderware InTouch application including display mimics and tag definitions.
- **Display navigation.** Defines screen navigation.
- **Alarm groups.** Browse tags and plant units to define alarm groups.

# 2 THE OPERATIONS VIEWER INTERFACE

## 2.1 OPERATIONS VIEWER SCREEN

The default opening operator interface display is the same as the Help Screen, but it almost certainly will have been customised for a particular application. Here is an example Operations Viewer screen:




The operator interface lets you:

1. See the current time-of-day and date.
2. See details on the latest alarms in the system and acknowledge selected alarms.
3. See if a Group contains any points in alarm and view an alarm summary for the area.
4. View a general alarm summary and a summary of system alarms.
5. View a group of up to sixteen point fascias displaying chart recorder parameter values.
6. View a detailed point page for any of the available tagged points.
7. View and examine live and historic trends of the logged chart recorder points.
8. Access the Help screen for help with the operator interface.
9. See system information on the computer, servers, EurothermSuite access names, etc.

If data security has been configured you can also log in as a user with password-protected access privileges.

## 2.2 TITLE BAR


### 2.2.1 Overview title

The title of the currently displayed mimic appears at the left-hand end of the title bar ('Plant' in this example).

### 2.2.2 Write Failure warning

You may see a yellow **Write Failure** box at the right-hand end of the title bar (as in the above example). This means that at least one LIN write error has been logged and not yet acknowledged.

- Click the box to pop up the **LIN Write Errors** window, where you can see details of the error(s).

### 2.2.3 Server Comms Failure warning

A red box in the title bar means that a total comms failure has occurred. The name of the server concerned appears in the box. If more than one server has failed comms, a red box appears for each server.

- Click the red box to pop up the Help About Data page for the server, where you can see details of the server comms error.
- If the red box is flashing, rather than steady, the comms failure has been artificially induced via the **Fail comms to this Server** button on the Help About window 's **Data** page.

### 2.2.4 Comms health indicator

When the Operations Viewer workstation is started up, the health of the comms for each server is indicated in the title bar by a green 'percentage progress bar' in a grey box labelled with the server name. The green bar grows across the box as comms with each LIN block are checked. If the comms prove to be 100% healthy the box disappears. If not, the box remains on display with the progress bar set in its final position to indicate the current 'percentage health' of that server's comms (see example above).

- Click the green/grey box to pop up the **Help About** window's **Data** page for the server, where you can see details of the server including an exact 'server health' percentage figure.

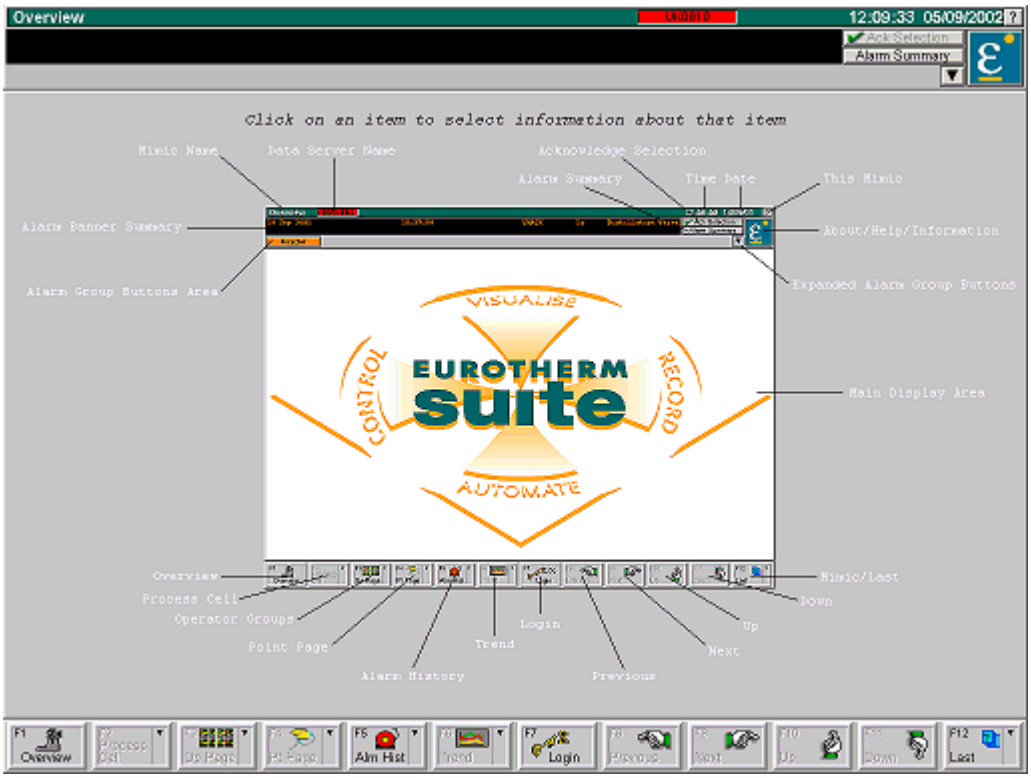
## 2.3 TIME-OF-DAY AND DATE DISPLAY


The current time-of-day and date are displayed at the top right-hand corner of the operator display. The formats used are based on the PC's time and date regional settings.

## 2.4 HELP SCREEN

### 2.4.1 Accessing the help screen

Click on the question mark at the top right corner of the screen – to the right of the date – to display the help screen, shown here.




### 2.4.2 Getting help

To get help on a labelled item, click on its label (white characters). A helpbox opens up over the main display, with an explanation of the selected item.

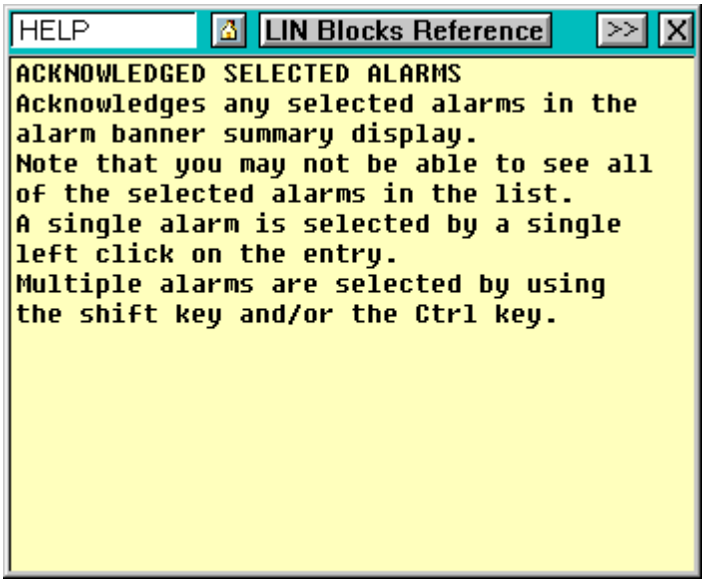
### 2.4.3 Helpbox

The helpbox gives context-sensitive information on labelled items in the help screen, and also on all LIN function blocks and their fields. **NOTE:** For more comprehensive help with LIN blocks and fields, you should access the online LIN Blocks Reference manual. To access the help box:

- Click an item label in the help screen, OR
- Click the help button in a point page, OR
- Click the LIN Blocks Help button in the Help About window.

The help box opens up displaying information relevant (where appropriate) to the selected item or point page.

### 2.4.4 An example helpbox, accessed via the help screen:



## 2.5 ALARM BANNER

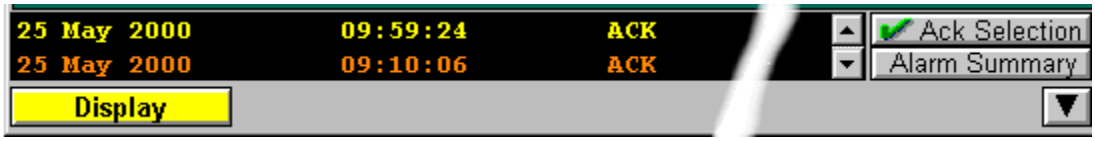
### 2.5.1 The Alarm Banner

This area near the top of the operator screen lets you:

1. See the latest alarms.
2. View a full-screen summary of all alarms in the project.
3. View alarms in particular alarm groups.
4. Selectively acknowledge alarms.

**LATEST TWO ALARMS**

The alarm banner displays the latest two alarms in the project. It shows the date, time, state, type, comment, and name of the alarms. Use the scroll keys at the right-hand end of the banner to bring any other alarms into view.




- Unacknowledged alarms take priority over acknowledged alarms for display in the alarm banner.
- Alarms appear in their **alarm colours**.

**ACKNOWLEDGING ALARMS IN THE ALARM BANNER** 


To acknowledge an alarm in the banner, highlight it by clicking on it anywhere in the line, then click the **Ack Selection** button at the right-hand end of the banner.

To de-highlight an alarm, use click + <**Ctrl**>

**ALARM SUMMARY PAGE** 

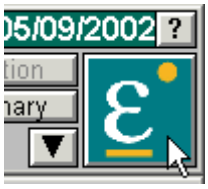

To see a general Alarm Summary page covering all alarms in the project, click the **Alarm Summary** button at the right-hand end of the banner. Via the Alarm Summary page you can quickly view the point page corresponding to any alarm, and investigate its cause.

### 2.5.2 Alarm Group buttons

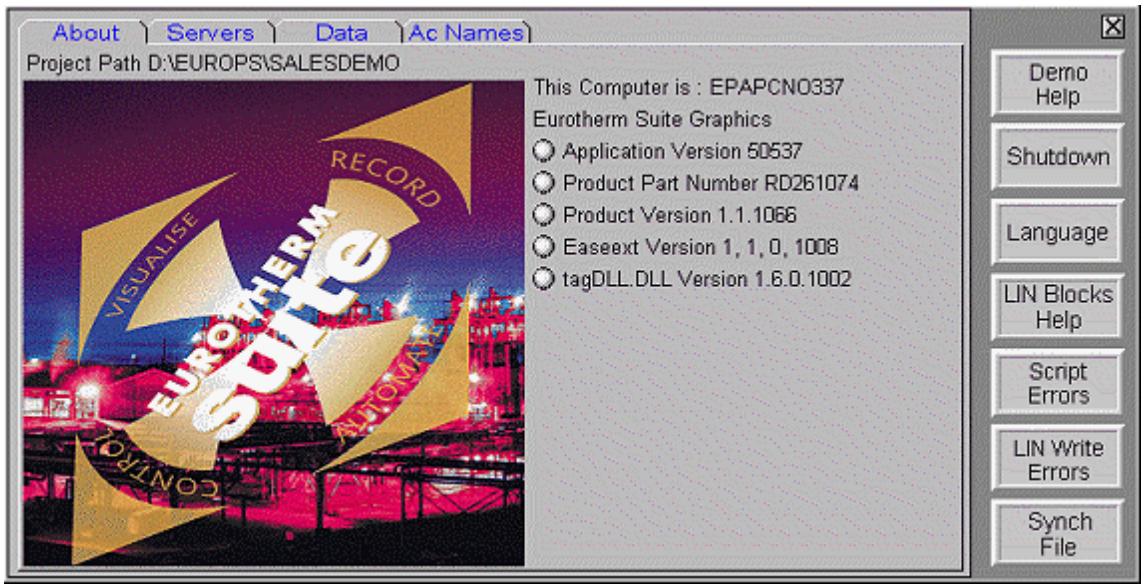
These appear as labelled rectangular boxes along the bottom of the alarm banner.

If there are more alarm groups than can fit in the banner, click the '**more**' button  at the right-hand end of the banner to see the rest.

## 2.6 HELP ABOUT WINDOW




Click the Eurotherm logo – which acts as a **Help About** button – near the top right-hand corner of the operator display to open a moveable window with tabbed pages and a set of buttons:




## 2.7 OVERVIEW DISPLAY

The default overview display is the same as the Help Screen, but it certainly will have been customised for a particular application – as in this example.

Overview displays often represent the total area of the plant or system that is being supervised. Clicking on buttons or graphics in the overview changes the display to more detailed representations of subsections of the plant/system. These displays in turn may have hierarchical links to other displays, allowing the operator to navigate around the system, monitoring and interacting with its various parts.

Clicking various standard soft function keys along the foot of the screen, and buttons in the alarm banner and title bar at the top of the screen, opens up windows that overlay the Overview display.

To restore the Overview display at any time, click the Overview (F1) softkey or press the PC's <F1> function key.

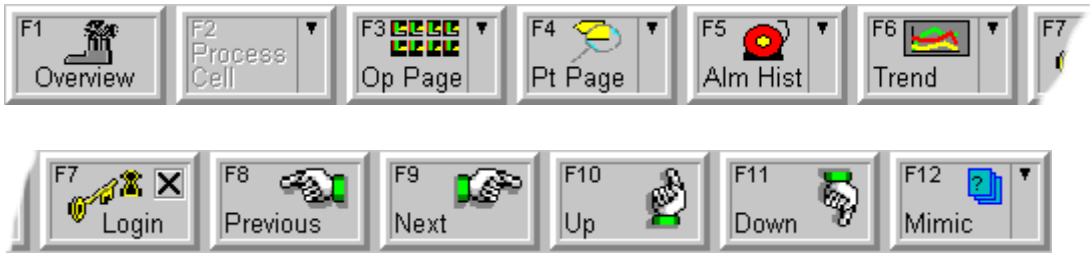
## 2.8 OPERATOR INTERFACE BUTTONS

What happens when you click an interface button depends on what has been configured for your application. Usually, a mimic is presented that relates to the legend or image on the button, giving you more specific information.

Check your application documentation for details.

## 2.9 STANDARD SOFT FUNCTION KEYS

Twelve standard soft function keys appear along the bottom of the screen:. These softkeys are always accessible and allow the user to define what is displayed in the central area of the screen.




Activate a softkey by clicking it with the mouse, or by pressing the equivalent PC function key (**F1** to **F12**).

> Note... In certain software variants, some of the softkeys are not implemented, and have legends that are permanently 'greyed out'. Some keys have legends that grey out temporarily, denoting that the key is not currently enabled.

