Alarm User Guide
IGSS Version 13.0

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained therein. The documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application of use thereof.

Neither Schneider Electric nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein, If you have any suggestions for improvements or amendments or have found errors in this publication, please notify us.

No part of this document may be reproduced in any form or by any means, electronic or mechanical, including photocopying, without express written permission of Schneider Electric.

All pertinent state, regional and local safety regulations must be observed when installing and using this product. For reasons of safety and to help ensure compliance with documented system data, only the manufacturer should perform repairs to components.

Failure to use Schneider Electric software or approved software with our hardware products may result in injury, harm or improper operating results.

Failure to observe this information can result in injury or equipment damage.

Table of Contents

Chapter 1: The Alarm List

1.1 Introducing the Alarm List

Process alarms and 'IGSS Alarm'

IGSS Alarm is a fast and powerful alarm handling routine which is an integral part of the IGSS process control system. This is an enormous advantage to both the plant operator and the system designer as all interfacing between alarm management and process supervision and control functions is dealt with automatically by IGSS.

Your plant signals an alarm situation whenever the control process generates an error which may be some electrical equipment not functioning properly, or some measured values stepping out of the predefined limits. Thus it could for instance happen that the water level of a tank level rises dangerously high or a valve did not close properly where it should have done. In all these cases, alarm signals of higher or lesser importance are registered by IGSS and indicated to the operator in various ways:

- The alarm counter, which is a special icon displayed on the screen in the taskbar or in a user-defined spot, is automatically incremented with each new alarm and thus indicates the number of unacknowledged alarms.
- The symbol in the process screen which represents the faulty plant component changes color or begins to flash.
- A text message explaining the nature of the alarm appears in the message line of the currently displayed process screen.
- The alarm and all its relevant information is recorded in two lists
  - the Active Alarms
  - the Alarm Log

for evaluation, archiving, reporting and further processing.

- Depending on its severity, the alarm may be announced by an acoustic signal and service personnel may be called over the paging system.

Below the **Alarm List**, you will find the **Event List**. Click here for further information.

How is an alarm identified ?

A process alarm is primarily identified by its alarm number .

Each alarm number is linked to a specific plant component - an object - and thus indicates that this particular object is in the state of alarm.

All characteristics of that alarm - priority, color, alarm text, acknowledged or not acknowledged - are stored under this number.

Alarm characteristics

Apart from the identifying alarm number, each alarm is given a set of attributes which describe nature and severity of the process alarm:

- Priority, from 1 to 255

- Date and time of alarm occurrence

- Date and time of alarm end

- Time of alarm acknowledgement

- Name of the faulty plant object

- Name of the plant area to which the object belongs

- Worst process value measured for the faulty plant object

- Node (PLC) and driver identification

- Name of the user who has acknowledged the alarm

These details are automatically recorded in both the alarm list and the alarm log.

The Alarm Count icon

The Alarm Count icon is a special icon that can be displayed on the local machine when the alarm module is started. The Alarm Count icon provides the operator a quick overview of the alarms in the system and the operator can access to the **Active Alarms** form by double-clicking the Alarm Count icon.

The alarm count icon can be set up to display:

- the number of objects currently in alarm

- the number of currently active unacknowledged alarms (default setting)

- the number of acknowledged and unacknowledged alarms

- the number of alarms that match the used alarm filter

Enable and set up

The Alarm Count icon can be enabled in the **Active Alarms** form > **View** > **Alarm Count**. Display parameters for the Alarm Count icon can be defined in the **System Configuration** form > **Alarm** tab > **Counter** group found in the **IGSS Master** > **Design and Setup** tab.

The alarm icon automatically adopts the color of the pending alarm with the highest priority so that you are always informed about the severity of the alarms still awaiting acknowledgement and correction.

Alarm count icon placement

 Taskbar

The alarm icon is permanently displayed, either in the taskbar in the bottom of the screen, provided that the taskbar is enabled for your application, or in a predefined spot on the screen, irrespective of which process diagram is currently being displayed.

System tray

The alarm icon is also displayed in the system tray.

The Alarm List

Click the picture for further information
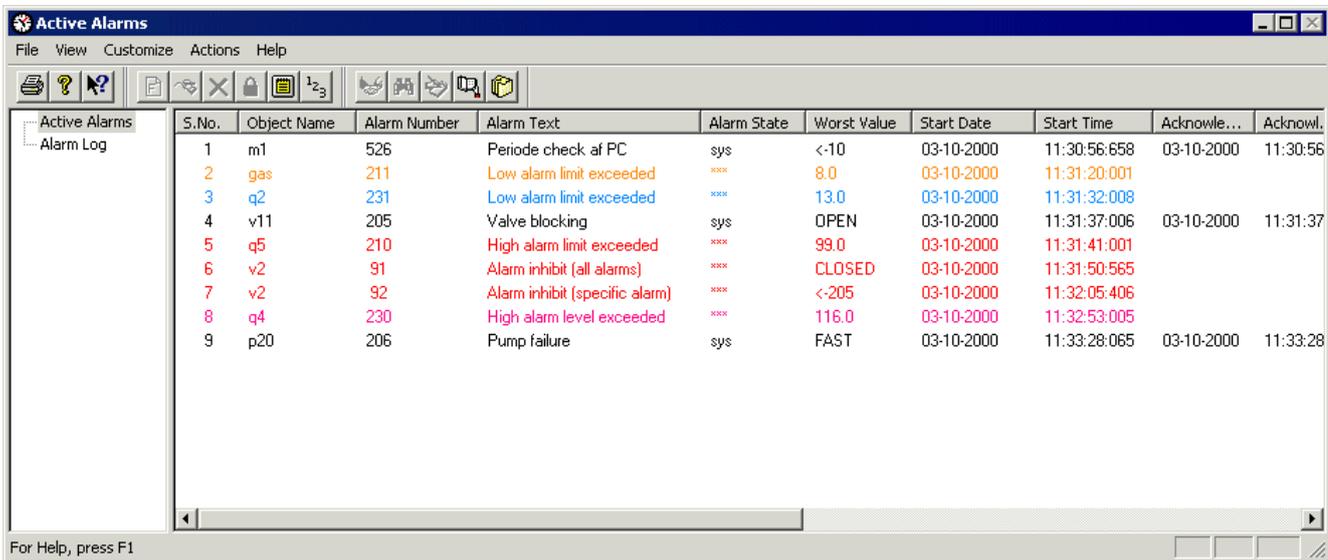
Active Alarms versus Alarm Log

Every alarm triggered in the plant and defined as such during project design is principally registered in two different generated automatically lists: The ALARM LIST and the ALARM **LOG**.

These lists provide the operator with important information about the alarm situation.

Active Alarms	Alarm Log
contains all pending alarms, i.e. those alarms that are currently active.	Contains ALL process alarms, including those that have been acknowledged or whose cause has in the meantime been corrected.
Alarms are automatically deleted from the list when the alarm situation has ended AND the alarm has been acknowledged. Alarms that are acknowledged but whose cause has not yet been eliminated, or alarm situations that have been corrected but not yet acknowledged, remain in the alarm list, i.e. they are considered as being active or pending.	Alarms are not automatically deleted from the alarm log, irrespective of their 'age'.
The alarm list is a subset of the alarm log.	The alarm log contains the pending alarms registered in the alarm list AND the 'old'

Active Alarms	Alarm Log
	alarms.
You may define your own sorting and filter criteria and thus exactly define which type of alarms you want to have displayed in the alarm list and in which format and layout.	You yourself define the period of time to be covered by the alarm log. You may for instance decide to call up an alarm log that shows all alarms - acknowledged or not – from the last 24 hours.
All edit functions offered in the menu bar (filter, sort, find, note, freeze, delete, update etc.) can be applied to the alarm list.	All edit functions offered in the menu bar (filter, sort, find, note, freeze, delete, update etc.) can be applied to the alarm log.

Alarm or Event log display limits

If the alarm or event log contains records that exceed the user-defined maximum alarm or event log limit, the latest alarm or event logs will be displayed. To find older alarm or event logs, you must create and apply an alarm or event log filter to display the desired alarm or event log entries.

The maximum number of alarm log entries is defined in the **Max. alarm log entries** field on the **Alarm** tab of the **System Configuration** form.

Priority

Each alarm is given a priority in the range of 1 to 255, 255 being the highest priority.

The reaction of IGSS Alarm to alarms of different priorities is defined during system design in the Definition module.

Alarms of low priority (Priority 1 and 2) may be self-acknowledging and not even make the relevant symbol in the process screen change color or flash, whereas alarms of high priorities may cause an automatic printout, personnel to be called over the paging system, return a signal to the PLC in order to set off an acoustic alarm etc.

These reactions are decided on during system design when the alarm is given its alarm number, priority and other characteristics, such as color changes.

Alarm Priorities and Analog and Table objects

An analog or table object can only display one active alarm at a time and only the alarm with the highest priority will be displayed.

If you have multiple alarms for the analog or table object, for example if a High Limit alarm is triggered, and the object value then triggers the High Alarm, two alarms will be triggered, but only the alarm with the highest priority will be displayed in the Active Alarm list. The other alarm will be placed in the Alarm log, but will be unacknowledged.

Alarm priorities and Digital objects

Digital objects and analog or table objects whose alarms are controlled by the PLC machines may contain up to 32 simultaneous alarms if the Single Bit option is used when setting up the object template.

> Digital objects can only be set up with the Single Bit option if a Digital Object Template is used to create the object.

Alarm priorities and Counter objects

You can only define one alarm for Counter objects and therefore only one alarm is displayed.

1.2 Viewing the Alarm List

Open the Alarm List or the Alarm Log

You can open the Active Alarms form by clicking the **Alarm Count** icon (if the alarm count icon is enabled) or clicking the **Alarm** button found on the **IGSS Master** > **Home** tab.

The Active Alarm list and Alarm Log column list

List of the columns in the Active Alarm list and Alarm Log:

- S.No. = Sequence Number
- Start Date
- Start Time
- Acknowledge Time
- End Time
- Object Name
- Worst Value
- Alarm Text
- Area Name
- Object Description
- Value
- Priority
- Alarm Number
- Acknowledge Date
- End Date
- Alarm State
- Driver Id.
- Node Id.
- User name
- Arrival date
- Arrival time
- The icons
- Last Changed Date

- Last Changed Time
- Action

> You can adjust the information displayed or printed in the Active Alarm list or Alarm log according to your requirements, removing and adding columns as needed.