## 2.10 USING THE OPERATOR SOFTKEYS

### 2.10.1 Using the Overview softkey

Click the **Overview** softkey to restore the Overview display to the main area of the operator screen at any time.

### 2.10.2 Using the Operator Page softkey

The **Op Page** (Operator Group) softkey lets you view a pre-configured group of up to sixteen point fascias, overlaying the main display. Here is an example operator group with four fascias:


This softkey has two zones – the **main key** on the left and a **pulldown menu** button on the right.


**TO SELECT AN OPERATOR GROUP FOR VIEWING:**

1. Click the pulldown menu button on the Op Page softkey, to pop up a menu of operator groups configured by the currently logged-in user.
2. Click on the group required. The selected operator group appears on the screen overlaying the main display, and the popup menu closes.
3. If you want to choose an operator group configured by another user, click the Load Other menu item to add all available configured groups to the menu.

The legend on the **Op Page** softkey changes to **Configure**, and its icon changes to a 'spanner', ready for configuring or editing the operator group:


You can also select the **Configure Operator Group** menu item if you want to edit or configure an operator group.

If required, you can move individual point fascias around by dragging any inactive area (e.g. the banner), and you can close unwanted fascias by clicking their 'close' boxes ☒.

**TO VIEW THE CURRENT OPERATOR GROUP:**

Click the main zone of the **Op Page** softkey (or press the PC's <**F3**> key.). If no current group has been selected, use the pulldown menu to select one. The legend on the Op Page softkey changes to **Configure**, and its icon changes to a 'spanner', ready for configuring or editing the operator group.

**TO CLEAR THE WHOLE OPERATOR GROUP:**

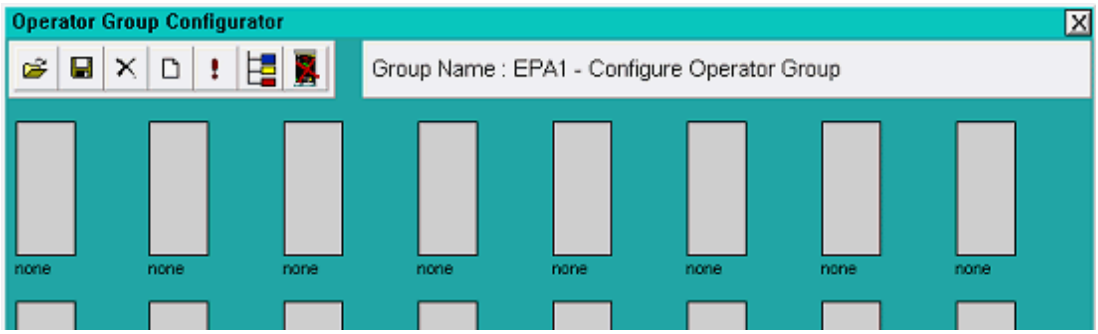
To close all fascias in the operator group quickly, click the 'Configure' softkey then close the Operator Group Configurator window that pops up. The softkey returns to its normal 'Op Page' appearance when all point fascias in the group have been closed.

### 2.10.3 Configuring & editing operator groups

Operator groups are edited in the Operator Group Configurator window.

Click the pulldown menu part of the **Op Page** softkey and select 'Configure Operator Group' from the menu. A blank **Operator Group Configurator** window appears (part of which is shown here).

To edit an existing operator group, click the **Configure** ('spanner') softkey. The operator group configurator opens with the existing fascias configured, ready for editing.




**USING THE TAG BROWSER**

1. Click the tag browser button to open the Tag Browser window. Browse to the list of tags containing the one you want to add to the operator group, then click on the tag name or icon to highlight it. The tag selected is displayed in the Selected Tag box. To see additional (read-only) tag information, click the >> button; Close the information window with <<
2. Click the Select button to bring the Operator Group Configurator window in front. Locate the cursor over the required fascia (blank or already occupied) and click the mouse to 'paste' the tag fascia into position. A generic representation of a fascia appears at the chosen location. You can double-click the tag in the browser instead of clicking the Select button.
3. Repeat as necessary to place further tags into the operator group.
4. Note that you can paste a tag over an existing one to overwrite it.
5. When you are happy with the configuration, click the Save button to pop up a menu of options:

**Save As <current user name> - <New Group>.** Click to open a keyboard for entering a name for the operator group. Alternatively, use the PC keyboard if you prefer. Hit <Enter> to save the configuration. The new name appears in the operator group name box.

**List of current user's groups.** Click one to save the current configuration under the selected name, which appears in the operator group name box.

Note...This immediately overwrites the selected configuration.

**Save Other.** Click to add all other users' operator groups to the menu, for selection.

### 2.10.4 Using the Pt Page (Point Page) softkey

The **Pt Page** softkey lets you view the point page of a tag (e.g. LIN block) associated with an instrument (e.g. controller) in the system. The point page displays all the tag's current field values in table format, and includes a point fascia. With some tags a realtime trend of the principal parameters is also displayed.

#### THE PT PAGE SOFTKEY

This softkey has two zones – the **main key** on the left and a **pulldown menu** button on the right.


#### VIEWING THE CURRENT POINT PAGE

Click the main zone of the **Pt Page** softkey (or press the PC's <**F4**> key) to open up the current point page directly.

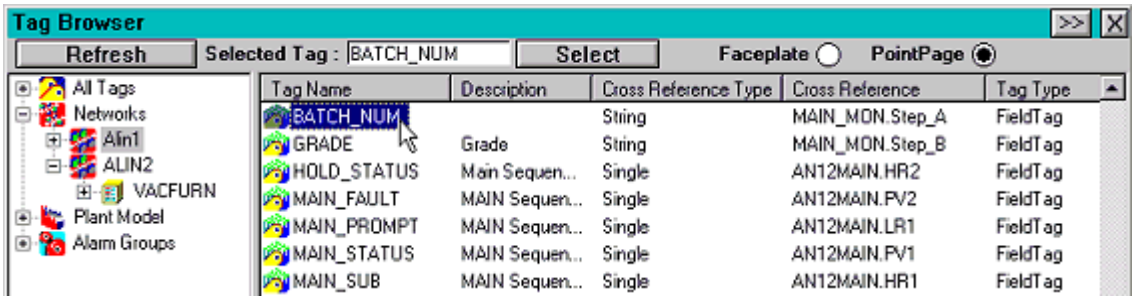
If the 'Pt Page' legend on the softkey is greyed out, this means that no current point page has been selected. Use the pulldown menu to select one.

#### SELECTING A POINT PAGE FOR VIEWING

Click the pulldown menu button on the **Pt Page** softkey, to pop up a menu of available point pages. Click one to view it.To delete the list of available point pages, click the **Clear List** item.

#### SETTING UP A POINT PAGE FOR VIEWING

1. Click the pulldown menu button on the Pt Page softkey, to pop up a menu of items.
2. Click Tag Browser to open up the tag browser window. This lists the available block tags, as shown in this example:




3. Browse to the list of tags containing the one you want, then click on the tag name or icon to highlight it. The tag selected is displayed in the Selected Tag box.

   To see additional (read-only) tag information, click the >> button. Close the information window with <<
4. Click the Select button. The selected point page appears on the screen overlaying the main display, and the tag browser closes. This point page is now the current one. You can simply double-click the tag in the browser instead of clicking the 'Select' button.
5. If required, you can reposition the point page by dragging on any non-active area.

**VIEWING A POINT FASCIA**

1. Click the pulldown menu button on the Pt Page softkey and select Tag Browser from the menu.
2. Click the Faceplate radio button at the top of the tag browser window. (The PointPage button is the default selection).
3. Double-click the required tag name to display its point fascia. Its name appears in the Selected Tag box.

To see the associated point page, click the point fascia's title bar.

**CLOSING A POINT PAGE OR POINT FASCIA**

Close the point page/fascia by clicking its 'close' box ☒. Alternatively (for point pages only), select a different point page for viewing using the Pt Page softkey's pulldown menu. This closes the current point page because only one page is viewable at a time.

### 2.10.5 Using the Alarm History softkey

The **Alm Hist** softkey lets you view a list of historic alarms and events associated with the alarm groups configured in the system, derived from the SQL server. Quick filter buttons let you filter the list by individual alarm group, and by alarm/event type – e.g. writes, recipe downloads, security-related events, acknowledged or cleared alarms, etc. An advanced expression-based filter configurator is also provided for more complex filtering.

By default the history shows only the most recent 500 events from the last three days.

Click to see part of an example alarm history.

This softkey has two zones – the **main key** on the left and a **pulldown menu** button on the right.


**VIEWING THE ALARM/EVENT HISTORY FOR ALL ALARM GROUPS**

In general, clicking the main part of the key displays a history of all alarms and events for all the configured alarm groups in the system.

If you clicked an alarm group button in the alarm banner and are viewing its group alarm summary page, clicking the main part of the **Alm Hist** softkey displays the alarm/event history for that alarm group only.

**SELECTING A PARTICULAR ALARM GROUP HISTORY FOR VIEWING**

Click the pulldown menu part of the key to pop up a list of alarm groups that have been configured on this system. Click on one to view its history of alarms/events.

In the popup menu you can also click **All Alarm Groups** to see the unfiltered alarm/event history for all alarm groups.

**FILTERING THE ALARM/EVENT HISTORY**

Along the bottom of the history display is a row of buttons that let you selectively filter the items displayed, create your own custom filters, print out the history, view associated point groups, and control display refreshing:


**THE APPLIED FILTER EXPRESSION**

The 'Filter' status bar just above the row of filter buttons shows you what (if any) filter expression is currently being applied to the displayed alarm history.

E.g. **Filter : EventType='ALM'** is automatically applied when you click the **Alarms** filter button.

### 2.10.6 Filter configuration window

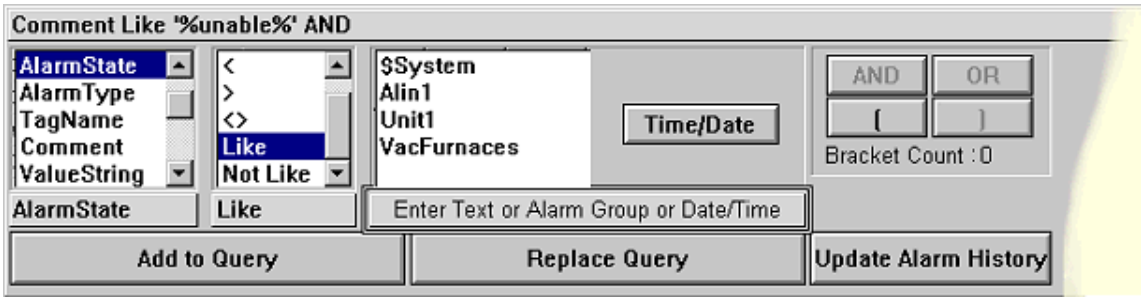
The filter configuration window is where you create Boolean expressions that act as alarm/event history filters. This lets you control exactly what you want appearing in the history display.

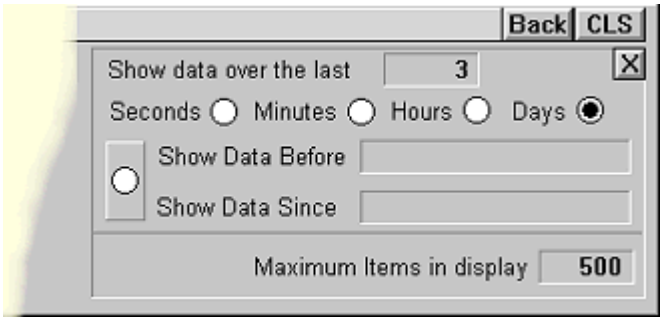
You can create custom filters from scratch, or modify the existing filters accessed via the filter buttons along the bottom of the alarm history display.

**ACCESSING THE FILTER CONFIGURATION WINDOW**


In the alarm history display, click the **Filter** button near the bottom-right corner of the window. The configurator opens up as a draggable oblong window. The left section of the window is used to configure filter expressions; the right section to specify how much history is displayed.

**THE FILTER CONFIGURATOR**



**CREATING A FILTER – EXAMPLE**

1. Click the Filter button 

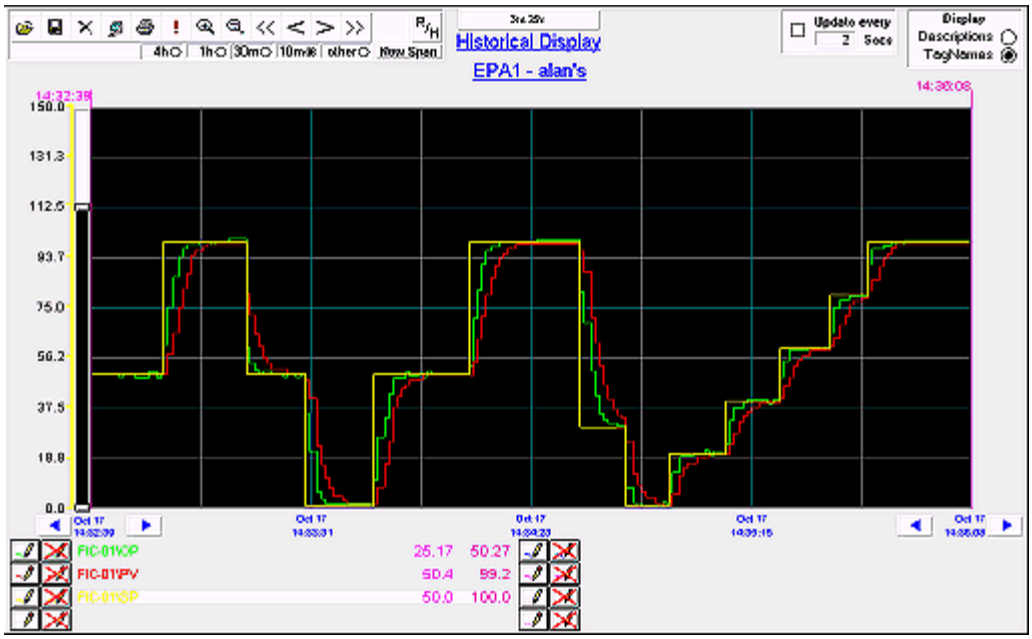
at the foot of the Alarm History display to open the filter configuration window.
2. Click the EventType item in the menu of expression subjects. 'EventType' appears in the selected subject box below the menu.
3. Click the = item in the menu of operators. '=' appears in the selected operator box below the menu.
4. Click the Enter Text or Alarm Group or Date/Time button. In the popup keyboard, type in 'EVT' (not case-sensitive) and hit <Return>. 'EVT' appears in the selected object box.
5. Click the Replace Query button. Any existing filter expression is replaced by the new expression and appears as the current expression at the top of the configuration window: EventType = 'EVT'.
6. Click the Update Alarm History button to update the history display. Only 'EVT' type items are now seen in the history, as specified by your new filter.