See Also

"Add columns" on page 102

"Change the column width" on page 103

"Change the sorting order in the list" on page 108

"Define a new filter" on page 91

"Set a default Alarm log or Event log filter" on page 96

"Define special filter parameters" on page 93

"Delete an existing filter" on page 93

"Edit an existing filter" on page 92

"Rearrange the columns" on page 100

"Remove columns" on page 101

"Rename a column" on page 101

"Restore the Alarm list default format" on page 106

"Save the list format as the default format" on page 108

1.3 Predefined System Alarms

List of predefined alarms

The alarm numbers between 1 and 100 have been reserved for reporting system alarms in IGSS. System alarms are used for generating warnings to assist in controlling and troubleshooting IGSS. When activated, these alarms will appear in the **Active Alarms** form.

> Do not delete or re-use the predefined alarms for alarm indication purposes in your objects in your configuration. These alarms are used for reporting specific system events.

To view a complete list of all alarms in the configuration - system alarms as well as user-created alarms, in the **Supervise** module, click **Tools** > **Alarms** to open the **Alarm Details** form.

Alarm See-Thru and Communication errors

Alarm number 1 is used for alarm See-Thru and the alarm numbers between 10 and 51 are reserved for various communication errors (the communication ports, the PLC, the data collection engine, etc.).

Alarm Number	Description
1	An object on the diagram a button is linking to is in alarm. The alarm border surrounding the button will blink in the alarm color. You can edit the blink and the alarm color.
10 and 11	The setup of drivers is erroneous.
20 and 21	Communications ports are faulty.
30 to 39	Extended event-driven communication drivers fail; please refer to driver documentation.
40	A general PLC error has occurred. Refer to PLC documentation.
41 to 45	Driver communication errors. Refer to driver documentation.
46	Connection to the PLC program is missing. The physical connection may be in order, but for some reason the PC has not received the expected "I'm alive" message.
47	Extended event-driven communication drivers fail. Refer to driver documentation.
50	Incomprehensible data from the PLC is received by the data collection engine (DC).
51	Too much data output is generated, for example, if a DDE link generates too much data.

Errors and messages related to other system parameters

The alarm numbers between 80 and 100 are reserved for alarms related to system conditions and errors.

Alarm Number	Description
80	A network connection to the station type **AB-server** is lost.
86	Monitors the Backup folder for the configuration data specified in the **System Configuration** form> **Files** tab > **Automatic Backup** group > **Select backup folder** field. The alarm will trigger when: • the specified backup folder is inaccessible through the network • there is less than 1 GB data remaining in the backup folder • the specified backup folder cannot be written to
87	This alarm is used when the Data Collector encounters an unexpected error. The alarm text is "Internal system problem." The Data Collector will attempt to recover and if no more errors occur the alarm will be ended. If the Data Collector cannot recover, the Data Collector will be terminated and restarted by the IGSS Master. When this alarm has been triggered, basic system health should be checked (data collection and logging working as expected) You can define Data Collector recover and re-start options in the **Alarms on Internal Errors and suppressed logging** group on the **Data Collection** tab in the **System Configuration**

Alarm Number	Description
	form.
88	Logging of **LOG**, **BCL** and alarms to disk is stopped for any reason. Any error writing to the LOG, BCL and/or Alarm files or any error accessing the Report folder will also trigger this alarm. The alarm text is "Data logging has stopped". The alarm is automatically ended when the conditions triggering the alarm no longer are present. You can negate this alarm from being triggered by clearing the **Generate alarm no. 88 if writing of historical data has been stopped** check box on the **Data Collection** tab in the **System Configuration** form.
90	An alarm has been generated by an **Event**.
91	An operator has attached an alarm inhibit flag to all the alarms defined for the given object.
92	An operator has attached an alarm inhibit flag for specific alarms defined for a given object.
93	An operator has attached a Notifier alarm inhibit flag for all alarms defined for a given object.
94	The current disk usage exceeds the High Limit value of the predefined System object. The default value is 80 %.
95	The current disk usage exceeds the High Alarm value of the predefined System object. The default value is 90 %. All writing to the harddisk is suspended when this alarm occurs and log files (*.log) or base class files (*.bcl files) will not be saved.
96	An operator writes a comment on the **Object note** tab of an object.
97	An alarm normally sent out to the WinPager module has been temporarily disabled.
98	An Event has been generated in the Event list.
99	An undetermined alarm has been received on the IGSSserver. This alarm is used when IGSS receives an error message that it is unable to find a matching alarm text for. This situation could arise if an alarm text was modified after the installation of the configuration.
100	(reserved for future use by the system)

See Also

"Driver error codes in the Alarm List" on page 23

Driver Communication Errors

Driver error codes in the Alarm List

Viewing error codes

A driver communication error will result in an alarm in the Alarm List. The alarm number will be one of the predefined alarm numbers for driver errors and the alarm text will be the general alarm text associated with that number. The driver error code itself is shown in the **Worst Value** field. Its syntax is described below.

Help on error codes

If you get a driver error, right-click the alarm line and choose **Driver Error Help**.

To view the full list of driver-specific error codes, choose **Driver Help**.

Error code syntax

A driver error code consists of three or four elements separated by periods. The first three elements are always present, whereas the fourth element is an extended error code which may be omitted depending on whether IGSS has registered the extended error code from the PLC manufacturer.

The error code convention is as follows:

<Drv No>.<Node No>.<IGSS error code>.<Extended error code>

where:

Syntax	Description	Format	Example
<Drv No>	The number of the driver used. You can find the driver ID in the **ID** column of the **Select Communication Driver** dialog or on the **Driver Information** tab for the selected driver.	Decimal	**19** (Telemechanique Xway protocol driver - 7TXWAY)
<Node No>	The node number assigned to the PLC in the **System Configuration** form.	Decimal	**05** for node number 5
<IGSS error code>	The IGSS error code	Hexadecimal	**130A**
<Extended error code>	Is the extended error code which typically comes from the PLC or the PLC interface software	Hexadecimal	**0c02**

The full error code in the **Worst value** field would thus be **19.05.130A.0c02**.

See Also

"Extended Error Codes" on page 24

"List of general driver error codes" on page 25

Extended Error Codes

Extended error codes originate from the PLC interface software or from the Windows operating system and are displayed in the **Active Alarms** form as the fourth (and last) element of the driver error code.

Error code descriptions

The link below contains the error code descriptions received from the PLC manufacturers. In some cases, the extended error code may be missing if information concerning the error code has not been imparted.

For further details about these error codes, refer to the documentation from the PLC manufacturer.

Windows error codes

In some cases, the extended error code is a Windows error code. A Windows error code is generated by the WIN32 API and is registered by the IGSS communications driver.

See Also

"List of general driver error codes" on page 25

"Driver error codes in the Alarm List" on page 23

List of general driver error codes

IGSS includes a number of predefined alarms used for reporting general driver communication errors in the **Active Alarms** form. The alarms will be reported on the predefined driver communication object named **Driver** or the relevant node status object, if defined.

The communication errors can also be viewed in the Communications tab in the IGSS Master as shown below.

Alarm num-ber	Alarm text	Communications error text
10	Global driver configuration error	CONFIGERR
11	Global driver resource problem	DRVRESRC
12	Servers def time not the same	DEFTIMEERROR
20	Errors occurred during input fm port	LOWLEVERRI
21	Errors occurred while output to port	LOWLEVERRO
22	Errors reported by GetLastError() in	IOERRORI
23	Errors reported by GetLastError() out	IOERRORO
24	Errors reported by ClearCom-mError() in	COMMERRORI
25	Errors reported by ClearCom-mError() in	COMMERRORO

Alarm num- ber	Alarm text	Communications error text
40	In remote PLC reported by pro- tocol	PLCSYSERR
41	Message protocol errors while input	PROTOCERRI
42	Message protocol errors while out- put	PROTOCERRO
43	Packet level error during input	PACKETERRI
44	Packet level error during output	PACKETERRO
45	A bad packet received and returned	BADPACKET
46	Keep alive timeout	KPALV_TO
47	Errors from dialup module	DIALUPERR
48	DCA-TCP: Error group for remote DCA's	DCATCPERR
49	Error codes received from AlarmNet	ALARMNETERR
50	Errors generated by DC at packet in	DCPACKETI
51	Errors generated by DC at packet out	DCPACKETO

The error code itself is shown in the **Worst value** field of the **Active Alarms** form. The **Error descrip- tion** field in the table describes the cause of the error and suggests corrective action.

Worst value[1]	Error Description	Internal error text
0x0040	No buffer or request blocks	NO_REQBUF
0x0041	No scan buffers	NO_MSGBUF
0x0042	Ring buffer is full (B.060)	RBUF_FULL
0x0042	Received buffer does not match scan record	SREC_ERR

Worst value[1]	Error Description	Internal error text
0x0044	Received buffer has unexpected length	LEN_ERR
0x0045	No channel exists for requested node	NO_CHAN
0x0046	Unexpected character received	CHAR_ERR
0x0047	Wrong BCC/FRC/CRC code in telegram	CRC_ERR
0x0048	Unsupported data type	TYPE_ERR
0x0049	Unsupported data group	DB_ERR
0x004A	Unsupported offset	OFFSET_ERR
0x004B	Transmit waiting for flow control signals (i.e. device off or cable is broken)	TX_FLOWCTRL
0x004C	Node suspended by operator.	ONLINESUSPEND
0x0050	Open timeout	TO_OPEN
0x0051	Connect request timeout	TO_CR
0x0052	Send timeout	TO_XMIT
0x0053	Receive timeout	TO_RECV
0x0001	**Cause:** An event telegram was received with an invalid type value **Action:** Check the PLC program that sends the telegrams	DC_INVTYPE
0x0002	**Cause:** An event telegram was received with a length that is shorter then allowed **Action:** Check the PLC program that sends the telegrams	DC_BADLEN
0x0004	**Cause:** An event telegram was received with a type message code that is not supported by DC **Action:** Check the PLC program that sends the telegrams	DC_NOSUPPORT
0x0005	**Cause:** An event telegram was received with a type message code that is not supported by DC as an inbound packet **Action:** Check the PLC program that sends the telegrams	DC_NOTINPKT
0x0006	**Cause:** An event telegram was received with an object address that is not in the configuration **Action:** Check the PLC program that sends the telegrams	DC_INVADDR
0x00e1	**Cause:** An event telegram was received with a bad type value. **Action:** Check the PLC program that sends the telegrams	_7TPOLLED_ BADTYPE
0x00e2	**Cause:** An event telegram was received with a length that is longer then allowed **Action:** Check the PLC program that sends the telegrams	_7TPOLLED_ BADWLEN
0x00e3	**Cause:** An event telegram was received with a wrong timestamp or an	_7TPOLLED_