### 2.10.7 Using the Trend softkey

The **Trend** softkey lets you view current and historical data, trended on a single chart occupying the main display area.

The many features of the trend package include independent trend scaling, timespan zooming, operator-manipulation of live charts, dynamic autoscaling of trends, etc.

Example historical trend display:




This softkey has two zones – the **main key** on the left and a **pulldown menu** button on the right.


- The pulldown menu lets you select a particular trend display for viewing, which then becomes the current trend display.
- The main key lets you view the current trend display directly. If no current trend has been selected, the 'Trend' legend on the main key is greyed out and that part of the softkey is inactive.

**TO VIEW A HISTORICAL TREND DISPLAY:**

1. Click the pulldown menu button on the Trend softkey, to pop up a menu of available trends.
2. Click on the trend required. The selected trend display appears on the screen overlaying the main display, and the popup menu closes.

**TO VIEW THE CURRENT TREND DISPLAY:**

Click the main zone of the **Trend** softkey (or press the PC's <**F6**> key.)

- If the 'Trend' legend on the softkey is greyed out, this means that no current trend display has been selected. Use the pulldown menu to select one.

**TO CLOSE A TREND DISPLAY:**

Click the **Overview** softkey, or the **Mimic** softkey (<**F12**>).

**TO VIEW A REALTIME TREND DISPLAY:**


Access the historical trend display, then click the **Display Alternative Trend** button at the top of the trend display. Clicking it again restores the historical trend.

### 2.10.8 Using the Login softkey

The Login softkey allows you to identify yourself to the operator interface using a valid user ID and password for the purposes of data security. Once logged in, you are then able to edit only certain LIN block field values, according to your particular access level to different security areas. If your access level is not high enough for a particular field, you won't be permitted to edit it.

This softkey has two zones – the **main key** and a **logout** button marked with a '**X**' in the top-right corner. The main key lets you log into the user interface by supplying a valid user ID and password; the logout button lets you log out of the interface.


**TO LOG IN TO THE INTERFACE:**

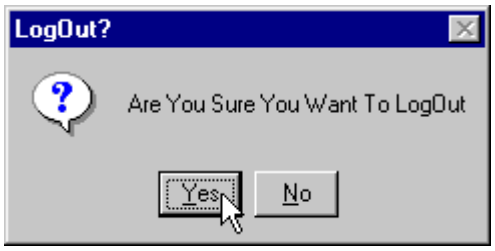
1. Click the Login softkey to pop up a login dialog. The current logged-on user and access level are displayed on the dialog.
2. Click the white User ID box. A keyboard pops up. Type in your ID using either the on-screen keys or the PC keyboard. Hit <Return> to enter the ID.

   Note... User IDs are not case-sensitive.
3. Now click the white Password box and type in your password via the popup keyboard. Hit <Return> to close the box. A row of asterisks appears in the box.

   NOTE Passwords are case-sensitive.
4. Click the dialog's OK button – or hit <Return> – to complete the login process. A message box warns you if your password and/or ID are invalid and aborts the login.

**TO LOG OUT OF THE INTERFACE:**

1. Click the logout button ('X') at the top right of the Login softkey. A LogOut? dialog pops up:




2. Click Yes to log out. You are now logged in as the default user 'None', with an access level of zero.

### 2.10.9 Using the Navigation softkeys

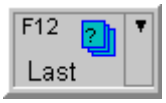

Clicking these four **Navigation** softkeys allows you to move from one mimic to another in a preconfigured way. During interface configuration, the Screen Navigation utility will have been used to define certain mimics as 'Previous', 'Next', 'Up', or 'Down' in relation to a given 'source' mimic. When you are viewing a source mimic, click one of the navigation softkeys to replace it with the corresponding predefined mimic.

imics are often related to one another in a hierarchy, with 'Previous' and 'Next' mimics on the same level as the source mimic, and 'Up' and 'Down' mimics hierarchically above and below the source mimic, respectively. Consult your application documentation for details.

### 2.10.10 Using the Last/Mimic softkey

This softkey displays with the 'Mimic' legend when a mimic is not on-screen.

This softkey has two zones – the **main key** on the left and a **pulldown menu** button on the right.




- The pulldown menu lets you select a particular picture or main display for viewing.
- The main key lets you redisplay the mimic or main display that was on-screen just previous to the current picture.
- Alarm summary pages, point pages, group fascias, and trends are not recalled by this softkey.

## 2.11 POINT FASCIAS AND PAGES

### 2.11.1 Using Point Fascias

Point fascias appear in groups of up to sixteen fascias, in a group display. You access group displays using the **Fascia** softkey.

Note...Point fascias also appear embedded in Point Pages.

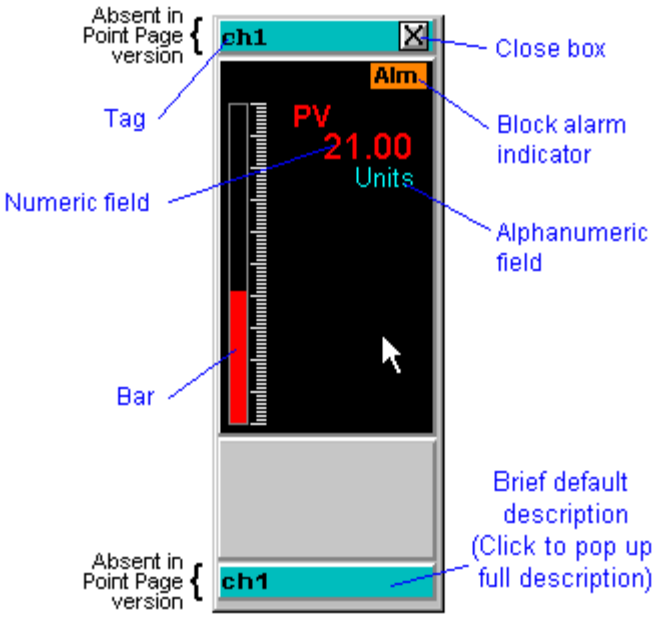
**WHAT POINT FASCIAS DO**

Every LIN block type and tag has an associated point fascia, which displays dynamically certain of the block or tag field values. Point fascias mimic the front panels of notional 'instruments' performing the functions of the represented tags. Point fascias may display values using alphanumeric readout fields, bars, pushbuttons, and other symbols, and also by using different colours.

As well as monitoring block values via the point fascia, you can also select and interact with certain fields, to access more detailed information and/or to alter field values.

Note...Only fields that have been enabled can be selected.

**EXAMPLE POINT FASCIA**



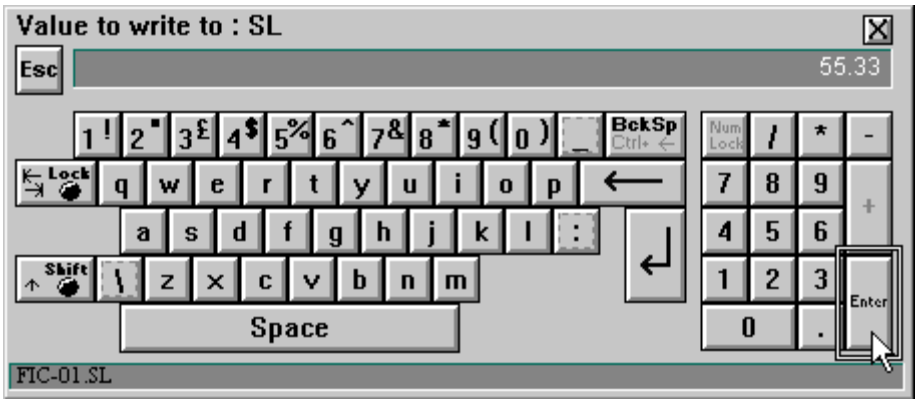

**INTERACTING WITH A POINT FASCIA**

You can interact with various parts of a point fascia, provided they have been configured for interaction:

1. The whole point fascia - to access the tag's point page (always enabled)
2. An enabled alphanumeric field
3. An enabled bar
4. An enabled button
5. Block alarm indicator (always enabled)

### 2.11.2 Alphanumeric fields

Clicking a field on the point fascia that can accept alphanumeric input pops up an **Alphanumeric Keypad Entry** 'qwerty' keyboard. Type in a value, then click **Enter** to input it to the field and close the keyboard.




### 2.11.3 Bars

**TO INTERACT WITH A BAR:**

1. Double-click an interactable bar on the point fascia to pop up a **Ramp Value** keypad.
2. Click the **1%** or **5%** pads to increment the field value by the corresponding amounts. There is no need to subsequently 'enter' your changes.
3. Click **Done** to close the keypad.

### 2.11.4 Buttons

Some point fascias have **mode control** buttons on them, e.g. the PID block fascia. These are near the bottom of the fascia, and are clearly associated with symbols indicating the LIN block's corresponding operating states. You can click on these buttons -- if they have been enabled -- to select an **operating mode**.

### 2.11.5 Point page

To access the point page of the tag (e.g. LIN block) associated with a particular fascia, click on its tag area:


The point page appears, overlaying the main display.

- Once this page has been accessed, it becomes the **current point page** and is then directly accessible via the **Pt Page softkey**.

### 2.11.6 Using Point Pages

A point page appears as a window overlaying the main display. You can access a point page using the **Pt Page** softkey.

- A point page can also be accessed for a highlighted alarm in an alarm summary page by clicking the Point Page key.

A point page presents dynamically all the associated tag's current parameter values in table format. A point fascia is also displayed on the page. With some tags a realtime trend of the principal parameter(s) also appears in the point page, with a 30-second timespan. The trend's four pens can be assigned to available (preconfigured) points.

As well as monitoring values via the point page, you can also write new values to certain fields.

**WRITE-PROTECTED FIELDS**

Fields that cannot be edited -- i.e. are write-protected (read-only) -- are shown in **yellow** in the point page. Clicking on these has no effect (other than to expand bitfields or menu fields).

NOTE Other fields may also be configured as read-only in the LIN database, but do not show up in yellow in the point display. You will not be able to edit these fields either.

You can interact with the point page fields (provided they are not write-protected), trend, and buttons. You can also interact with the point fascia included in the page.

### 2.11.7 LIN function block

**WHAT IS A LIN FUNCTION BLOCK?**

LINtools uses a block-structured approach to configuring a control strategy, where a variety of ready-made **function blocks** perform the processing required.

A function block is an instance of a reusable module of program code, called a template, dedicated to a particular type of processing operation e.g. the **ADD2** template adds two numbers. In general, function blocks take in analogue and/or digital signals via their inputs, process them in a variety of ways, and then pass the results on via their outputs. You 'wire' the function blocks together so that the signals can flow between them to execute the control strategy.

### 2.11.8 Home display for a tag

**THE HOME DISPLAY**

Each point page (and its associated tag) can have a special mimic assigned to it, called its **home display**. This would typically represent the part of the plant most closely associated with the tag concerned.

**TO VIEW THE POINT PAGE'S HOME DISPLAY:**

**1** From the point page, locate the cursor over the '**home display**' button, which highlights with a box. (The diagram below shows the button.)

If a home display has not been configured for this block, the button does not highlight.

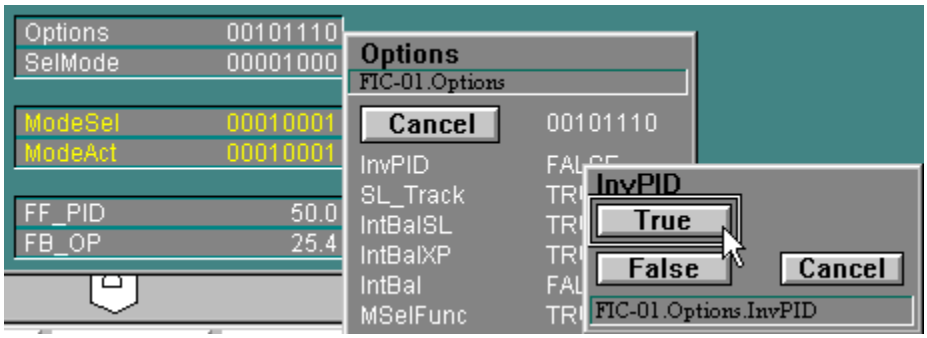
**2** Click the button to see the home display, which replaces the current main display on the operator screen.

### 2.11.9 Editing a bitfield

**TO INSPECT AND EDIT A BITFIELD:**

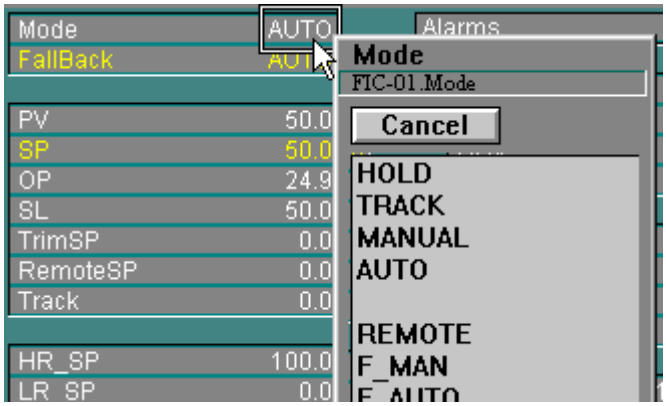
1. Move the cursor over the field, which highlights with a box. In the example below, the **Options** bitfield **>00101110** was selected.
2. Click the highlighted field to pop up a labelled box listing all the bit names and states.
3. Click a bitfield value to pop up a labelled **True/False/Cancel** box.
4. Click the required state. The box closes and the new state is adopted (if writeable).
5. Click the **Cancel** button to close the bit list (or select another bit for editing).

NOTE Bits that are write-protected appear in yellow characters.



### 2.11.10 Editing a menu field

1. Move the cursor over the field, which highlights with a box. In the example below, the menu field AUTO is selected.
2. Click the highlighted field to pop up a labelled box listing all the options for the field.
3. Click a menu item. The box closes and the new value is adopted (if permitted).
4. Click the Cancel button to close the menu if the edit is to be abandoned.




### 2.11.11 Editing an alphanumeric field

1. Move the cursor over the field, which highlights with a box. In the example below, the menu field 0.0 is selected.
2. Click the highlighted field to pop up a labelled 'qwerty' keyboard.
3. Click the 'keys' (or use the PC's keyboard) to enter the required value in the input window (click the Lock button for capital letters; click the Shift button for uppercase number-key characters).
4. Click the Enter key (or the PC's <Return> key) to enter the value. The keyboard closes and the new value is adopted (if permitted).

Click the **Esc** button or the **Close** box ☒ to close the keyboard if the edit is to be discarded.

### 2.11.12 Keyboard Lock

The green 'LED' lights when the keyboard is in **lock mode** (for capital letters).

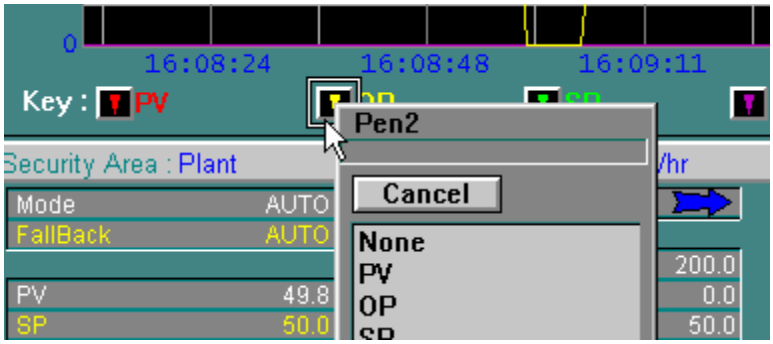

### 2.11.13 Keyboard Shift

The green 'LED' lights when the keyboard is in **shift mode** (for uppercase number-key characters).


### 2.11.14 Assigning a point page trend pen

1. Move the cursor over one of the four coloured pen icons below the trend display, which highlights with a box. In the example below, the yellow pen icon is selected.
2. Click the highlighted icon to pop up a menu of points available for trending.
3. Click an item to assign it to the selected pen – or None if that pen is not to be used. The menu closes and the selected point starts to appear in the trend with the selected pen colour.

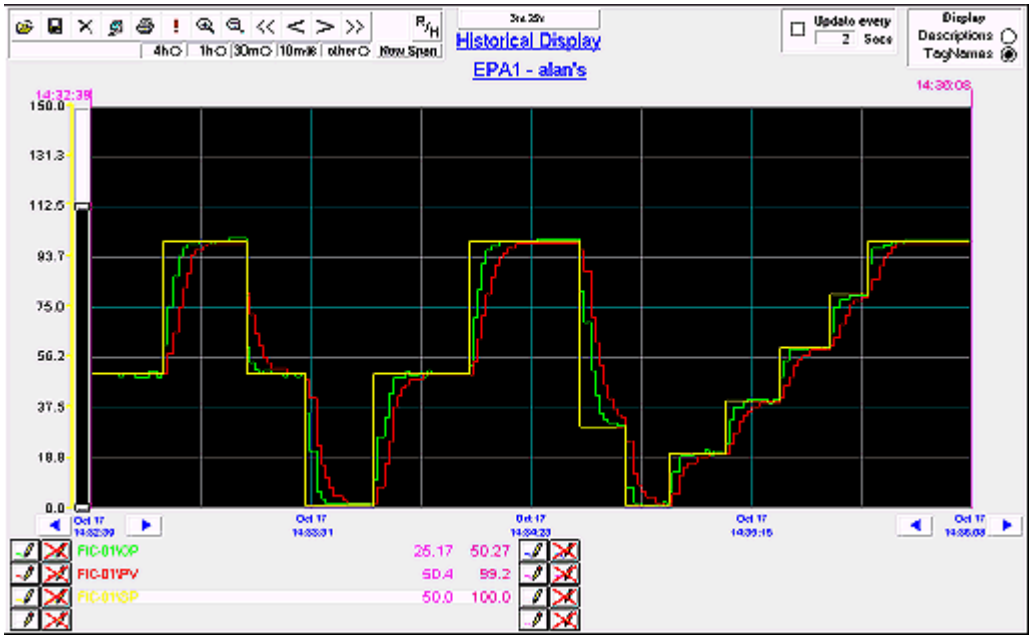
- Click the **Cancel** button to close the menu if you want to abandon the pen assignment.



## 2.12 TREND DISPLAY

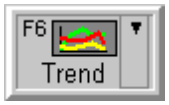
### 2.12.1 Using the Trend softkey

The **Trend** softkey lets you view current and historical data, trended on a single chart occupying the main display area. Features of the trend package include independent trend scaling, timespan zooming, operator-manipulation of live charts, dynamic autoscaling of trends, etc.




**THE TREND SOFTKEY**

This softkey has two zones – the **main key** on the left and a **pulldown menu** button on the right.




- The pulldown menu lets you select a particular trend display for viewing, which then becomes the **current trend display**.

- The main key lets you view the current trend display directly. If no current trend has been selected, the 'Trend' legend on the main key is greyed out and that part of the softkey is inactive.

**TO VIEW A HISTORICAL TREND DISPLAY:**

1. Click the pulldown menu button on the Trend softkey, to pop up a menu of available trends.
2. Click on the trend required. The selected trend display appears on the screen overlaying the main display, and the popup menu closes.

**TO VIEW THE CURRENT TREND DISPLAY:**

Click the main zone of the **Trend** softkey (or press the PC's <**F6**> key.)

- If the 'Trend' legend on the softkey is greyed out, this means that no current trend display has been selected. Use the pulldown menu to select one.

**TO CLOSE A TREND DISPLAY:**

Click the **Overview** softkey, or the **Mimic** softkey (<**F12**>).

**TO VIEW A REALTIME TREND DISPLAY:**


Access the historical trend display, then click the **Display Alternative Trend** button at the top of the trend display. Clicking it again restores the historical trend.

### 2.12.2 Working with trends

**ACCESSING TRENDS**

You access historical and realtime trends via the Trend softkey.

**TREND OPERATIONS**

You can carry out a number of operations in the trend window, including the following:

1. Configure a historical trend
2. Change the trend's timespan
3. Change the scale of the trend's vertical (value) axis
4. Configure a realtime trend
5. Export a trend
6. Print a snapshot of the trend
7. Delete the current trend settings
8. Update the trend to the current time

### 2.12.3 Configure a historical trend

**TO CONFIGURE A HISTORICAL TREND:**

1. Click the 'pulldown menu' button on the Trend softkey (<F6>). A menu pops up. Click the Configure Trend item. A blank historical trend window replaces the main display.
2. Click a 'pen' icon  at the foot of the display to pop up the Select Tag dialog. In the dialog you must open up any 'SuperTag' folder icons to see the individual tags inside. The dialog contains only those points being logged in history files.
3. Select a tag for trending by highlighting the tag and clicking OK – or simply double-click the required tag. The dialog closes and the selected tag appears in the trend window. Its tagname appears next to the configured pen icon, in the colour for that pen.
4. You can display the pen's description instead, by clicking the 'Descriptions' radio button in the `Display' area at the top right corner of the trend.
5. Repeat steps 2 and 3 for up to eight pens in total.

Delete a pen by clicking its 'delete pen' icon  .

6. Finally, save the trend pen configuration by clicking the 'save' toolbutton  near the top-left corner of the display. A menu of save options pops up:

- **Save As...** Click this item to pop up a keyboard. Type in a name for the new trend and hit **OK** or <Return>. In the **Historic Trend Save** dialog, click **Yes** to confirm the save. The title appears at the head of the trend display.

- **<Existing trend names>** Click an existing trend name if you want to overwrite it with the current trend using the same name. **Yes** confirms your choice.

- **Save Other** Click this item to list any trends configured by other users. Select one for overwriting with the new trend using the same name. Confirm your choice with **Yes**.

**HISTORICAL TREND FEATURES**

The new trend has a default timespan of 10 minutes, with the date/time at the right-hand (latest) end set to the creation-time of the trend.

- The trend is normally static and does not update. If you want it to update with realtime data, click the white box in the **Update every 2 Secs** area near the top right corner of the display. To edit the default 2-second update period, click the '2' and enter the required value in the popup keyboard.

### 2.12.4 Change the trend's timespan

The trend is displayed with the oldest data at the left-hand end of the chart, and the newest data at the right-hand end. The horizontal time axis is labelled at intervals with the date/time.

You can change the chart's timespan – i.e. the start date/time and/or the end date/time – in a number of ways:

**USING THE NEW SPAN BUTTON TO SELECT A TIME INTERVAL**


This button selects a particular time-interval across the chart. Using 'New Span' leaves the time at the right-hand end of the chart unaltered, but adjusts the time at the left-hand end to give the requested time interval.

1. Click one of the 'New Span' radio buttons to select the required timespan. For non-standard timespans, click the 'other' radio button and enter the required timespan in the popup keyboard.
2. Click the New Span button to redraw the trend chart with the requested timespan. The new timespan is indicated in the timespan box at the top-centre of the trend window.
3. The right-hand date/time does not change – the process changes only the left-hand one.

### ALTERING THE START AND/OR THE END TIME

If you want the trend to start and/or finish at particular dates/times, use the time increment buttons or the calendar input windows at each end of the chart.

1. Click one of the time increment buttons at the end of the chart you want to alter – the start or the finish. The time/date changes by the current increment value, in the direction indicated by the blue arrow on the button. The current increment value is determined by the currently-selected 'New Span ' radio button. The current increment value equals the radio button value whether or not the New Span button has been clicked
2. Alternatively, click a date/time readout (between the increment buttons) to pop up a calendar. Edit the date/time and click Update to enter the new value for that end of the chart.
3. You cannot edit a date/time if this would result in a timespan of less than zero. But you can have date/times that are outside the scope of the historical data, into the future as well as the past. (Where no data exists, the trend chart shows no gridlines.)

### ZOOMING IN ON A SECTION OF THE TREND

If you want to view a section of the trend that is of particular interest, use the pair of line cursors.

1. Hover the arrow cursor over one of the vertical line cursors near each end of the chart – either the purple cursor at the left-hand end or the red cursor at the right-hand end. It highlights with a very narrow vertical box.
2. Drag each line cursor across the trend and position both of them to enclose the section of the chart to be zoomed. A Zoom To box appears at the top of the chart between the repositioned cursors. At the top of each cursor its time position shows in the cursor colour.
3. Click the Zoom To box. The trend redraws to display the zoomed section between the cursors, now expanded to fill the whole chart.

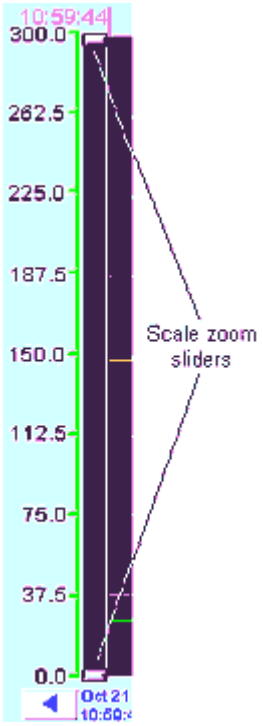
### USING THE PAN AND ZOOM BUTTONS

Click these buttons to incrementally zoom in and out of the trends, and pan left or right along the time axis.

## 2.12.5 Change the scale of the trend's vertical (value) axis

### DISPLAYING A TREND SCALE

The trend's vertical (value) scales are displayed at the left-hand end of the chart. Only the scale for the currently-selected pen is displayed, in the same colour as the trend trace and the tagname (or description) below the chart. Scales may differ for each individual pen. You can select what scale is displayed by clicking on the corresponding pen tagname or description below the chart. Repeatedly clicking the scale itself cycles the display around the eight pens.




### ALTERING THE SCALE FOR THE WHOLE CHART

You can alter the trend display's vertical scaling, from the default values. This is useful if you want to zoom into a particular range of trend values. To do this, use the **scale zoom sliders** at the left-hand end of the chart. There is one at the top of the scale and one at the bottom.

1. Drag the top slider downwards to reduce the scale values from the top downwards. The lowest value at the foot of the scale is unchanged. This has the effect of 'expanding' the trends from the bottom upwards.
2. Drag the bottom slider upwards to increase the scale values from the bottom upwards. The highest value at the top of the scale is unchanged. This has the effect of 'expanding' the trends from the top downwards.
3. By using both sliders together you can zoom the trends to make a particular range of values fill the chart.

## 2.12.6 Configure a realtime trend

1. Click the 'pulldown menu' button on the Trend softkey (<F6>). A menu pops up. Click the Configure Trend item. A blank historical trend window replaces the main display.
2. Click the Display Realtime Trend button 

at the top of the display. The historical display changes to a blank realtime display, ready for pen configuration.
3. Click a 'pen' icon  at the foot of the display to pop up the Tag Browser dialog.
4. Select a tag for trending by highlighting the tag and clicking OK – or simply double-click the required tag. The dialog closes and the selected tag appears in the trend window. Its tagname appears next to the configured pen icon, in the colour for that pen.
5. Repeat steps 3 and 4 for up to four pens in total. Delete a pen by clicking its 'delete pen' icon  .
6. Finally, save the trend pen configuration by clicking the 'save' toolbutton  near the top-left corner of the display. A menu of save options pops up:

### SAVE AS...

Click this item to pop up a keyboard. Type in a name for the new trend and hit OK or <Return>. In the Historic Trend Save dialog, click Yes to confirm the save. The title appears at the head of the trend display.

### <EXISTING TREND NAMES>

Click an existing trend name if you want to overwrite it with the current trend using the same name. Yes confirms your choice.