Worst value[1]	Error Description	Internal error text
	address request with wrong type. **Action:** Check the PLC program that sends the telegrams	BADCONT
0x00e4	**Cause:** A time synchronization telegram was received from a node that is not time master. **Action:** Correct the problem in the **System Configuration** form.	_7TPOLLED_ BADTSYNCH
0x00e5	**Cause:** Invalid Minor State **Action:** Internal error	_7TPOLLED_ DIALUP_ MINORSTATE_ ERROR
0x00e6	**Cause:** Unable to establish call **Action:** Check modem and phone line	_7TPOLLED_ DIALUP_ CONNECT_ TIMEOUT
0x00e7	**Cause:** Driver can't find node to call **Action:** Check that node definition in System Configuration form and the Definition modules match.	_7TPOLLED_ DIALUP_NODE_ UNDEFINED
0x00e8	**Cause:** Can't perform a proper disconnect **Action:** Check modem	_7TPOLLED_ DIALUP_ DISCONNECT_ TIMEOUT
0x00e9	**Cause:** No valid response to historical data request **Action:** Check quality of phone line.	_7TPOLLED_ DIALUP_ HISTDATA_ TIMEOUT
0x00ea	**Cause:** Timeout reading valid node number in calling PLC. **Action:** Check that correct node number is written into the right PLC address. Remember to write node number in SATTR16 if COMLI protocol. Check for correct Data Group and Word Offset in the **System Con-figuration** form > **Modem** > **Remote**.	_7TPOLLED_ DIALUP_ PREEVENT_ TIMEOUT
0x00eb	**Cause:** Phone connection disconnected by remote party. **Action:** Re-establish connection manually.	_7TPOLLED_ DIALUP_GOT_ DISCONNECTED
0x00ec	**Cause:**IGSS could not read a valid node number in the calling PLC. **Action:** Make a scanned analog object that addresses the location in the PLC where you expect to find the node number. Call the PLC from IGSS and verify that the node number is correct.	_7TPOLLED_ DIALUP_ ILLEGAL_NODE_ NO
0x00ed	**Cause:** Unable to establish call to PLC. **Action:** Check phone number, modem and cable.	_7TPOLLED_ DIALUP_ CONNECT_ FAILED
0x00ee	**Cause:** Timeout writing scan complete indication to the PLC	_7TPOLLED_

Worst value[1]	Error Description	Internal error text
	Action: Check for correct Data Group and Word Offset and value in the **System Configuration** form > **Modem** > **Remote**	DIALUP_ POSTEVENT_ TIMEOUT
0x00ef	**Cause:** Too long outbound message. **Action:** Check for correct segment size in **System Configuration** form.	_7TPOLLED_ OUTBOUND_ LEN_ERR
0x00f0	**Cause:** Too long outbound mailbox message **Action:** Check for correct segment size and mailbox size in the **System Configuration** form.	_7TPOLLED_ MAILBOX_LEN_ ERR
0x00f1	**Cause:** The time interval for collection of historical data was set to zero. The program modified the interval to 60 seconds. **Action:** Setting the interval in the **System Configuration** form to zero is only valid if the driver can read actual interval in the PLC. Correct the interval in **System Configuration** form > Node > Connection Misc. > Configure > Interval.	_7TPOLLED_ INVHISTTIME
0x00f2	**Cause:** There is no dummy node configured for the alarm modem. **Action:** Add a node to the alarm modem in the **System Configuration** form.	_7TPOLLED_NO_ ALARMNODE
0x00d5	**Cause:** A telegram was received that was too long for the program. **Action:** Check that the PLCs are sending valid telegrams, then contact IGSS Support.	_7TSICOS_ EBADTLEN
0x00d7	**Cause:** The link to the node is down. **Action:** Check that the PLC is running and that the connection is working	_7TSICOS_ ELINKDOWN
0x00d8	**Cause:** No keep alive telegram was received in the expected time **Action:** Check the PLC program	_7TSICOS_ EKPAEXPIR
0x00d9	**Cause:** A bad sequence number was received **Action:** Check the PLC program	_7TSICOS_ EBADRCVSEQNO
0x00da	**Cause:** No buffer available **Action:** Increase number of messages for the driver in the **System Configuration** form.	_7TSICOS_ ENOMOREBUF
0x00dd	**Cause:** Illegal node number specified. **Action:** Remove the object in the IGSS configuration that belong to the illegal node or create the node in the **System Configuration** form.	_7TSICOS_ EILLEGALNODE

[1] in Alarm List and error code in Communications tab in IGSS Master.

1.4 Acknowledging Alarms

Acknowledge alarms in the alarm list

Procedure

1. In the Alarm List, select the alarm message you wish to acknowledge.
2. In the function menu, select **Actions → Acknowledge.**

First Shortcut

1. You are inside the Alarm List.
2. Click on the alarm message which you wish to acknowledge.
3. Click the <u>right</u> mouse button.
4. This opens the **Actions** function box and places it immediately next to the selected message so that you can now conveniently activate the **Ack** function.

Second Shortcut

1. You are inside the Alarm List.
2. Click on the alarm message which you wish to acknowledge.
3. Double click on the left mouse button. The alarm is acknowledged.

See also

Acknowledge alarms in the process diagram

You are in the online supervision mode and the symbol of a process object starts flashing, which means it is in the state of alarm.

Procedure

1. Click on the object that indicates an alarm state.
2. In the menu bar, go **Edit → Acknowledge alarm.**
3. The alarm is now acknowledged.

Shortcut

1. Right-click on the object that indicates an alarm state.

2. A popup menu appears next to the object offering you the **Acknowledge** command**.**

3. Click **Acknowledge.** The alarm is now acknowledged.

See also

1.5 Inhibiting and Removing Alarms

Inhibiting Alarms

You can temporarily inhibit alarms on IGSS objects, preventing specific or all alarms from being sent to the **Active Alarm** form until you remove the alarm inhibition again. The present alarm will not be affected and must be acknowledged and ended as any other alarm. Only new alarms from that object will be inhibited.

Inhibit alarms if the process component is being serviced, renders irrelevant alarms for other reasons or to prevent additional alarms disturbing work on the component.

If multiple objects share the same alarm number, inhibiting a alarm only inhibits alarms from that particular object. All other objects can still trigger the same alarm numbers. You cannot inhibit all alarms for all objects in one process.

You can inhibit alarms for objects directly on the object in the Supervise module or through the **Active Alarms** form.

When you inhibit one or more alarms for an object, a system alarm will be generated and displayed in the **Active Alarms** form and the **Inhibit alarms** option in the object menu in the Supervise module will be displayed with a check mark to indicate that the object contains one or more inhibited alarms.

> It is possible to remove operator access to the object menus in Supervise. If this is the case, inhibiting alarms and reactivating inhibited alarms is not possible in the Supervise module.

Inhibit specific alarms

You can inhibit specific alarms for the object either through the **Active Alarms** form or directly on the object through the **Supervise** module.

Inhibit specific alarms in Supervise

To inhibit specific alarms on an object in Supervise:

1. Click the object on the diagram and select **Inhibit Alarms** to open the **Inhibit Alarms** form.

2. In the **Inhibit Alarms** form, select the **Inhibit only individual alarms on the object as selected below** check box

3. If you want to inhibit other alarms not configured for the object, select the **Also show alarms that may be generated from code** check box[1].

4. In the group box below the **Inhibit only individual alarms on the object as selected below** check box, select the alarms you want to inhibit.

5. Click the **OK** button to save and close the **Inhibit Alarms** form.

[1] It is possible to create VBA procedures in IGSS which can trigger an alarm for an object, even if the specific alarm has not been configured for that object. You can inhibit these alarms in the same fashion as alarms that have been directly configured for the object.

Inhibit specific alarms in the Active Alarms form

To inhibit specific alarms on an object in the **Active Alarms** form:

1. In the **IGSS Master** > **Home** tab, click the **Alarm** button to open the **Active Alarms** form.

2. In the right pane of the **Active Alarms** form, right click the alarm you want to inhibit and select **Inhibit Alarm**.

When you inhibit a specific alarm, a new system alarm will be registered in the **Active Alarms** form indicating that an alarm has been inhibited. The system alarm number is 92 with the alarm text *Alarm Inhibit (specific alarms)*. You can acknowledge the system alarm number 92, which will move the alarm to the Alarm Log.

Inhibit all alarms

You can inhibit all alarms for the object either through the **Active Alarms** form or directly on the object through the **Supervise** module.

Inhibit all alarms on an object in Supervise

To inhibit specific alarms on an object in Supervise:

1. Click the object on the diagram and select **Inhibit Alarms** to open the **Inhibit Alarms** form.

2. In the **Inhibit Alarms** form, select the **Inhibit all alarms that have been configured on this object** check box

3. If you want to inhibit other alarms not configured for the object, select the **And inhibit individual alarms on the object as selected below** check box and the **Also show alarms that may be generated from code** check box[1].

    1. In the group box below the **Inhibit only individual alarms on the object as selected below** check box, select the alarms you want to inhibit. You must also select any alarms configured on the object.

4. Click the **OK** button to save and close the **Inhibit Alarms** form.

[1] It is possible to create VBA procedures in IGSS which can trigger an alarm for an object, even if the specific alarm has not been configured for that object. You can inhibit these alarms in the same fashion as alarms that have been directly configured for the object. You can click the **Select All** button to select all the alarms displayed in the group box.

Inhibit all alarms on an object in the Active Alarms form

To inhibit specific alarms on an object in the **Active Alarms** form:

1. In the **IGSS Master** > **Home** tab, click the **Alarm** button to open the **Active Alarms** form.
2. In the right pane of the **Active Alarms** form, right click the alarm you want to inhibit and select **Inhibit all Alarms**.

When you inhibit a specific alarm, a new system alarm will be registered in the **Active Alarms** form indicating that an alarm has been inhibited. The system alarm number is 91 with the alarm text *Alarm Inhibit (All alarms)*. You can acknowledge the system alarm number 91, which will move the alarm to the Alarm Log.