### SAVE OTHER

Click this item to list any trends configured by other users. Select one for overwriting with the new trend using the same name. Confirm your choice with **Yes**.

### 2.12.7 Exporting a historical trend

You can export values from the current historical trend as a comma separated variable file, for analysis or charting elsewhere (e.g. in a spreadsheet application such as Excel™).

**TO EXPORT A HISTORICAL TREND:**

1. In the historical trend display, click the Export Current Trend button  near the top-left corner of the display. A Historic Trend Export window opens.
2. Click the long white box showing the default path for the export. A Select trend export file dialog pops up. Browse for the required destination path for the exported file, and/or type a path/filename into the 'File name' field in the dialog. Click the Open button. The dialog closes leaving the selected path and filename in the box.
3. Click the Samples box to pop up a keyboard. Enter the required number of samples to be exported and click OK (or hit <Return>) to update the samples box.
4. If you want column headings to be included in the exported file, click the Print Tags checkbox.
5. Finally, click the Export to: button, and then OK to confirm the save in the dialog that pops up. The trend export is carried out as specified. Click the  button to close the Historic Trend Export window.

### 2.12.8 Printing a snapshot of a historical trend

You can print the currently-displayed chart to the default printer (if connected) with the default settings. To do this, click the **Print Current Trend** button  at the top of the display. A warning message appears if the print fails for any reason, e.g. printer not connected or not ready.

### 2.12.9 Deleting the current trend settings

To delete all pen settings for both the historical and the realtime current trends, click the **Delete Current Trend** button  . A confirmation dialog pops up. Click the **Yes** button to proceed with the delete operation.

Note...All pen settings for both trend types are deleted

### 2.12.10 Updating a historical trend to the current time

To update a historical trend to the current time, click the **Update** button  . The right-hand end of the chart is set to the current date/time, and the left-hand end is altered to retain the existing trend timespan.

## 2.13 ALARMS

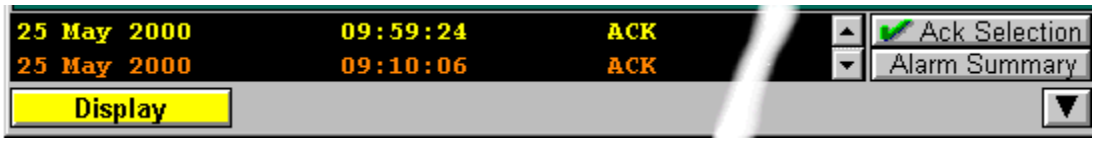
### 2.13.1 Alarm banner

This area near the top of the operator screen lets you:

1. See the latest alarms.
2. View a full-screen summary of all alarms in the project.
3. View alarms in particular alarm groups.
4. Selectively acknowledge alarms.

**LATEST TWO ALARMS**

The alarm banner displays the latest two alarms in the project. It shows the date, time, state, type, comment, and name of the alarms. Use the scroll keys at the right-hand end of the banner to bring any other alarms into view.




- Unacknowledged alarms take priority over acknowledged alarms for display in the alarm banner.
- Alarms appear in their **alarm colours**.

**Acknowledging alarms in the alarm banner** 


To acknowledge an alarm in the banner, highlight it by clicking on it anywhere in the line, then click the **Ack Selection** button at the right-hand end of the banner.

- To de-highlight an alarm, use click + <**Ctrl**>

**Alarm Summary page** 


To see a general Alarm Summary page covering all alarms in the project, click the **Alarm Summary** button at the right-hand end of the banner. Via the Alarm Summary page you can quickly view the point page corresponding to any alarm, and investigate its cause.

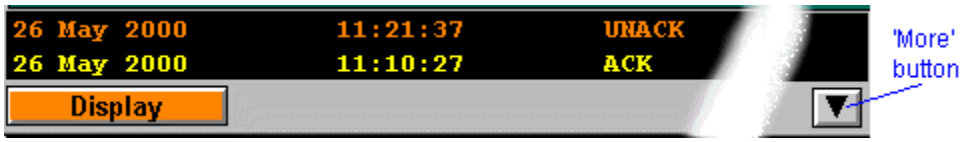
### 2.13.2 Alarm Group buttons

These appear as labelled rectangular boxes along the bottom of the alarm banner.

- If there are more alarm groups than can fit in the banner, click the '**more**' button  at the right-hand end of the banner to see the rest.

### 2.13.3 Using Alarm Group buttons

These appear as one or more rectangular boxes along the foot of the alarm banner, labelled with the name(s) of the corresponding alarm group(s). A single alarm group button '**Display**' appears in this example:




- Up to 256 alarm group buttons can be configured. If more than eight are active, click the '**more**' button at the right-hand end of the banner to see the rest.

**ALARM BUTTON INDICATIONS**

- If **no alarms** are present in an alarm group, its alarm group button is not seen in the banner.
- If an **alarm arises** in any of the tags associated with an alarm group, the corresponding button appears in the banner. E.g. in the above diagram, the '**Display**' alarm group has an alarm present.
- The button's **colour** tells you the priority band of the alarm with the highest 'rank'. Alarms are ranked by alarm priority, but unacknowledged alarms rank higher than acknowledged alarms.

  For example, in the diagram above, orange means a priority of 5 to 8, and ranks higher than yellow (priority 12 to 15) because the lower-priority alarm is unacknowledged..

- A **steady colour** in the button means that all alarms in the group have been acknowledged (or are self-acknowledging) but at least one is still currently in alarm.
- The button **flashes** if the group contains any currently unacknowledged alarms.

**VIEWING A GROUP ALARM SUMMARY**

Clicking an alarm group button opens an alarm summary page for the group, in the main display area. This alarm summary display is similar to the general alarm summary display. The difference is that it shows only alarms in the selected alarm group.

- To investigate a tag in alarm, click anywhere on the alarm line to highlight it, then press the **Point Page** button at the foot of the display to pop up the relevant point page. Here you can view its parameters in detail.
- To view the alarm group's alarm/event history, click the **Alm Hist** softkey (or press the PC's <**F5**> key).

### 2.13.4 Alarm groups

**UNDERSTANDING ALARM GROUPS**

An alarm group is a set of named data points (tags) in the project that have been grouped together to make alarm monitoring easier. An alarm group can correspond to a physical or functional division of the plant, and acts as a routing label for alarms in that group.

For example, all tags associated with a particular boiler could be put into a single alarm group 'Boiler1'; all tags associated with pressure measurement could form a 'Pressures' alarm group, etc.

### 2.13.5 Alarm colours

Colour coding is used to help you quickly identify the priority (importance) of an alarm display e.g. an item in the Alarm Summary page, an Alarm Group button, or an ALM 'lamp' on a point fascia.

A special colour (**green**) is also used to identify an alarm that is in the **UNACK_RTN** state i.e. out of alarm, but not yet acknowledged.

The table shows how alarm priority determines the colour adopted by an alarm display.

- The colours shown are the defaults. They could be different in your project – consult your project documentation!

| Alarm type | LIN Priority | InTouch Priority | Display colour |
|---|---|---|---|
| Alarm disabled | 0 | – | (No display) |
| Self-acknowledging alarms — do not need acknowledging | 1<br>2<br>3<br>4 | 999<br>900<br>850<br>800 | Cyan |
| | 5 | 750 | Orange |
| Acknowledging alarms — need acknowledging | 6<br>7<br>8 | 700<br>650<br>600 | |
| | 9<br>10 | 550<br>500 | Red |
| Acknowledging alarms — need acknowledging.<br>May also set bit in target instrument, and/or activate a hardware alarm relay | 11 | 450 | |
| | 12<br>13<br>14<br>15 | 400<br>350<br>300<br>250 | Yellow |
| Indicates **UNACK_RTN** alarm state | 6 - 15 | 700-250 | Green |

### 2.13.6 Alarm Summary page

To see this page, click the **Alarm Summary** button 

at the right-hand end of the alarm banner.

| Date | Time | State | Type | Cmt | Name | Val | Limit |
|---|---|---|---|---|---|---|---|
| 25 May 2000 | 14:54:25 | ACK | Comms | ch1 | ch1 | | |
| 25 May 2000 | 14:54:25 | ACK | Comms | ch2 | ch2 | | |
| 25 May 2000 | 14:54:25 | ACK | Comms | ch3 | ch3 | | |
| 25 May 2000 | 14:54:25 | ACK | Comms | ch4 | ch4 | | |
| 25 May 2000 | 14:54:23 | ACK | Comms | ch6 | ch6 | | |
| 25 May 2000 | 14:54:23 | ACK | Comms | ch5 | ch5 | | |
| 25 May 2000 | 14:53:33 | UNACK | Alarm1 | ch1 | ch1 | | |
| 25 May 2000 | 12:23:00 | ACK | Alarm1 | ch4 | ch4 | | |

The summary lists all alarms in the project, with the latest at the top of the list. The list shows the date, time, state, type, comment, name, value, and limit for each alarm.

- Unacknowledged alarms are listed above acknowledged alarms with the same times.
- Alarms appear in their **alarm colours**.

> Note...The top two lines of the alarm summary are those seen in the alarm banner when scrolled to the top.

**ACKNOWLEDGING ALARMS IN THE ALARM SUMMARY PAGE** 


To acknowledge an alarm in the summary, highlight it by clicking anywhere on its line, then click the **Ack Selection** button at the foot of the alarm summary page (**not** the one in the alarm banner).

You can select and acknowledge a several alarms at once using the <Shift> and <Ctrl> keys when clicking items.

**ACKNOWLEDGING ALL ALARMS IN THE SUMMARY** 


To do this, click the **Ack Display** button at the foot of the page.

**INVESTIGATING AN ALARM** 


To investigate an alarm in the summary, highlight it by clicking anywhere on its line, then click the **Point Page** button at the foot of the alarm summary page. This pops up the **point page** associated with the selected alarm, where you can view its parameters in detail.

### 2.13.7 Alarm indicators on fascias

If a block is in alarm, the corresponding point fascia lights up a box labelled **ALM** near the top of the fascia (see Using Point Fascias for an example). The colour of the lit ALM box indicates the priority of the alarm, and flashing means an unacknowledged alarm.

**ACKNOWLEDGING THE ALARM**

Click the flashing **ALM** indicator to acknowledge any alarms in the associated LIN block. The ALM box stops flashing.

## 2.14 SECURITY

### 2.14.1 Using the Login softkey

The **Login** softkey allows you to identify yourself to the operator interface using a valid **user ID** and **password** for the purposes of data security. Once logged in, you are then able to edit only certain LIN block field values, according to your particular **access level** to different **security areas**. If your access level is not high enough for a particular field, you won't be permitted to edit it.

The softkey has two zones – the **main key** and a **logout** button marked with a '**X**' in the top-right corner.


- The main key lets you log into the user interface by supplying a valid user ID and password.
- The logout button lets you log out of the interface.

**TO LOG IN TO THE INTERFACE:**

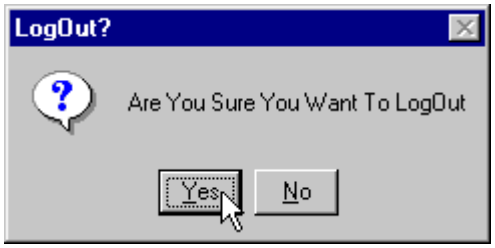
1. Click the Login softkey to pop up a login dialog. The current logged-on user and access level are displayed on the dialog.
2. Click the white User ID box. A keyboard pops up. Type in your ID using either the on-screen keys or the PC keyboard. Hit <Return> to enter the ID.
3. NOTE User IDs are not case-sensitive.
4. Now click the white Password box and type in your password via the popup keyboard. Hit <Return> to close the box. A row of asterisks appears in the box.

   NOTE Passwords are case-sensitive.

5. Click the dialog's OK button – or hit <Return> – to complete the login process. A message box warns you if your password and/or ID are invalid and aborts the login.

**TO LOG OUT OF THE INTERFACE:**

1. Click the logout button ('X') at the top right of the Login softkey. A LogOut? dialog pops up:




2. Click Yes to log out. You are now logged in as the default user 'None', with an access level of zero.

## 2.15 GETTING HELP

### 2.15.1 Help with a block

While viewing a point page for a LIN block, you may want to know more about the associated block – e.g. details of its fields, or what it does. Or you may want to find out more about LIN blocks in general.

To get help on the LIN block, click the help (**?**) button near the top right-hand corner of the point page (see diagram). This opens up a helpbox, with the particular LIN block information in view.

Alternatively, hover the cursor over the 'more' arrow (▶) to pop up a context menu. Select LIN Block Help to see the helpbox.


**VIEWING THE LIN BLOCKS REFERENCE MANUAL**

In the helpbox, click the LIN Blocks Reference button.

### 2.15.2 Helpbox LIN Blocks Reference button


Click to launch the Acrobat Reader and display the **LIN Blocks Reference Manual** in PDF format. If a particular LIN block has been selected (e.g. the one associated with the current point page) the manual opens at the section describing that block. Otherwise the manual opens at the title page.

- You can navigate around the manual by clicking hyperlinks in the TOC and the Index.
- If the particular LIN block is not described in the manual, it opens at the title page.

> Note...This button may be 'greyed out' if it has not been enabled.

### 2.15.3 Helpbox

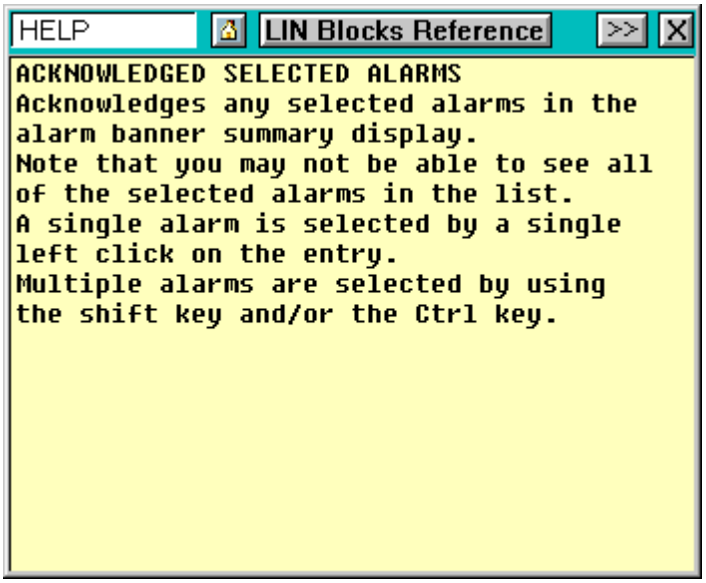
The helpbox gives context-sensitive information on labelled items in the help screen, and also on all LIN function blocks and their fields. **NOTE:** For more comprehensive help with LIN blocks and fields, you should access the online LIN Blocks Reference manual.