See Also

"Reactivating inhibited alarms" on page 33

"Inhibit Notifier Alarms" on page 35

"Remove Notifier Inhibition" on page 36

Reactivating inhibited alarms

You can reactivate specific inhibited alarms or all inhibited alarms for an object, either through the Active Alarms form or directly on the object in the Supervise module.

When you reactivate inhibited alarms, the **Active Alarms** form will start registering alarms on the object. and the system alarm that was generated when the alarms were inhibited will be ended and moved in the Alarm log with the date and time the inhibited alarms were reactivated registered in the **End Date** and **End Time** fields.

In the Supervise module

Inhibited alarms will always be displayed on the object in the Supervise module and you can inhibit and reactivate an inhibited alarm directly in the Supervise module.

> It is possible to remove operator access to the object menus in Supervise. If this is the case, inhibiting alarms and reactivating inhibited alarms is not possible.

Reactivate a specific inhibited alarm on an object in the Supervise module

To reactivate a specific inhibited alarm on an object in Supervise:

1. Click the object on the diagram and select **Inhibit Alarms** to open the **Inhibit Alarms** form.

2. In the **Inhibit Alarms** form, In the group box below **the Inhibit only individual alarms on the object as selected below** check box, clear the alarms you want to inhibit.

3. Click the **OK** button to save and close the **Inhibit Alarms** form.

Reactivate all inhibited alarms on an object in the Supervise module

To reactivate a specific inhibited alarm on an object in Supervise:

1. Click the object on the diagram and select **Inhibit Alarms** to open the **Inhibit Alarms** form.

2. In the **Inhibit Alarms** form, In the group box below **the Inhibit only individual alarms on the object as selected below** check box, clear all the alarms to inhibit.

    If you select the **Do not inhibit any alarms on this object** check box, all inhibited alarms for the object will be reactivated.

3. Click the **OK** button to save and close the **Inhibit Alarms** form.

In the Active Alarms form

You can reactivate the inhibited alarm for the object either by reactivating the alarm on which the inhibition was created or by reactivating the system alarm which was created when the alarm inhibition was created.

If you have acknowledged the system alarm number 91 or system alarm number 92, they are no longer displayed in the **Active Alarms** form, but are instead displayed in the Alarm Log list.

If you want to reactivate these inhibited alarms for an object through the **Active Alarms** form, you must first open the Alarm Log in the left pane of the **Active Alarms** form, filter the Alarm Log to find the relevant system alarms and then reactivate the inhibited alarm.

Reactivate a specific inhibited alarm for an object in the Active Alarms form

To reactivate a specific inhibited alarm on an object in the **Active Alarms** form:

1. In the **IGSS Master** > **Home** tab, click the **Alarm** button to open the **Active Alarms** form.

2. In the right pane of the **Active Alarms** form, find the alarm number 92 with the alarm text *Alarm Inhibit (specific alarm)* for the object you want to reactivate the inhibited alarm for.

    You can create a new filter to find all inhibited alarms (Alarm number 92) or you can sort the **Active Alarms** form by clicking the **Alarm Number** or **Object Name** column heading.

3. Right click the relevant alarm number 92 to open the options menu. The **Inhibit Alarm** option is displayed with a check mark.

4. Select the **Inhibit Alarm** to clear the check mark and reactivate the inhibited alarm.

Reactivate all inhibited alarms for an object in the Active Alarms form.

To reactivate all inhibited alarms on an object in the **Active Alarms** form:

1. In the **IGSS Master** > **Home** tab, click the **Alarm** button to open the **Active Alarms** form.

2. In the right pane of the **Active Alarms** form, find the alarm number 91 with the alarm text *Alarm Inhibit (all alarms)* for the object you want to reactivate the inhibited alarm for.

   You can create a new filter to find all inhibited alarms (Alarm number 91) or you can sort the **Active Alarms** form by clicking the **Alarm Number** or **Object Name** column heading.

3. Right click the relevant alarm number 91 to open the options menu. The **Inhibit All** option is displayed with a check mark.

4. Select the **Inhibit All** to clear the check mark and reactivate the inhibited alarm.

See Also

"Inhibiting Alarms" on page 31

"Inhibit Notifier Alarms" on page 35

"Remove Notifier Inhibition" on page 36

Prevent Alarm Inhibition

In some IGSS configurations, operators are not permitted to inhibit alarms.

You can configure an operator station to prevent alarms from being inhibited by all operators working on that operator station.

To prevent operators from inhibiting alarms

1. In the **IGSS Master** > **Design and Setup** tab, click the **System Configuration** button to open the **System Configuration** form

2. In the left pane of the **System Configuration** form, select the operator station you want to configure.

3. In the right pane of the **System Configuration** form, click the **Supervise & Language** tab and clear the **Enable Inhibit alarms menu** check box

4. Click **File** > **Save Project** and close the **System Configuration** form.

   The IGSS configuration will be restarted for the changes to take effect.

Inhibit Notifier Alarms

You can inhibit alarms on the object from being sent to operators through the Notifier module. The alarms can still be acknowledged and ended from within IGSS, but the alarms will not be sent to the Notifier server for processing and forwarding to on-duty operator cell phones. The present alarm will not be affected and must be acknowledged and ended as any other alarm. Only new alarms from that object will be inhibited.

You can remove the Notifier alarm inhibition for the object again, restoring Notifier alarm notification forwarding.

You can inhibit alarms for objects directly on the object in the Supervise module or through the **Active Alarms** form.

When you inhibit Notifier alarms for an object, a system alarm will be generated and displayed in the **Active Alarms** form. The system alarm number is 93 with the alarm text is *Notifier Inhibit*. You can acknowledge the system alarm number 93, which will move the alarm to the Alarm Log.

The **Inhibit alarms** option in the object menu in the Supervise module will be displayed with a check mark to indicate that the object contains one or more inhibited alarms.

> It is possible to remove operator access to the object menus in Supervise. If this is the case, inhibiting alarms and reactivating inhibited alarms is not possible in the Supervise module.

Inhibit Notifier alarms for the object in the Supervise module

1. Click the object on the diagram and select **Inhibit Alarms** to open the **Inhibit Alarms** form.
2. In the **Inhibit Alarms** form, **Inhibit alarm transmissions via Notifier** group, select the **Disable sending alarm information on this object until I manually re-enable** option.
3. Click the **OK** button to save and close the **Inhibit Alarms** form.

Inhibit Notifier alarms for the object in the Active Alarms form

1. In the **IGSS Master** > **Home** tab, click the **Alarm** button to open the **Active Alarms** form.
2. In the right pane of the **Active Alarms** form, right click the alarm you want to inhibit and select **Inhibit Notifier**.

See Also

"Remove Notifier Inhibition" on page 36

"Inhibiting Alarms" on page 31

"Reactivating inhibited alarms" on page 33

Remove Notifier Inhibition

You can remove the inhibited Notifier alarm for the object either by removing the Notifier alarm inhibition on the alarm itself or by removing the Notifier alarm inhibition on the system alarm which was created when the Notifier alarm inhibition was created.

If you have acknowledged the system alarm number 93, it will no longer be displayed in the **Active Alarms** form, but is displayed in the Alarm Log list instead.

If you want to reactivate the inhibited Notifier alarms for an object through the **Active Alarms** form, you must first open the Alarm Log in the left pane of the **Active Alarms** form, filter the Alarm Log to find the relevant system alarm and then reactivate the inhibited alarm.

It is possible to remove operator access to the object menus in Supervise. If this is the case, inhibiting alarms and reactivating inhibited alarms is not possible.

Remove Notifier alarm inhibition for the object in the Supervise module

1. Click the object on the diagram and select **Inhibit Alarms** to open the **Inhibit Alarms** form.

2. In the **Inhibit Alarms** form, **Inhibit alarm transmissions via Notifier** group, select the **Enable alarm information on this object as per standard configuration** option.

3. Click the **OK** button to save and close the **Inhibit Alarms** form.

Remove Notifier alarm inhibition for the object in the Active Alarms form

1. In the **IGSS Master** > **Home** tab, click the **Alarm** button to open the **Active Alarms** form.

2. In the right pane of the **Active Alarms** form, find the alarm number 93 with the alarm text *Inhibit Notifier* for the object you want to reactivate the inhibited alarm for.

   You can create a new filter to find all inhibited Notifier alarms (Alarm number 93) or you can sort the **Active Alarms** form by clicking the **Alarm Number** or **Object Name** column heading.

3. Right click the relevant alarm number 93 to open the options menu. The **Inhibit Notifier** option is displayed with a check mark.

4. Select the **Inhibit Notifier** to clear the check mark and reactivate the inhibited alarm.

See Also

"Inhibit Notifier Alarms" on page 35

"Inhibiting Alarms" on page 31

"Reactivating inhibited alarms" on page 33

Removing Alarms

You can remove an alarm from the active alarm list by selecting the alarm and clicking the **Actions** > **Remove Alarm** in the **Active Alarms** form.

The selected alarm will be removed from the active alarm list and placed in the alarm log with the user name. The Audit trail database will also be updated if Audit trail functionality has been enabled for the configuration. The selected alarm will be removed from the active alarm list even if the alarm has been inhibited or acknowledged.

Note that the alarm will be removed, but not the object value that triggered the alarm. The object will still display the value that triggered the alarm in the process diagram. The alarm will be re-evaluated

when the object value is renewed again and if the object value is sufficient to trigger an alarm, a new alarm will be created.

Operator access to Remove alarm

You must have sufficient rights to inhibit alarms in order to remove alarms. If you do not have the right to inhibit alarms , you cannot remove alarms and the **Remove alarm** option in the **Actions** tab of the **Active Alarms** form will be inaccessible.

The right to remove an alarm - and the **Remove alarm...** item in the **Actions** menu - only exists if the system engineer has selected **Allow user to remove alarms** under the **Alarm settings** group in the **Alarm** tab of the **System Configuration** form.

1.6 Hiding Alarms

Hiding Alarms

You can hide selected alarms from the **Active Alarm** form, removing the alarms from view in the Active Alarms list. Hidden alarms are still active and must still be acknowledged.

Only active alarms can be hidden. Active Events, Event and Alarm Log entries cannot be hidden.

You can hide individual alarms or select multiple alarms and hide them. Hiding alarms augment any applied filters and you can create filters that will reveal hidden alarms. You must still select to display hidden alarms in order to see them in the **Active Alarm** form.

Hidden alarms distributed globally and are hidden for all operators on all stations.

Enable Hide Alarms

Operator access to hiding alarms must be enabled in the **System Configuration** form. If not enabled, the **Hide Alarm** menu options will be inaccessible and you will not be able to hide alarms.

When you hide an alarm, the caption HIDDEN ALARMS will be displayed in the **Active Alarms** form title to indicate there are hidden alarms in the **Active Alarms** form.

You can also disable the ability to hide alarms from all operators, instantly displaying all hidden alarms to all operators on all operator stations by editing the alarm settings in the **System Configuration** form.

Displaying hidden alarms in the Active Alarms form

Hidden alarms are not displayed in the **Active Alarms** form, but you can change the view settings of the local **Active Alarms** form to in order to display hidden alarms as well.

Hidden alarms are displayed in italics in the **Active Alarms** form. The hidden alarms are still registered as being hidden and are not displayed in the Active Alarms form on other operator stations unless their view settings are changed as well.

You can reveal one or more alarms in the active alarms list, removing the hidden status of the alarms and displaying the selected alarms once more in the **Active Alarm** form.

There is a difference between revealing selected alarms and displaying all hidden alarms.

Revealing selected alarms allows you to remove the hidden status of a few alarms, causing these alarms to be visible to all operator on all stations. Displaying all hidden alarms through the **View** menu of the Active **Alarms** form only displays all hidden alarms to the operator of the local operator station and not all other operators and does not change the hidden status of the alarm.

Finally, you can disable the ability to hide alarms from all operators, instantly displaying all hidden alarms to all operators on all operator stations by editing the alarm settings in the **System Configuration** form.

Audit Trial logging of Hide actions

The Audit Trail subtype **HideAlarm** is used to indicate the Hide Alarm action for an IGSS user.

If the **Audit Trail** module is enabled, any alarms hidden by operators will result in the user action being logged in the Audit Trail database.

User Administration and hiding alarms

The user right to hide alarms for specific objects is part of the **Can Acknowledge** permission for object-level protection. Object-level protection permission settings are set up the **Definition** module as part of the general set up of the IGSS User Administration module.

If you do not utilize IGSS User Administration or if Object-level protection is not used, then all operators (users) may hide and reveal alarms for all objects.

Embedded Alarm lists and hidden alarms

Hidden alarms are not displayed in Embedded Alarm lists in the **Supervise** module and there are no options to display hidden alarms in Embedded Alarm lists.

If you want to view individual hidden alarms or to display all hidden alarms, you must use the **Active Alarms** form and not any Embedded Alarm lists.

See Also

Enable / Disable Hide Alarms

The ability to hide and display hidden alarms is by default disabled for the IGSS configuration and must be enabled in order to hide alarms from the active alarm list.

When you enable operators hiding alarms, the **Hide Alarms** menu options in the **Active Alarms** form will become accessible to all operators on all operator stations connecting to the configuration.

To enable Hide Alarms

Make sure the **IGSS Master** is in Design Mode. If the **IGSS Master** is in Runtime mode, you can change modes by clicking **Application Menu** > **Design mode** in the **IGSS Master**.

1. In the **IGSS Master**, click **Design and Setup** tab> **System Configuration** button to open the **System Configuration** form.

2. In the **System Configuration** form > **Alarm** tab, select the **Allow "Hide Alarms"** check box.

3. Click **File** > **Save Project** to save the configuration setup and close the **System Configuration** form.

4. In the **IGSS Master** dialog, click **Yes** to restart the configuration in order to apply the new changes to the configuration.

Disable Hide Alarms

When you disable the operator ability to hide alarms, the **Hide Alarms** menu options in the **Active Alarms** form will become inaccessible to all operators on all operator stations connecting to the configuration.

If hidden alarms exist in the **Active Alarms** form and you afterwards disable the Hide Alarms, all hidden alarms will become visible.

To disable Hide Alarms

Make sure the **IGSS Master** is in Design Mode. If the **IGSS Master** is in Runtime mode, you can change modes by clicking **Application Menu** > **Design mode** in the **IGSS Master**.

1. In the **IGSS Master**, click **Design and Setup** tab> **System Configuration** button to open the **System Configuration** form.

2. In the **System Configuration** form > **Alarm** tab, clear the **Allow "Hide Alarms"** check box.

3. Click **File** > **Save Project** to save the configuration setup and close the **System Configuration** form.

4. In the **IGSS Master** dialog, click **Yes** to restart the configuration in order to apply the new changes to the configuration.

See Also

Hiding Alarms

"Hide one or more alarms " on page 41

"Revealing one or more hidden alarms" on page 41

"Displaying all hidden alarms" on page 42

Hide one or more alarms

You can hide one or more alarms in the Active Alarms form, removing them from view but still leaving the alarms as active.

To hide one or more alarms

1. In the left pane of the **Active Alarms**form, select the **Active Alarms** folder or a select a filter in the **Active Alarms** folder to display active alarms in the right pane of the **Active Alarms** form (the active alarms list)

2. In the right pane of the **Active Alarms** form, select an alarm right-click and select **Hide Alarm**.

   To hide multiple alarms, select the alarms you want to hide in the active alarm list, right click the selection and select **Hide Alarms**.

   You can also click **Actions** > **Hide Alarms** instead of right-clicking the alarm selection to hide the selected alarms.

3. The selected alarms will not be displayed in the active alarm list but are still active.

4. The title of the **Active Alarms** form change to include the text HIDDEN ALARMS to indicate there are hidden alarms in the active alarm list.

See Also

Hiding Alarms

"Enable / Disable Hide Alarms" on page 39

"Revealing one or more hidden alarms" on page 41

"Displaying all hidden alarms" on page 42

Revealing one or more hidden alarms

You can reveal one or more alarms in the active alarms list, removing the hidden status of the alarms and displaying the selected alarms once more in the **Active Alarm** form.

To reveal one or more hidden alarms

1. In the **Active Alarms** form, click **View** > **Show Hidden Alarms** to display all hidden alarms in the active alarm list.

2. In the left pane of the **Active Alarms**form, select the **Active Alarms** folder or a select a filter in the **Active Alarms** folder to display active alarms in the right pane of the **Active Alarms** form (the Active Alarms list)

3. In the right pane of the **Active Alarms** form, select the hidden alarm you want to reveal, right-click and select **Hide Alarm**. Hidden alarms are displayed in italics in the active alarms list.

To reveal multiple alarms, select the alarms you want to reveal in the active alarm list, right click the selection and select **Hide Alarms**.[1]

You can also click **Actions** > **Hide Alarms** instead of right-clicking the alarm selection to reveal the selected alarms.

4. The selected alarms will be displayed in the active alarm list.

5. If there are no hidden alarms left in the **Active Alarm** form, the HIDDEN ALARMS text in the title of the **Active Alarms** form will be removed. If there are still hidden alarms, the HIDDEN ALARMS text will remain in the **Active Alarms** form title.

[1]All selected alarms must be hidden or the **Hide Alarms** menu option will not be accessible.

See Also

Hiding Alarms

"Enable / Disable Hide Alarms" on page 39

"Hide one or more alarms " on page 41

"Displaying all hidden alarms" on page 42

Displaying all hidden alarms

You can display all hidden alarms in the **Active Alarms** form by clicking **View** > **Show Hidden Alarms** in the **Active Alarms** form.

All hidden alarms will be displayed in italics in the active alarm list (right pane of the **Active Alarms** form) for the local operator station only. The status of the hidden alarms is not changed. They are still registered as hidden alarms and are still hidden on all other operator stations.

To remove the display setting for all hidden alarms, click **View** > **Show Hidden Alarms**. The **Show Hidden Alarms** view option will be cleared and the hidden alarms no longer displayed in the form.

See Also

Hiding Alarms

"Enable / Disable Hide Alarms" on page 39

"Hide one or more alarms " on page 41

"Revealing one or more hidden alarms" on page 41

1.7 Alarm Instructions and Notes

View the operator instruction

You can view an instruction for a given alarm registered in the alarm list or the alarm log, provided that an operator instruction has been specified by the development engineer during system design.

Procedure

1. In the alarm list or alarm log, click on the alarm whose operator note you wish to display.

2. In the function menu, select **Actions → Note.**

3. The dialogue which appears on the screen provides two tabs: Alarm Text | Alarm Note

4. Select **Alarm Text** to display the predefined instructions to the operator.

Shortcut

1. You are inside the list and a message line is selected.

2. Click the <u>right</u> mouse button.

3. This opens the **Actions** function box and places it immediately next to the selected message so that you can now conveniently activate the **Note** command, and open the **Alarm Text** tab.

See also

Write an alarm note

Background information

You can enter your own comments about an alarm situation. This may be useful if you wish to inform your colleagues, possibly the operator of the next shift, how you have dealt with the situation and which measures you have taken to eliminate the problem.

Procedure

1. With the mouse, select the alarm in the **Acrtive Alarms** list for which you wish to write a comment.

2. Right click on the alarm and select **Note...** or go to the **Actions** menu and select **Note.**

3. The dialogue which appears on the screen displays two tabs: Alarm Text | Alarm Note
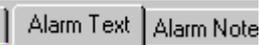
4. Select **Alarm Note**.

5. The text field underneath the **Alarm Note** tab is where you can enter your text.

6. After you finish entering your textSave with.

•

Click on [Print] if you wish to print out your comment together with alarm information.

See also

1.8 Updating and Freezing the Alarm List

Update the list

Background information

The process values shown in the **Alarm List** and **Event List** are not continuously refreshed. They are updated whenever the **Worst Value** of the object value has changed, or at specific intervals set by the System Integrator during system design. IGSS therefore provides an **Update** facility so you can read and load the newest process values whenever needed.

Procedure

1. In the **Tree View**, select the list you wish to update.
2. Move into the selected list in the right-hand section of the screen.
3. In the **Tool Menu**, click **Actions** > **Update**.
4. The entire list is updated.

- For the options of the **Actions** menu to become available, you must have moved the cursor out of the **Tree View** into the alarm list or alarm log !

Shortcut

1. You are inside the list.
2. Simply click the right mouse button.
3. This opens the **Actions** function box so that you can now conveniently activate the **Update** function.

See also

Freeze the list

Background information

In situations where you have a cluster of alarms in rapid succession it might be useful to freeze the list for a short period at its current status. The freeze period is predefined by the development engineer during system design and cannot be changed by the operator.

Default setting: 30 seconds

Procedure

1. In the **Tree View**, select the list you wish to freeze.

2. Move into the selected list in the right-hand section of the screen.

3. In the **Actions** menu, select **Freeze**.

- For the options of the **Actions** menu to become available, you must have moved the cursor out of the **Tree View** into the **Alarm List** or the **Event List**.