**TO ACCESS THE HELPBOX:**

- Click an item label in the help screen, OR
- Click the help button in a point page, OR
- Click the LIN Blocks Help button in the Help About window.

The helpbox opens up displaying information relevant (where appropriate) to the selected item or point page.

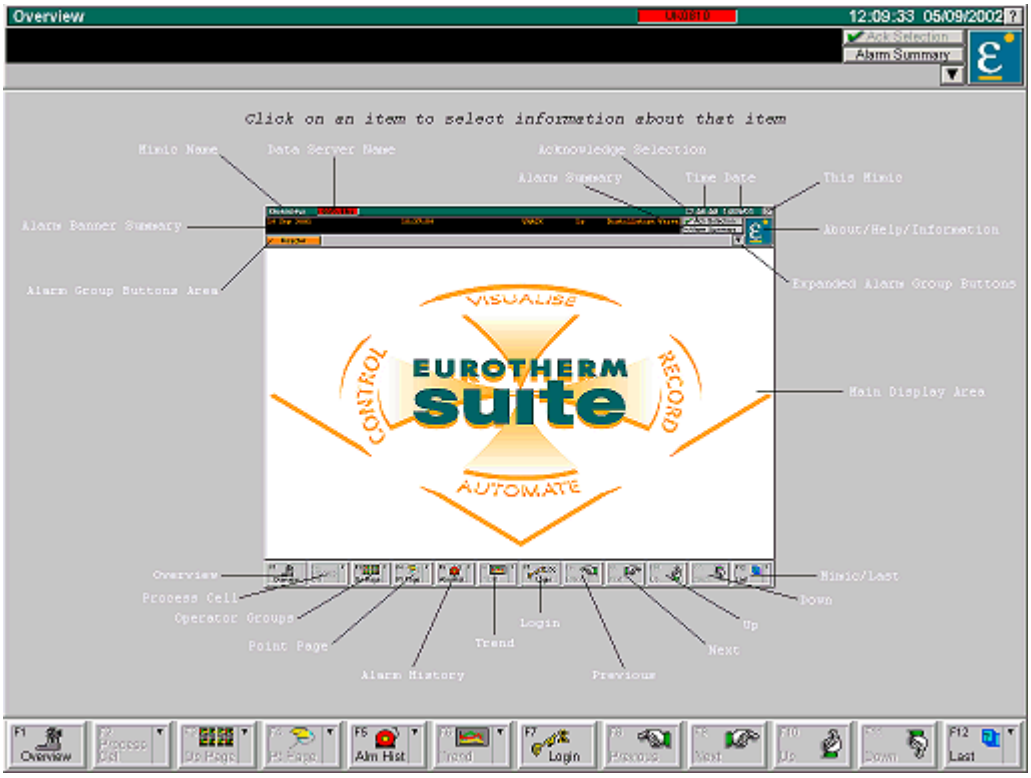
**AN EXAMPLE HELPBOX, ACCESSED VIA THE HELP SCREEN:**



### 2.15.4 Help Screen

**ACCESSING THE HELP SCREEN**

Click on the question mark at the top right corner of the screen – to the right of the date – to display the **help screen**, shown here.




**GETTING HELP**

To get help on a labelled item, click on its label (white characters). A helpbox opens up over the main display, with an explanation of the selected item.

# 3 OTHER ITEMS

## 3.1 AC NAMES PAGE

Lists the EurothermSuite access names for all servers.

## 3.2 ADD TO QUERY BUTTON

Click this button to append the **selected** filter expression to the **current** filter expression shown at the top of the configurator window. E.g. If your selected expression is:


and your current expression is:

**GroupName = 'Unit1' AND**

the result of clicking **Add to Query** would be:

**GroupName = 'Unit1' AND EventType = 'ack'**

- The Add to Query button is greyed out if appending the selected expression would create an invalid expression – e.g. if the Boolean operator 'AND' were absent in this example.

## 3.3 ACK FILTER BUTTON

Click to display only the '**ACK**' events in the history.

- If you are viewing an alarm summary page for a particular alarm group, or have selected a group via the Alm Hist pulldown menu key, only the events for that group are displayed.

An ACK event is generated whenever an alarm is acknowledged. For alarms that need manual acknowledging, the ACK event is generated when the operator acknowledges the alarm. For self-acknowledging alarms, the event is generated at the same time as the alarm itself arises.

Two alarm states are possible:

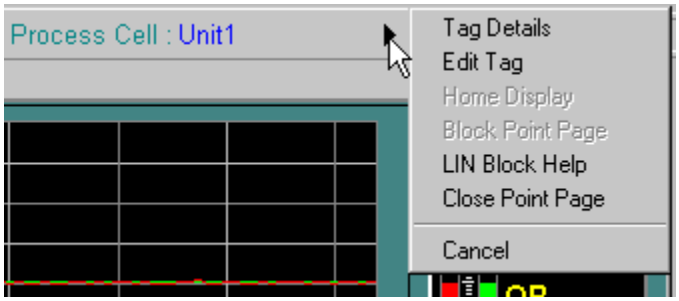
- **ACK_ALM** for an alarm acknowledged when it was still in the alarm condition, and
- **ACK_RTN** for an alarm acknowledged after it had returned to normal from the alarm condition.

## 3.4 ADDITIONAL TAG INFORMATION

Certain data in the project database is associated with a LIN block, but is not contained in its fields – e.g. physical address, alarm rate, etc. You can view and sometimes edit this additional block (tag) information via the block's **point page**.

### 3.4.1 To view and edit additional tag information:

In the block's point page, hover the cursor over the **more** button ▶. A context menu pops up listing various items relating to the tag, which do not appear in the point page (see example).




## 3.5 ALARMS FILTER BUTTON

Click to display only the '**ALM**' events in the history.

- If you are viewing an alarm summary page for a particular alarm group, or have selected a group via the **Alm Hist** pulldown menu key, only the events for that group are displayed.

An ALM event is generated whenever an alarm condition arises in a LIN block – e.g. of alarm type high absolute (Hi), low absolute (Lo), high deviation (HiDv), or low deviation (LoDv).

Two alarm states are possible:

- **ACK_ALM** for a `self-acknowledging' alarm, and
- **UNACK_ALM** for an alarm that needs acknowledging.

### 3.5.1 All Groups filter button

Click to display **all** event types for **all** alarm groups in the alarm/event history – that is, to remove all event filtering.

### 3.5.2 All Types filter button

Click to display **all** event types in the alarm/event history of the particular alarm group selected.

- You can select an alarm group by viewing its alarm summary page, or via the **Alm Hist** pulldown menu key.

## 3.6 ALM HIST SOFTKEY -- MAIN KEY

In general, clicking the main key displays a list of all alarms and events for all the configured alarm groups in the system.

**VIEWING THE ALARM/EVENT HISTORY FOR A PARTICULAR ALARM GROUP**

If you have clicked an alarm group button in the alarm banner and are viewing its group alarm summary page, clicking the main part of the **Alm Hist** softkey displays the alarm/event history for that alarm group only.

- You can filter these lists to see only specific types of alarms and events.

### 3.6.1 Alm Hist softkey -- pulldown menu

**SELECTING AN ALARM GROUP HISTORY FOR VIEWING**

Click the pulldown menu key to pop up a list of alarm groups that have been configured on this system. Click on one to view its history of alarms/events.

- In the popup menu you can also click **All Alarm Groups** to see the unfiltered alarm/event history for all alarm groups.

### 3.6.2 Back button

The **Back** button lets you delete the last term in the current expression.

- Click the **Back** button to delete the right-most term – i.e. bracket, Boolean, operator, or whole subject or object – in the current expression.

### 3.6.3 Blank fascia

These sixteen grey boxes represent the locations of the maximum number of fascias in an operator group. From the Tag Browser, you select tags to 'paste' into the boxes in the required positions. When you are happy with the arrangement you save the configuration as a new or edited operator group.

## 3.7 BLOCK POINT PAGE

**TO VIEW THE TAG'S BLOCK POINT PAGE:**

- This item is greyed out if you are viewing a **block** point page. It is active only when viewing a **field** point page, i.e. a point page associated with a single LIN block field.

In the field's point page, hover the cursor over the **more** button ▶and select **Block Point Page** in the popup menu.

The **block point page** associated with this tag is displayed on the screen, replacing the field point page.

### 3.7.1 Boolean operator selectors

These buttons let you use the Boolean operators **AND** & **OR** in the current expression, and **brackets ( )** to determine evaluation order.

Click a button to append an operator to the current expression. A **greyed out** button indicates that the operator is not currently a valid choice for the expression.

### 3.7.2 Bracket Count readout

This readout indicates the number of unmatched left-hand brackets in the current expression.

For a completed valid expression the bracket count must always be zero.

### 3.7.3 CLS button

The **CLS** button deletes the entire current expression.

### 3.7.4 Cancel Point Page More menu

Click this menu item to close the 'more' menu.

### 3.7.5 Clear all fascias button

Click this button to clear all fascias in the current operator group, leaving a blank configuration window.

### 3.7.6 Close Point Page

Click this menu item to close the point page.

## 3.8 CURRENT EXPRESSION

This is the filter expression ('query') currently being edited, and may therefore not be complete or syntactically correct. E.g. **EventType =**

As you add/delete terms, the current expression alters to reflect your edits.

## 3.9 DATA PAGE

Gives statistics and status for the currently installed licence – including numbers of View Blocks, OPC Blocks, and Server Watchdog data.

If you are logged in with a high enough security access level, you also see a **Fail comms to this Server** button. Pressing this halts comms to this server, and forces a redundant server (if configured) to take over data collection.

You might want to do this when making fundamental changes to the local PC that would interfere with the comms in an erratic way.

- When this button is pressed it changes to a **Restore this Server** button, and after a delay when the comms have failed an explanatory message appears below the button. Press the new button to restore the comms.
- While the comms are in the failed state a red box showing the server name appears in the title bar. It flashes to show that the comms failure has been artificially induced. For a genuine comms failure the red box does not flash.

## 3.10 DISPLAY TAG BROWSER BUTTON

Click this button to open the **Tag Browser** window, where you can view and select tags for displaying as fascias in the operator group.

## 3.11 DISPLAY NEW OPERATOR GROUP BUTTON

Click this button to preview the current operator group configuration and close the configurator window.

- If you have not yet saved the configuration, when you next click the **Configure** softkey a dialog warns you of this and asks if you want to save it. Click **Yes** to save the operator group, **No** to discard it, or **Cancel** to return to the preview.

## 3.12 DOUBLE PAN BACK BUTTON


Click to pan the trend backwards in time by **twice** the current period selected by the New Span radio button. The timespan stays the same, but the start and end date/times of the chart are shifted backwards.

The current period equals the radio button value whether or not the **New Span** button has been clicked.

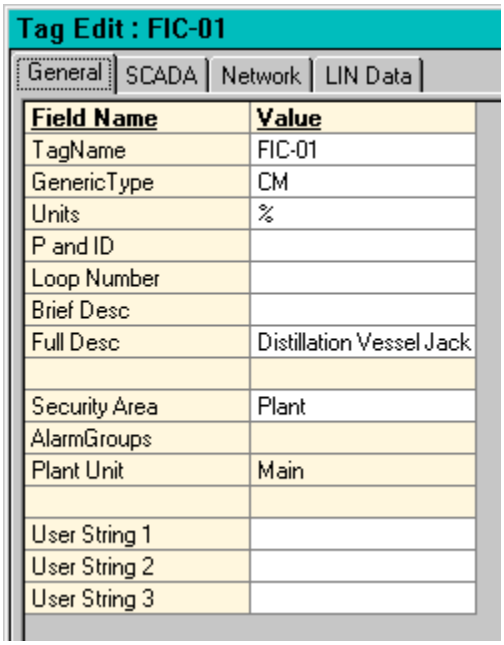
## 3.13 DOUBLE PAN FORWARD BUTTON

Click to pan the trend forwards in time by **twice** the current period selected by the New Span radio button. The timespan stays the same, but the start and end date/times of the chart are shifted forwards.

The current period equals the radio button value whether or not the **New Span** button has been clicked.

## 3.14 EDIT TAG

In the block's point page, hover the cursor over the **more** button ▶ and select **Edit Tag** in the popup menu. A **Tag Edit** window opens up with up to five tabbed pages. (The example below shows the **General** page. Some tags will include an **I/O** page as well.)




Each page lets you inspect and sometimes edit the different types of field values associated with the selected tag.

### 3.14.1 Enter Text or Alarm Group or Date/Time button

When edited, this button shows either

- the **alarm group** you have selected for the filter expression from the menu above the box, OR
- the **string** or **numbers** you have entered via the keyboard as the object of the filter expression, OR
- the **date** and **time** you have entered via the **Time/Date** button.

**ENTERING STRINGS OR NUMBERS**

1. Click the Enter Text or Alarm Group or Date/Time button to pop up a keyboard.
2. Then, either click the onscreen keys to enter characters, or use the PC keyboard to type them into the white edit box. Enter the percent character '%' as a 'wildcard' if necessary. Each % matches zero or more characters. E.g. %ack% matches the string 'ack' occurring anywhere in the searched field (including the start and end), whereas ack% matches only fields starting with 'ack'.
3. Click the OK button (or hit <Return> on the PC keyboard) to enter your characters and display them on the Enter Text or Alarm Group or Date/Time button.

**ENTERING A DATE AND TIME**

Use the Time/Date button (above the Enter Text or Alarm Group or Date/Time button).