Shortcut

1. You are inside the list and a message line is selected.

2. Click the right mouse button.

3. This opens the **Actions** function box so that you can now conveniently activate the **Freeze** function.

- A seconds counter in the screen title bar indicates the 'frozen' status and the number of seconds still to go.

See also

1.9 Customizing, Sorting and Filtering

Filter the Alarm list

Filter the Active Alarms form

Alarms are displayed as they are received in the Active Alarms form, which can contain many alarm records, quickly becoming difficult to gain an overview. While you can sort the alarms in the columns, it may be difficult to gain an overview of all alarms that satisfy specific criteria, such as all alarms from a specific area, or high priority all alarms from specific objects.

You can create and apply a filter to only display alarm records in the right-panes of the **Active Alarms** form that meet the filter criteria.

Filters can be created for Active alarms and Active Events as well as alarms and events that have been saved in the respective logs (Alarm log and/or Event log).

When you create a new filter and apply it to the **Active Alarms** form, the name of the selected filter will be displayed in the title of the **Active Alarms** form to indicate that the alarm list is the product of an applied filter.

Filters are saved locally on the machine and are available to all operators who use the IGSS configuration on the local machine.

Default Filters

You can define a filter to be the default filter for the Active Alarms, Active Events, Alarm Log and Event Log each. A default filter will be applied automatically when opening (clicking on) the respective list (Active

Alarms, Active Events, Alarm Log and Event Log) in the left pane of the Active Alarms form.

The procedure to define and create default filters differ between the Active Alarm and Event list and Alarm and Event Log list. Active Alarm and Event list filters are created and defined in one way and Alarm and Event Log list filters are created and defined in another fashion.

Mobile Filters

The IGSS Mobile application uses existing filters to sort and display records on the operator smartphone. By default, filters are also accessible to IGSS Mobile users , but you can create special filters only for mobile user and filter only for operator station users by adjusting the special filter parameters.

Special filter parameters

When you create a filter, you can apply special filter parameters, locking the filter from editing, making the filter globally available to all operator stations, making the filter available to IGSS Mobile users, requiring the operator to input a date interval for the filter when it is applied as well as adding special Alarm report based columns to the Active Alarm list when the filter is applied and restricting operator use of the alarm filter.

See Also

"Define a new filter" on page 91

"Edit an existing filter" on page 92

"Delete an existing filter" on page 93

"Define special filter parameters" on page 93

"Set a default Active Alarms or Active Events list filter" on page 95

"Set a default Alarm log or Event log filter" on page 96

Define a new filter

You can create a filter to reduce the records displayed in the list panes of the **Active Alarms** form to only those records that meet the filter criteria.

To create a new filter

1. In the left pane of the **Active Alarms** form, select the record type to be displayed: Active Alarms, Alarm log, Active Events or Event log. The new filter will only be applied to the selected display type.

2. Click **Customize** > **New Filter** to open the **Defining Filters** form. You can also click the **New Filter** button in the toolbar to open the **Defining Filters** form.

3. In the **Filter name** field on the **Defining Filters** form, enter a filter name.

   The filter name is not required to be unique and it is possible to create identical filter names. It is recommended to create unique filter names to better distinguish filters from each other.

4. In the **Edit Condition** group:

   1. In the **Property** field, select the filter property from the drop down list.

   2. In the **Condition** field, select the filter condition of the property from the drop down list. The displayed properties depend on the selected property.

   3. In the **Value** field, select the filter value from the drop down list. The filter value will be applied to the condition.

5. Click the **Add** button to submit the filter condition to the filter.

6. If you need to create successive filter conditions, select a logical operator to apply to the next filter condition (And / Or) and repeat steps 4 and 5 above.

7. Click the **OK** button to save the filter and close the **Defining Filters** form.

A filter can only contain a maximum of 10 filter criteria.

See Also

"Filter the Active Alarms form " on page 45

"Multiple alarm filter conditions" on page 47

"Edit an existing filter" on page 92

"Delete an existing filter" on page 93

"Define special filter parameters" on page 93

Multiple alarm filter conditions

You can define up to 10 filter conditions for an alarm filter.

If you require additional filter conditions, you can specify more filter conditions in an array of conditions, using semi-colons (;) to separate each filter condition.

Only the following filter conditions can be arrayed:

- Begins with
- Is Exact
- Match

The arrayed filter conditions can be applied to any alarm filter condition property that uses texts such as

- Object Name
- Object Description
- Area Name
- Alarm Text

- Alarm State
- User

Maximum length of the array

The array can contain a maximum of 128 characters, including the semi-colon separators.

Semi-colons as text

If the text you want to filter contains a semi-colon, you must use a double semi-colon (;;) to represent the semi-colon as a text instead of a semi-colon as a separator.

Example of an arrayed filter condition

An alarm filter is created to display the following objects:

- A01
- A02
- A03
- A04
- A05
- A06
- A07
- A08
- A09
- A10
- A11

Since there are 11 objects and the alarm filter conditions only can process 10 conditions, the following filter condition is created:

- Alarm filter condition property: Object Name
- Alarm filter condition: is exact
- Value: A01; A02; A03; A04; A05; A06; A07; A08; A09; A10; A11

See Also

Filter Conditions

The following filter conditions can be used in the **Condition** field on the **Defining Filters** form.

Condition	Property	Use this filter condition to...
on	Acknowledge Date, Begin Date, End Date, Arrival date	define the exact date to the filter.

Condition	Property	Use this filter condition to...
between	Acknowledge Date, Begin Date, End Date, Arrival date	set a time period to the filter, defining the start date and time and end date and time.
yesterday	Acknowledge Date, Begin Date, End Date, Arrival date	filter the alarms using yesterday's date. The machine date is used to determine the present date.
today	Acknowledge Date, Begin Date, End Date, Arrival date	filter the alarms using present date. The machine date is used to determine the present date.
in the last	Acknowledge Date, Begin Date, End Date, Arrival date	define a number days from the present date to apply to the filter.
is not blank	Acknowledge Date, Begin Date, End Date, Arrival date	apply dates that are not empty to the filter.
is blank	Acknowledge Date, Begin Date, End Date, Arrival date	apply dates that are empty to the filter.
greater than	Worst Value, Priority, Alarm No, Value, Driver ID, Node ID	define a value which the selected property must be greater than to apply to the filter.
less than	Worst Value, Priority, Alarm No, Value, Driver ID, Node ID	define a value which the selected property must be less than to apply to the filter.
equal to	Worst Value, Priority, Alarm No, Value, Driver ID, Node ID	define a value which the selected property must be equal to for the filter.
not equal to	Worst Value, Priority, Alarm No, Value, Driver ID, Node ID	define a value which the selected property must not be equal to for the filter.
in between	Worst Value, Priority, Alarm No, Value, Driver ID, Node ID	set an interval to apply to the filter, defining a lower and upper value.
Begins with	Object Name, Object Description, Alarm Name, Alarm Text, Alarm State, User	define the beginning characters which the property must be equal to for the filter. The filter condition is case sensitive.
Is exact	Object Name,	define the exact name of the prop-

Condition	Property	Use this filter condition to...
	Object Description, Alarm Name, Alarm Text, Alarm State, User	erty to for the filter. The filter condition is case sensitive.
Match	Object Name, Object Description, Alarm Name, Alarm Text, Alarm State, User	use wildcards to define parts of the property name for the filter where • * matches any number of characters • ? matches any single character Example: Given the three objects: • Tr01 • Tu01 • Tr02 The different Match filter condition values will result in the following: • "Tr*" will find Tr01 and Tr02 but not Tu01 • "T?01" will find Tr01 and Tu01 but not Tr02 • "T?0*" will find Tr01, Tr02 and Tu01 The filter condition is case sensitive.
Is True	Maintenance Alarm, Has alarm note, Hidden alarm	select only the alarms that are maintenance alarms, hidden alarms or contain an alarm note.
Is False	Maintenance Alarm, Has alarm note, Hidden alarm	select only the alarms that are not maintenance alarms, hidden alarms or do not contain an alarm note.

See Also

"Filter conditions, examples" on page 51

"Filter the Active Alarms form " on page 45

"Define a new filter" on page 91

Filter conditions, examples

You can combine many different filter conditions in the filter to create complex filter conditions, connecting the conditions with the AND / OR logical operators.

The following are examples of user applied sample filter conditions

To filter unacknowledged alarms

Filter Conditions: Acknowledge Date Is blank

To filter active alarms

Filter Conditions: End Date Is blank

To filter active alarms that are also unacknowledged

Filter Conditions: Acknowledge Date Is blank AND End Date Is blank.

To filter active, high priority (priority over 100) alarms

Filter Conditions: (End Date Is blank AND Priority greater than 100)

To filter active alarms and unacknowledged maintenance alarms

Filter Conditions: End Date Is blank OR (Maintenance alarm Is True AND Acknowledge Data Is blank)

To filter acknowledged maintenance alarms

Filter Conditions: Maintenance alarm Is True AND Acknowledge Data Is not blank

To filter all active hidden alarms

Filter Conditions: Hidden Alarm Is True AND End Date Is blank

(You must set the alarm form to display hidden alarms in order to be able to see hidden alarms)

See Also

"Filter Conditions " on page 48

"Filter the Active Alarms form " on page 45

"Define a new filter" on page 91

Edit an existing filter

You can edit existing filters, adding new filter conditions, deleting or adjusting existing conditions.

> Some filters have been write-protected to disable editing. If this is the case, you must have sufficient user rights to edit a write-protected filter. User rights are determined by the User Group you are member of in the IGSS User Administration module.

To edit an existing filter

1. In the left pane of the **Active Alarms** form, select the record type to be displayed: Active Alarms, Alarm log, Active Events or Event log.

2. Click **Customize** > **Edit Filter** to open the **Defining Filters** form. You can also click the **Edit Filter** button in the toolbar to open the **Defining Filters** form.

3. To rename the filter, enter a new filter name in the **Filter name** field on the **Defining Filters** form.

   The filter name is not required to be unique and it is possible to create identical filter names. It is recommended to create unique filter names to better distinguish filters from each other.

4. To edit an existing condition, select the filter condition you want to edit in the **Filter Conditions** group.

    1. In the **Edit Condition** group:

    2. In the **Property** field, select a new filter property from the drop down list.

    3. In the **Condition** field, select a new filter condition of the property from the drop down list. The displayed properties depend on the selected property.

    4. In the **Value** field, select a new filter value from the drop down list. The filter value will be applied to the condition.

5. To delete an existing condition, select the filter condition you want to edit in the **Filter Conditions** group and click the **Delete** button.

6. To add a new Filter condition,

    1. In the **Property** field, select the filter property from the drop down list.

    2. In the **Condition** field, select the filter condition of the property from the drop down list. The displayed properties depend on the selected property.

    3. In the **Value** field, select the filter value from the drop down list. The filter value will be applied to the condition.

4. Select the relevant logical operator to apply to the new filter condition.

5. Click the **Add** button to submit the filter condition to the filter.

7. Click the **OK** button to save the filter and close the **Defining Filters** form.

See Also

"Filter the Active Alarms form " on page 45

"Define a new filter" on page 91

"Delete an existing filter" on page 93

"Define special filter parameters" on page 93

Delete an existing filter

You can delete an existing filters from the local machine, removing it from the **Active Alarms** forms.

Deleting a filter does not require user confirmation and will be removed immediately. A deleted filters can not be restored and you must recreate the filter if you regret deleting the filter.

Filters are saved locally on the machine and are available to all operators who use the IGSS configuration on the local machine. If you delete a filter, you will remove access to the filter for all operators that use the machine.

To delete a filter

1. In the left pane of the **Active Alarms** form, select the record type to be displayed: Active Alarms, Alarm log, Active Events or Event log. The new filter will only be applied to the selected display type.

2. Click **Customize** > **Delete Filter** to delete the filter. You can also click the **Delete Filter** button in the toolbar to delete the filter.

   There is no user confirmation dialog to confirm the removal of the filter.

See Also

"Define a new filter" on page 91

"Edit an existing filter" on page 92

"Define special filter parameters" on page 93

Define special filter parameters

You can apply the following parameters to an existing filter to change the characteristics of the filter, specializing the filter in some cases and expanding the filter functionality in others.

All parameters can be combined with each other.

Create a Global filter

All filters are by default local filters and are saved on the local machine. A filter defined by one operator station will not be accessible to other users on other operator stations.

You can make a filter global across the IGSS configuration by selecting the **Global** check box in the **Defining Filters** form when creating or editing a filter.

A global filter is saved in the IGSS configuration and distributed to all online stations when they connect to the IGSS server. Global filters are also synchronized between IGSS servers in a dualized (hot standby) IGSS server environment.

Global alarm filters can be assigned to the selected alarm printer for the station in the **System Configuration** form > **Reports** tab > **Alarm** group to only print alarms that satisfy the global filter conditions.

Create a Write-protected filter

By default, any operator can edit or delete a filter, as well as create a new filter. You can prevent operator from editing a filter by protecting the individual filter. When you protect a filter, only operators that are IGSS users and have access to the Can use System Commands global rights may edit a protected filter.

Write-protecting a filter therefore requires the IGSS User Administration module is enabled, set up and in use on the IGSS configuration.

You can write protect a filter by selecting the **Protect** check box in the **Defining Filters** form when creating or editing a filter.

You can combine the Write Protected filter with the User limited filter for additional filter protection.

Create a filter which prompts for a filter period

By default, the filter is applied to all records in the active alarm list, active event list, alarm log or event log regardless of start or end date and time.

You can create a filter which requires the user to enter the start date and time and the end date and time of the alarm or event before applying the filter to the event or log list.

Select the **Prompt for Period** check box in the **Defining Filters** form when creating or editing a filter to create a period-defined filter that can apply user input for start and end dates.

Create a user limited (Exclusive) filter

A user limited (Exclusive) filter is a filter which only certain IGSS users may apply to the log list or event list. Any operator can apply any log or list filter by default, but you can prevent a filter from being applied by users who do not have sufficient rights by using the **Exclusive** parameter on the filters.

The **IGSS User Administration** module must be enabled, set up and in use on the IGSS configuration and the **Exclusive** parameter must be applied to at least one filter to enable user limited filters.

If the **IGSS User Administration** module is enabled and the **Exclusive** parameter applied to at least one filter, then only the users with the **Can Administer** Global Right may apply any filter. Users without the **Can Administer** global right can only apply filters that have the **Exclusive** check box selected.

The **Exclusive** parameter is applied to a filter by selecting the **Exclusive** check box in the **Defining Filters** form when creating or editing a filter.

You can combine the User limited filter with the Write Protected filter for additional filter protection.

Create an Alarm Report filter

The Alarm Report contains additional alarm statistics when printed which the active alarm list does not display.

You can set up the active alarm list to display the additional alarm statistics from the Alarm Report by selecting the **Format as 'alarm print'** check box in the **Defining Filters** form.

The following columns are displayed in the Active Alarm list:

- The object value when the alarm was started
- The object value when the alarm was acknowledged
- The object value when the alarm was ended

Remove an IGSS Mobile filter

By default, all filters are enabled by be used by IGSS Mobile users. You can remove access to the filter from IGSS Mobile Users by clearing the **Include in IGSS Mobile** check box in the **Defining Filters** form.

See Also

"Define a new filter" on page 91

"Edit an existing filter" on page 92

"Direct alarm message printing" on page 73

Set a default Active Alarms or Active Events list filter

You can set a specific list filter as the default list filter. The default filter will be applied to the active alarm list or Active Events when you open the Alarm Module.

In a multi-user environment, this setting only applies to the machine on which it is set. The default list filter can therefore not be uploaded to the IGSS server and distributed to the other operator stations.

To set a default active alarm list filter

1. In the upper left pane of the **Active Alarms** form, navigate to the filter you want to make the default filter in the Active Alarms node.

2. Click **Customize** > **Set as Default Filter** to make the selected filter the default filter for the Active Alarm list. You can also click the **Set as Default Filter** button in the toolbar.

To set a default Event list filter

1. In the lower left pane of the **Active Alarms** form, navigate to the filter you want to make the default filter in the Active Events node.

2. Click **Customize** > **Set as Default Filter** to make the selected filter the default filter for the Active Events list. You can also click the **Set as Default Filter** button in the toolbar.

See Also

"Define a new filter" on page 91

"Set a default Alarm log or Event log filter" on page 96

Set a default Alarm log or Event log filter

If the alarm or event log contains records that exceed the user-defined maximum alarm or event log limit, the latest alarm or event logs will be displayed. To find older alarm or event logs, you must create and apply an alarm or event log filter to display the desired alarm or event log entries.

You can create a default log filter which will automatically filter the log list when you click the respective folder (**Alarm log** or **Event log**) in the lower left pane of the **Active Alarms** form.

Creating a default log list filter is different than creating an Active Alarm list filter or Active Event list filter.

To create a default log list filter, you must create an log list filter and prefix the filter name with an asterisk (*)

For example, if you create an alarm log filter called "Pump alarms ", you can set the filter as the default Alarm log list filter by changing the name of the filter to "*pump alarms".

Multiple default log filters

You can only apply one default Alarm log list filter and one Event log list filter although you can define many log list filters with a prefixed asterisk in the filter name.

The default log list filter is sorted alphabetically and the first appearing filter with a prefixed asterisk will be applied as the default log list filter.

For example, there are two log list filters defined: *Afilter and *Bfilter. The log list filter named *Afilter will be applied as the default log list filter as it comes before *Bfilter when sorted alphabetically.

See Also

"Define a new filter" on page 91

"Set a default Active Alarms or Active Events list filter" on page 95

The Alarm List format

Create a new Alarm List Format

You can change the physical appearance of the Alarm or Event list, adding columns to the list and removing columns from the list. As each column displays alarm or event information, you can define how much information the alarm or event list is to display to the operators.

> The alarm list format can be applied to the Event list, Event log and Alarm log as well.

You can create a new Alarm List Format to save the column layout of the alarm list or event list in the alarm list format and applying the Alarm List Format to the alarm list or event list.

Once an new Alarm List Format has been created, other operators can also apply the format to the alarm list or event list by selecting the format.

Alarm List Formats are available to all IGSS users and can be applied by any IGSS user of the configuration.

The Alarm List Format is specific to the IGSS configuration on the local machine and cannot be distributed to other machines or IGSS configurations.

To create a new Alarm List Format

1. Click in the alarm list or event list pane (right pane) of the **Active Alarms** form to bring the list view in focus.

2. Click **Customize** > **Alarm List Format** to open the **Alarm List Format** form. You can also click the **Format List** button in the toolbar to open the **Alarm List Format** form.

3. In the **Alarm List Format** form, click the **New** button to open the **New Format** dialog and enter a format name. The format name is not required to be unique and it is possible to create identical format names. It is recommended to create unique names to better distinguish formats from each other.

4. In the **Formats** group (lower part of the **Alarm List Format** form), make sure the new alarm list format is selected.

5. In the upper part of the **Alarm List Format** form, you can:

   - Rearrange the order of the columns
   - Add new columns to the columns displayed
   - Remove existing columns from the columns displayed
   - Change the column header name
   - Change the column width

6. Click the **Save** button to save the column layout to the new Alarm List Format.

7. Click the **OK** button to apply the new alarm list format to the **Active Alarms** form.

See Also

"Apply an Alarm List Format to the Active Alarms form" on page 98

"Delete an Alarm List Format" on page 99

"Rearrange the columns" on page 100

"Remove columns" on page 101

"Add columns" on page 102

"Change the column width" on page 103

"Rename a column" on page 101

Apply an Alarm List Format to the Active Alarms form

You can apply an existing Alarm List Format to the **Active Alarms** form, changing the layout and appearance of the columns in the Alarm list, event list, alarm log list and the event log list. only one Alarm List Format can be applied to the Active Alarms form at a time.

Alarm List Formats are applied to all users and cannot differentiate between IGSS users.

> The alarm list format can be applied to the Event list, Event log and Alarm log as well.

To apply a new Alarm list Format

1. Click in the alarm list or event list pane (right pane) of the **Active Alarms** form to bring the list view in focus.

2. Click **Customize** > **Alarm List Format** to open the **Alarm List Format** form. You can also click the **Format List** button in the toolbar to open the **Alarm List Format** form.

3. In the **Formats** group (lower part of the **Alarm List Format** form), select the Alarm List Format you want to apply. The upper part of the Alarm List Format form, will change, reflecting the column layout options for the selected Alarm List Format.