**THE SELECTED FILTER EXPRESSION**

The three boxes below the menus – taken together – display your **selected filter expression**. You can now

- append this expression to the current filter expression shown at the top of the configurator window, by clicking the **Add to Query** button (if activated), or
- replace the current expression with your selected expression, by clicking the **Replace Query** button.

## 3.15 EVENTS FILTER BUTTON

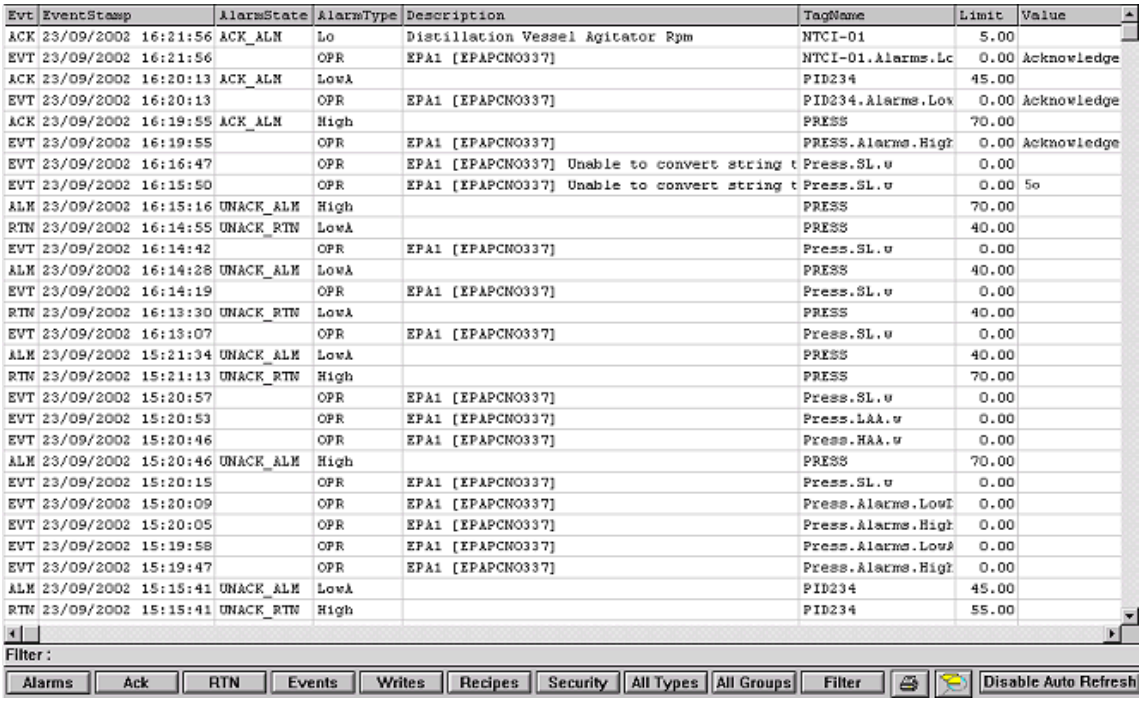
Click to display only the '**EVT**' events in the history.

- If you are viewing an alarm summary page for a particular alarm group, or have selected a group via the **Alm Hist** pulldown menu key, only the events for that group are displayed.

An EVT event is generated whenever a LIN block field is written to (successfully or otherwise), an alarm is acknowledged, an authentication/authorisation is input, an operating mode is changed, a user logs in or out (successfully or otherwise), etc.

### 3.15.1 Example alarm history

NOTE. You can drag column rules to alter the column widths if required.

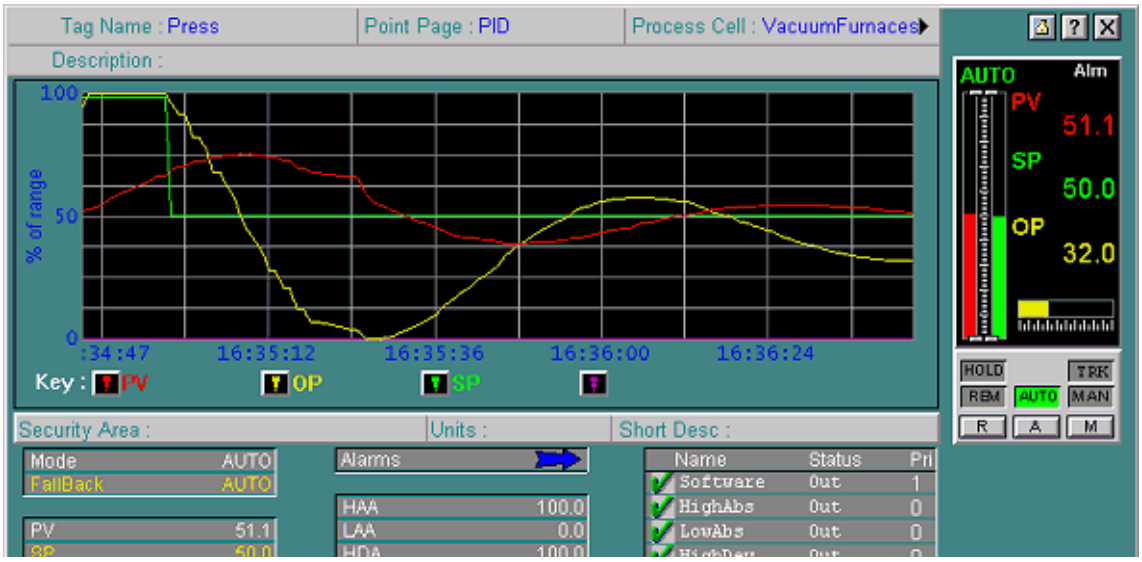


| Evt | EventStamp | AlarmState | AlarmType | Description | TagName | Limit | Value |
|---|---|---|---|---|---|---|---|
| ACK | 23/09/2002 16:21:56 | ACK_ALM | Lo | Distillation Vessel Agitator Rpm | NTCI-01 | 5.00 | |
| EVT | 23/09/2002 16:21:56 | | OPR | EPA1 [EPAPCNO337] | NTCI-01.Alarms.Lo | 0.00 | Acknowledge |
| ACK | 23/09/2002 16:20:13 | ACK_ALM | LowA | | PID234 | 45.00 | |
| EVT | 23/09/2002 16:20:13 | | OPR | EPA1 [EPAPCNO337] | PID234.Alarms.Low | 0.00 | Acknowledge |
| ACK | 23/09/2002 16:19:55 | ACK_ALM | High | | PRESS | 70.00 | |
| EVT | 23/09/2002 16:19:55 | | OPR | EPA1 [EPAPCNO337] | PRESS.Alarms.High | 0.00 | Acknowledge |
| EVT | 23/09/2002 16:16:47 | | OPR | EPA1 [EPAPCNO337] Unable to convert string t | Press.SL.u | 0.00 | |
| EVT | 23/09/2002 16:15:50 | | OPR | EPA1 [EPAPCNO337] Unable to convert string t | Press.SL.u | 0.00 | 5o |
| ALM | 23/09/2002 16:15:16 | UNACK_ALM | High | | PRESS | 70.00 | |
| RTN | 23/09/2002 16:14:55 | UNACK_RTN | LowA | | PRESS | 40.00 | |
| EVT | 23/09/2002 16:14:42 | | OPR | EPA1 [EPAPCNO337] | Press.SL.u | 0.00 | |
| ALM | 23/09/2002 16:14:28 | UNACK_ALM | LowA | | PRESS | 40.00 | |
| EVT | 23/09/2002 16:14:19 | | OPR | EPA1 [EPAPCNO337] | Press.SL.u | 0.00 | |
| RTN | 23/09/2002 16:13:30 | UNACK_RTN | LowA | | PRESS | 40.00 | |
| EVT | 23/09/2002 16:13:07 | | OPR | EPA1 [EPAPCNO337] | Press.SL.u | 0.00 | |
| ALM | 23/09/2002 15:21:34 | UNACK_ALM | LowA | | PRESS | 40.00 | |
| RTN | 23/09/2002 15:21:13 | UNACK_RTN | High | | PRESS | 70.00 | |
| EVT | 23/09/2002 15:20:57 | | OPR | EPA1 [EPAPCNO337] | Press.SL.u | 0.00 | |
| EVT | 23/09/2002 15:20:53 | | OPR | EPA1 [EPAPCNO337] | Press.LAA.u | 0.00 | |
| EVT | 23/09/2002 15:20:46 | | OPR | EPA1 [EPAPCNO337] | Press.HAA.u | 0.00 | |
| ALM | 23/09/2002 15:20:46 | UNACK_ALM | High | | PRESS | 70.00 | |
| EVT | 23/09/2002 15:20:15 | | OPR | EPA1 [EPAPCNO337] | Press.SL.u | 0.00 | |
| EVT | 23/09/2002 15:20:09 | | OPR | EPA1 [EPAPCNO337] | Press.Alarms.LowL | 0.00 | |
| EVT | 23/09/2002 15:20:05 | | OPR | EPA1 [EPAPCNO337] | Press.Alarms.High | 0.00 | |
| EVT | 23/09/2002 15:19:58 | | OPR | EPA1 [EPAPCNO337] | Press.Alarms.LowA | 0.00 | |
| EVT | 23/09/2002 15:19:47 | | OPR | EPA1 [EPAPCNO337] | Press.Alarms.High | 0.00 | |
| ALM | 23/09/2002 15:15:41 | UNACK_ALM | LowA | | PID234 | 45.00 | |
| RTN | 23/09/2002 15:15:41 | UNACK_RTN | High | | PID234 | 55.00 | |

Filter :

Alarms | Ack | RTN | Events | Writes | Recipes | Security | All Types | All Groups | Filter | Disable Auto Refresh

### 3.15.2 Example point page




### 3.15.3 Filter button

Click to display a movable **filter configuration window**, where you can configure a wide range of Boolean expressions to customise your alarm/event history display.

- You can create custom filters from scratch, or add filter terms to existing filter expressions.

## 3.16 HELPBOX HOME BUTTON

 Click to display information on the selected LIN block. For the 'HELP' helpbox, the home button displays general information on 'Operations Viewer Help'.

### 3.16.1 Helpbox Title

Shows the item for which help is given in the text window. This may be a LIN block type, or 'HELP' for a help screen item.

### 3.16.2 Helpbox Title Bar

You can use this title bar to drag the helpbox to another position on the screen. Don't inadvertently click any of the buttons, though!

### 3.16.3 Helpbox View Fields button

 Clicking this button expands the helpbox to show scrollable lists of LIN blocks and their associated fields. Also listed are all the help screen labelled items, as subfields of the 'Help' field. You can click a LIN block or field to see relevant help information in the text window.

To close the field view, click the 'unexpanded view' button 

### 3.16.4 Helpbox text window

This is where the help text appears. Clicking on a new item on the main Operations Viewer screen – while the helpbox is open – replaces the text and helpbox title with the relevant information.

### 3.16.5 History timespan specification

This area of the Filter Configuration window lets you display data that was logged **before** or **since** a specific date/time, or **between** a pair of specific date/times.

Click the radio button in this area of the window. (Any selections in the Recent History part of the window are deselected because these settings are mutually exclusive.) Click the **Show Data Before** or the **Show Data Since** box to pop up a calendar for setting the required date & time using the increment buttons provided. Click the **Update** button on the calendar to copy your settings to the box. The **Clear** button clears any setting – use this when you want just a single threshold to operate on the data.

The Alarm History display updates automatically to reflect your selection.

- To display data **between** a pair of date/times, enter the required values in both **Before** and **Since** boxes.
- The history timespan specification operates **in addition to** any filter currently applied to the Alarm History (e.g. **EventType = 'ack'**).

### 3.16.6 Home display

Selecting this menu item has the same effect as clicking the Home Display button.

### 3.16.7 LIN Block Help

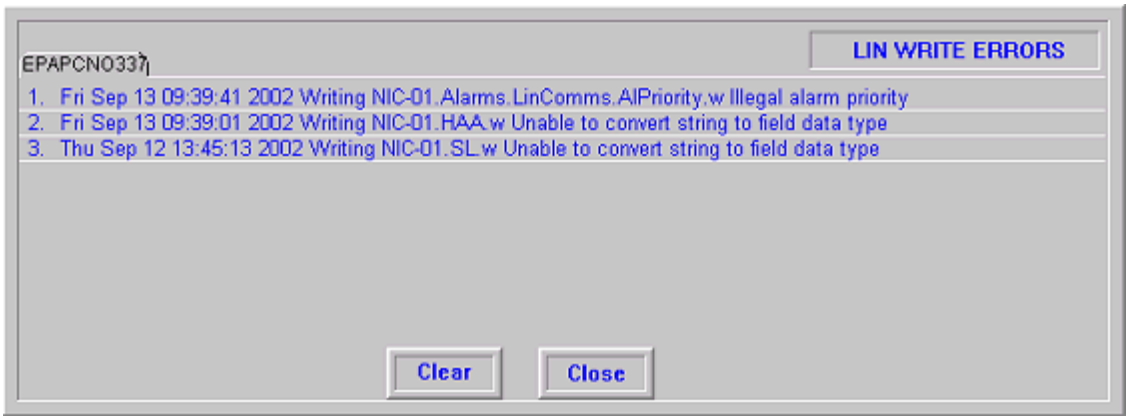
Selecting this menu item has the same effect as clicking the LIN Blocks Help button.

### 3.16.8 LIN Blocks Help button


Click to open the Helpbox, where you can get help on LIN function blocks and also on the operator interface.

## 3.17 LIN WRITE ERRORS BUTTON

Click to see a **LIN Write Errors** window listing all unacknowledged write errors for each server, with the latest at the top of the list. Example:




Click the **Clear** button to acknowledge all the listed errors for the particular server displayed, and/or close the window with the **Close** button.

- LIN write errors occur when you try to write an illegal value to a field – e.g. a string to a numeric field, or an out-of-range priority to an alarm field.
- If there are any write errors logged, a yellow **Write Failure** box appears at the top of the operator screen to the left of the time-of-day readout.
- Write Failure
- Clicking on this yellow box pops up the LIN Write Errors window directly.

## 3.18 LIN DATABASE

A Eurotherm LIN database is a software program that runs in a LIN instrument. The running LIN database can take in signals from sensors in an outside entity (e.g. an industrial plant), process them in specified ways, and then output signals to actuators in the entity to control its behaviour in the required manner.

The cycle of signal input to the database, signal processing, and signal output to the entity is repeated continuously while the database runs.

More than one LIN instrument can be involved in controlling a single entity, but only one LIN database can run in a single LIN instrument at a time.

## 3.19 LANGUAGE BUTTON

Click to see a list of configured languages that can apply to the operator interface. Click on a language to apply the selected language to the interface displays.

This button is disabled if the login security access level is not high enough.

## 3.20 MAXIMUM ITEMS IN DISPLAY

This area of the Filter Configuration window lets you limit the number of items that can be displayed in the Alarm History window. The default maximum number is 500.

Click the **Maximum Items in display** box to pop up a keyboard for typing in the required number. Click **OK** – or hit <Return> – to apply your setting.

## 3.21 MENU OF EXPRESSION OBJECTS

Use this menu to select predefined objects for the filter expression e.g. **AlarmType**, **ValueString**, **GroupName**, etc.

The menu lists all configured alarm groups, plus '**$System**' which is the alarm group containing all system events (e.g. startup, login/out, shutdown).

- Click on an item to display it in the selected object box, below the menu.
- Instead of picking an alarm group, you can enter **numbers** or a **string** (including **wildcards** if required). Do this by clicking on the Enter Text or Alarm Group or Date/Time box, which acts as a button as well as a readout.

### 3.21.1 Meanings of subject menu items

This table shows the meanings of the expression subjects that have different names from the history column headings, or are absent from the history altogether:

| Menu item | Equivalent history column | Other meaning |
|---|---|---|
| **EventType** | Evt | -- |
| **Comment** | Description | -- |
| **ValueString** | Value (as a string) | -- |
| **Value** | Value (evaluated as a number; zero if a string) | -- |
| **EngUnits** | -- | Engineering units (if specified in project dbase) |
| **GroupName** | -- | Alarm Group name |
| **NodeName** | -- | PC node name |
| **Operator** | -- | Login User ID |
| **Priority** | -- | Event priority (1-999; 1=top) |

- You can have several subjects in a compound Boolean expression, e.g. EventType = 'RTN' AND AlarmState Like 'UNACK%' AND AlarmType Not Like 'lowd'.

## 3.22 MENU OF OPERATORS

Use this menu to select operators for the filter expression.

Scroll to an item and click it. It appears in the 'selected operator' box below the menu.

The table below shows the meanings of the operators in the menu:

| Operator | Meaning | Examples of usage |
|---|---|---|
| = | Equals<br>(string or number) | **EventType = 'ALM'**<br>**Limit = '15'** (number, e.g. 15.00) |
| < | Is less than | **Limit < '25'** |
| > | Is greater than | **Priority > '800'** |
| < > | Is not equal to<br>(string or number) | **GroupName < > '$System'**<br>**Limit < > '200'** (number, e.g. 200.00) |
| **Like** | Contains (string) | **Comment Like '%furnace%'**<br>(% = zero or more wildcard characters) |
| **Not Like** | Does not contain (string) | **AlarmState Not Like 'ack%'**<br>(note: strings case-insensitive) |

- You can have several operators in a compound Boolean expression,
- e.g. **EventType = 'RTN' AND AlarmState Like 'UNACK%' AND AlarmType Like 'lowd'**. This filter causes the alarm history to display only low deviation alarms that have returned to the normal state without having been acknowledged.

## 3.23 OP PAGE SOFTKEY -- MAIN KEY

Click the main key to view the current operator group directly. If there are no operator groups configured, the 'Op Page' legend on the main key is greyed out and that part of the softkey is inactive.

### 3.23.1 Op Page softkey -- pulldown menu

#### SELECTING AN OPERATOR GROUP FOR VIEWING

Click the pulldown menu key to see a list of the operator groups configured by the currently logged-in user, from which you can select one for viewing. This group then becomes the 'current' operator group, directly selectable via the main part of the softkey.

#### CONFIGURING AN OPERATOR GROUP

Click the pulldown menu key and select 'Configure Operator Group' from the popup menu. The **Operator Group Configurator** window opens, ready for configuring an operator group.

#### OPERATOR GROUP CONFIGURATOR CLOSE BUTTON

Click this button to close the Operator Group Configurator window. If the operator group has been edited but not yet saved, a dialog pops up reminding you of this. Click **Yes** to save the operator group, **No** to discard it, or **Cancel** to do nothing and leave the configurator window open.

#### OPERATOR GROUP DELETE BUTTON

Click this button to delete the current operator group. A dialog asks you to confirm or cancel the operation. Hit **Yes** to proceed, or **No** to abort the delete.

## 3.24 OPERATOR GROUP MENU BUTTON

Click this button to pop up a menu of operator groups configured by the currently logged-in user. You can select one of these for editing. The menu also includes:

- **Configure Operator Group.** Click to open up a blank configurator window.
- **Load Other.** Click to add any other users' configured operator groups to the menu of available groups.

### 3.24.1 Operator group name

This box displays the name of the operator group currently being configured or edited.

- 'Configure Operator Group' appears as the name of a new, as yet unnamed, operator group.

## 3.25 PT PAGE SOFTKEY -- MAIN KEY

### 3.25.1 Viewing the current point page

Click the main key to view the current point page directly. If no current point page has been selected, the 'Pt Page' legend on the main key is greyed out and that part of the softkey is inactive.

> Note... You can also view a point page by clicking the tag area of a **point fascia**. This page then becomes the current point page.

### 3.25.2 Pt Page softkey -- pulldown menu

#### SELECTING A POINT PAGE FOR VIEWING

Click the pulldown menu key to pop up a menu of point pages (tags) that have been selected this session. Click on one to view it – which makes it the **current point page**.

- In the popup menu you can also click **Tag Browser** (to view the tag browser) and **Clear List** (to clear the list of viewed point pages). If the list has been cleared, clicking the pulldown menu opens the Tag Browser directly.

## 3.26 RTN FILTER BUTTON

Click to display only the '**RTN**' events in the history.

- If you are viewing an alarm summary page for a particular alarm group, or have selected a group via the **Alm Hist** pulldown menu key, only the events for that group are displayed.

An RTN event is generated whenever an alarm returns from the alarm condition to the normal condition.

Two alarm states are possible:

- **ACK_RTN** for an alarm that returned after it had been acknowledged, and
- **UNACK_RTN** for an alarm that returned while still unacknowledged.

## 3.27 RECENT HISTORY SPECIFICATION

This area of the Filter Configuration window lets you specify how far back in time you want the Alarm History display to go. (The default is the last three days.)

Click one of the **Seconds**, **Minutes**, **Hours**, or **Days** radio buttons. Then click the **Show data over the last** box to pop up a keyboard for typing in the required number. Click the **OK** button – or hit <Return> – to enter your specification. The Alarm History display updates automatically to reflect your selection.

- The recent history specification operates **in addition to** any filter currently applied to the Alarm History (e.g. **EventType = 'ack'**).

## 3.28 REPLACE QUERY BUTTON

Click this button to overwrite the **current** filter expression – shown at the top of the configurator window – with the **selected** filter expression – shown in the three boxes below the menus.

## 3.29 SAVE OPERATOR GROUP BUTTON

Click this button to save the current operator group configuration. A menu pops up listing options that let you save the configuration:

- under a new name
- under an existing operator group name, overwriting the original group.

## 3.30 SCRIPT ERRORS BUTTON

Click to view the **Eurotherm Script Extensions Error Log**. If a script extension error occurs during startup you are warned at the time, and an entry is made in the log. This could useful for future reference as a diagnostic aid.

- Script extension errors are rare!
- If your security access level is high enough you also see a set of four **debug** buttons. Clicking these sends diagnostic messages to the Wonderware Logger (running in the background) which can be used by software engineers to diagnose and cure any script errors.

## 3.31 SELECTED OPERATOR BOX

This box shows the **operator** you have selected for the filter expression, from the menu of operators above the box.

## 3.32 SELECTED SUBJECT BOX

This box shows the **subject** you have selected for the filter expression, from the menu of subjects above the box.

## 3.33 SERVERS PAGE

Shows for each server the versions of the Alarm Provider, LINOPC, LINSVR32, and others.

## 3.34 SHUTDOWN BUTTON

Click to shut down the Operations Viewer. You are asked to confirm the shutdown – click **Yes** to proceed or **No** to cancel the operation.

- This button is disabled if the login security access level is not high enough.

## 3.35 SINGLE PAN BACK BUTTON

Click to pan the trend backwards in time by the current period selected by the New Span radio button. The timespan stays the same, but the start and end date/times of the chart are shifted backwards.

- The current period equals the radio button value whether or not the **New Span** button has been clicked.

## 3.36 SINGLE PAN FORWARD BUTTON

Click to pan the trend forwards in time by the current period selected by the New Span radio button. The timespan stays the same, but the start and end date/times of the chart are shifted forwards.

- The current period equals the radio button value whether or not the **New Span** button has been clicked.

## 3.37 SOFTKEY NOT IMPLEMENTED

This softkey is not implemented in the current software. Its legends are permanently 'greyed out'.

## 3.38 SYNCH FILE BUTTON

Use this button when you have edited a configuration file – e.g. a recipe – and want to deploy this to all other PCs on the project network (via the Eurotherm File Reconcile utility).

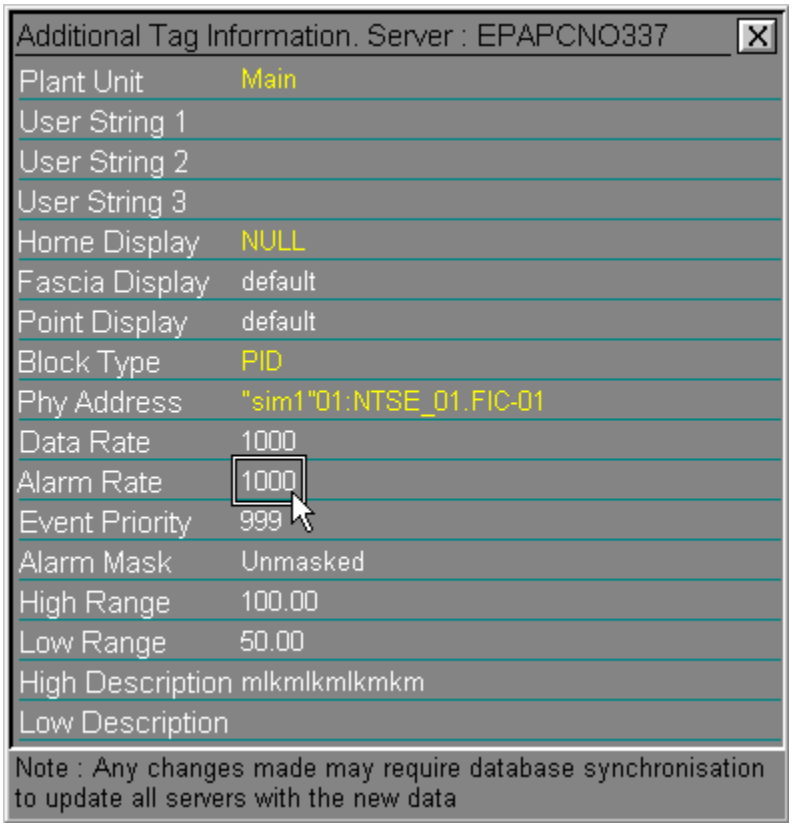
Click the Synch File button to pop up a **Select a File to Synchronise** dialog. Select the file you want to deploy and click **Open**. A message box tells you that synchronisation is occurring.

- You need not synchronise edited operator groups or trends. This happens automatically.
- File synchronisation applies only to InTouch applications and their sub-directories.
- The Synch File button is disabled if the login security access level is not high enough.

## 3.39 TAG DETAILS

To view and edit additional tag information:

1. In the block's point page, hover the cursor over the more button and select Tag Details in the popup menu. The Ad**ditional Tag Information** window opens up (example below):




2. To edit a field, move the cursor over the field value, which highlights with a box. For a **blank** value an 'empty' highlight box appears. Only fields with white characters are editable.
3. Click the highlighted value (or blank highlight box) to pop up an appropriate keyboard for editing the value – e.g. a alphanumeric keyboard.
4. Fields with yellow characters are read-only and do not pop up a keyboard.
5. Enter the new value using the keyboard and click the **close** button to close the window.

## 3.40 TIME/DATE BUTTON

Click this button if you want to enter a **date** and **time** as the object of the filter expression. A calendar pops up, which you set to the required date/time using the increment buttons provided. Click the **Update** button on the calendar to copy your settings to the box and close the calendar popup.

A typical filter you can create using time/date is

EventStamp > '09/27/2002 00:00:00' AND EventStamp < '09/28/2002 00:00:00'

which displays in the alarm history events that occurred on the 27th September 2002 (only).

The format of the time/date may differ from the format seen in the alarm history, but this does not affect this expression because all dates are evaluated in the same way when the query is executed.

## 3.41 UPDATE ALARM HISTORY BUTTON

Click this button to overwrite the **applied** alarm history filter expression (shown at the foot of the history window just above the filter buttons) with the **current** filter expression (shown at the top of the filter configurator window).

As soon as you do this the alarm history display updates according to the new filter expression.

## 3.42 USING THE PROCESS CELL SOFTKEY

Click the **Process Cell** softkey – or press <**F2**> – to see a list of displays that have been classified as '**Process Cell**' within the project. You can select one of these for display.

The softkey is greyed out if no 'Process Cells' have been defined.

## 3.43 WRITES FILTER BUTTON

Click to display only the 'EVT' events in the history, but excluding logging in/out events.

- If you are viewing an alarm summary page for a particular alarm group, or have selected a group via the **Alm Hist** pulldown menu key, only the events for that group are displayed.

## 3.44 ZOOM IN BUTTON

 Click to zoom in 2x on the centre of the trend. That is, halve the timespan keeping the centre of the trend where it is.

## 3.45 ZOOM OUT BUTTON

 Click to zoom out 2x on the centre of the trend. That is, double the timespan keeping the centre of the trend where it is.

# 4 INDEX

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