4. Click the **OK** button to apply the new alarm list format to the **Active Alarms** form.

See Also

"Create a new Alarm List Format" on page 96

"Delete an Alarm List Format" on page 99

Edit an Alarm List Format

You can edit an existing Alarm List Format, changing the column layout, order and header names.

> The alarm list format can be applied to the Event list, Event log and Alarm log as well.

To edit an Alarm List Format

1. Click in the alarm list or event list pane (right pane) of the **Active Alarms** form to bring the list view in focus.

2. Click **Customize** > **Alarm List Format** to open the **Alarm List Format** form. You can also click the **Format List** button in the toolbar to open the **Alarm List Format** form.

3. In the **Formats** group (lower part of the **Alarm List Format** form), select the Alarm List Format you want to edit. The upper part of the **Alarm List Format** form, will change, reflecting the column layout options for the selected Alarm List Format.

4. In the upper part of the **Alarm List Format** form, you can:
   - Rearrange the order of the columns
   - Add new columns to the columns displayed
   - Remove existing columns from the columns displayed
   - Change the column header name
   - Change the column width

5. Click the **Save** button to save the column layout to the new Alarm List Format.

6. Click the **OK** button to apply the new alarm list format to the **Active Alarms** form.

See Also

"Create a new Alarm List Format" on page 96

"Apply an Alarm List Format to the Active Alarms form" on page 98

"Delete an Alarm List Format" on page 99

"Rearrange the columns" on page 100

"Remove columns" on page 101

"Add columns" on page 102

"Change the column width" on page 103

"Rename a column" on page 101

Delete an Alarm List Format

You can delete an Alarm List Format, removing it from the list of formats.

The alarm list format can be applied to the Event list, Event log and Alarm log as well.

Once a format has been deleted, it cannot be restored. You must recreate it again if you want to apply the format to the **Active Alarms** form.

To delete an Alarm List Format

1. Click in the alarm list or event list pane (right pane) of the **Active Alarms** form to bring the list view in focus.

2. Click **Customize**> **Alarm List Format** to open the **Alarm List Format** form. You can also click the **Format List** button in the toolbar to open the **Alarm List Format** form.

3. In the **Formats** group (lower part of the **Alarm List Format** form), select the Alarm List Format you want to delete. The upper part of the **Alarm List Format** form, will change, reflecting the column layout options for the selected Alarm List Format.

4. Click the **Delete** button to delete the selected alarm list format

5. Click the **OK** button to close the **Active Alarms** form.

See Also

"Create a new Alarm List Format" on page 96

"Apply an Alarm List Format to the Active Alarms form" on page 98

Change the list format

Rearrange the columns

The columns in the Active Alarms list are displayed in the order listed in the **Alarm List Format** form. You can change the order of the displayed columns in the **Active Alarms** form by editing the column properties in the Alarm List Format applied to the **Active Alarms** form.

The alarm list format can be applied to the Event list, Event log and Alarm log as well.

To rearrange the columns in the Alarm list

1. Click in the alarm list or event list pane (right pane) of the **Active Alarms** form to bring the list view in focus.

2. Click **Customize** > **Alarm List Format** to open the **Alarm List Format** form. You can also click the **Format List** button in the toolbar to open the **Alarm List Format** form.

3. In the **Formats** group (lower part of the **Alarm List Format** form), select the Alarm List Format you want to edit. The upper part of the **Alarm List Format** form, will change, reflecting the column layout options for the selected Alarm List Format.

4. In the list box in the **Columns Displayed** group in the upper part of the **Alarm List Format** form, select a column and use the **Move Up** and **Move Down** buttons to rearrange the order of the column will be displayed in the Active Alarms form.

5. Click the **Save** button to save the column layout to the new Alarm List Format.

6. Click the **OK** button to apply the new alarm list format to the **Active Alarms** form.

See Also

"Create a new Alarm List Format" on page 96

"Rename a column" on page 101

"Remove columns" on page 101

"Add columns" on page 102

"Change the column width" on page 103

Rename a column

You can rename a column header, changing the title of the column as it is displayed in the **Active Alarms** form by editing the Alarm List Format applied to the **Active Alarms** form.

> The alarm list format can be applied to the Event list, Event log and Alarm log as well.

To rename a column header in the Alarm list

1. Click in the alarm list or event list pane (right pane) of the **Active Alarms** form to bring the list view in focus.

2. Click **Customize** > **Alarm List Format** to open the **Alarm List Format** form. You can also click the **Format List** button in the toolbar to open the **Alarm List Format** form.

3. In the **Formats** group (lower part of the **Alarm List Format** form), select the Alarm List Format you want to edit. The upper part of the **Alarm List Format** form, will change, reflecting the column layout options for the selected Alarm List Format.

4. In the list box in the **Columns Displayed** group in the upper part of the **Alarm List Format** form, select the column you want to change the header of

5. In the **Change Column Name** field enter the new column header to be displayed in the **Active Alarms** form.

6. Click the **Save** button to save the column layout to the new Alarm List Format.

7. Click the **OK** button to apply the new alarm list format to the **Active Alarms** form.

See Also

"Create a new Alarm List Format" on page 96

Rearrange the columns

"Remove columns" on page 101

"Add columns" on page 102

"Change the column width" on page 103

Remove columns

The columns in the Active Alarms list are displayed in the order listed in the **Alarm List Format** form. You can remove columns from the **Active Alarms** form by editing the column properties in the Alarm List Format applied to the **Active Alarms** form.

> The alarm list format can be applied to the Event list, Event log and Alarm log as well.

To remove a column from the Alarm list

1. Click in the alarm list or event list pane (right pane) of the **Active Alarms** form to bring the list view in focus.

2. Click **Customize** > **Alarm List Format** to open the **Alarm List Format** form. You can also click the **Format List** button in the toolbar to open the **Alarm List Format** form.

3. In the **Formats** group (lower part of the **Alarm List Format** form), select the Alarm List Format you want to edit. The upper part of the **Alarm List Format** form, will change, reflecting the column layout options for the selected Alarm List Format.

4. In the list box in the **Columns Displayed** group in the upper part of the **Alarm List Format** form, select the column you want to remove.

5. Click the **Remove** button to remove the selected column from the Active Alarms form.

6. Click the **Save** button to save the column layout to the new Alarm List Format.

7. Click the **OK** button to apply the new alarm list format to the **Active Alarms** form.

See Also

"Create a new Alarm List Format" on page 96

Rearrange the columns

"Rename a column" on page 101

"Add columns" on page 102

"Change the column width" on page 103

Directly in the list

1. Click on the right-hand limiting line of the column you wish to remove, using the left mouse button and keep the mouse button pressed.

2. The cursor changes its shape to a cross and highlights the vertical column delimiter.

3. Keep the left mouse button depressed and drag the cursor to the left until the right line covers the left line. In this way, the width of the column has been reduced to nothing and the column is removed from the list.

Only a column which was removed (collapsed) directly in the list by dragging its right-hand limiting line to the left until clearance, can be retrieved again directly in the list, without using menu functions.

The first method of removing columns is the more permanent layout change. It can only be undone by using the **ADD** button in the **Configure Columns** dialogue.

Add columns

The columns in the Active Alarms list are displayed in the order listed in the **Alarm List Format** form. You can add columns from the **Active Alarms** form by editing the column properties in the Alarm List Format applied to the **Active Alarms** form.

> The alarm list format can be applied to the Event list, Event log and Alarm log as well.

To remove a column from the Alarm list

1. Click in the alarm list or event list pane (right pane) of the **Active Alarms** form to bring the list view in focus.

2. Click **Customize** > **Alarm List Format** to open the **Alarm List Format** form. You can also click the **Format List** button in the toolbar to open the **Alarm List Format** form.

3. In the **Formats** group (lower part of the **Alarm List Format** form), select the Alarm List Format you want to edit. The upper part of the **Alarm List Format** form, will change, reflecting the column layout options for the selected Alarm List Format.

4. In the list box in the **Columns Displayed** group in the upper part of the **Alarm List Format** form, select the column you want to add.

5. Click the **Add** button to add the selected column to the Active Alarms form.

6. Click the **Save** button to save the column layout to the new Alarm List Format.

7. Click the **OK** button to apply the new alarm list format to the **Active Alarms** form.

See Also

"Create a new Alarm List Format" on page 96

Rearrange the columns

"Rename a column" on page 101

"Remove columns" on page 101

"Change the column width" on page 103

Directly in the list

Place the crosshair cursor onto the limiting line of the collapsed column and drag it to the right until the retrieved column has reached the width required.

Change the column width

You can change the column width as it is displayed in the **Active Alarms** form by editing the Alarm List Format applied to the **Active Alarms** form or directly in the Active Alarms list.

> The alarm list format can be applied to the Event list, Event log and Alarm log as well.

To change a column width by editing the format

1. Click in the alarm list or event list pane (right pane) of the **Active Alarms** form to bring the list view in focus.
2. Click **Customize** > **Alarm List Format** to open the **Alarm List Format** form. You can also click the **Format List** button in the toolbar to open the **Alarm List Format** form.
3. In the **Formats** group (lower part of the **Alarm List Format** form), select the Alarm List Format you want to edit. The upper part of the **Alarm List Format** form, will change, reflecting the column layout options for the selected Alarm List Format.
4. In the list box in the **Columns Displayed** group in the upper part of the **Alarm List Format** form, select the column you want to change the width of
5. In the **Width** field enter the new column width of the column (expressed in pixels) displayed in the **Active Alarms** form.
6. Click the **Save** button to save the column layout to the new Alarm List Format.
7. Click the **OK** button to apply the new alarm list format to the **Active Alarms** form.

To change a column width directly in the Active Alarms list

1. Left-click on the right-hand edge of the column whose size you wish to reduce or widen and keep the mouse button pressed.
2. The cursor changes its shape to a cross and highlights the vertical column delimiting line.
3. Maintaining the left mouse button depressed, drag the line to the left or to the right.
4. Release the mouse button as soon as you have obtained the required column width.

See Also

"Create a new Alarm List Format" on page 96

Rearrange the columns

"Rename a column" on page 101

"Remove columns" on page 101

"Add columns" on page 102

The default Alarm List format

The default List or Sort Format

IGSS contains a system default for the Alarm List format and the Sort Order formats. The system default formats are saved on the local machine of the operator station and can be restored to the **Active Alarms** form by the operator if necessary. You can see the contents of the system default list format in the **See Also** section below.

Changing the System Default List Format

You can also update the system default formats from the **Active Alarms** form if you want to use another default format than the original system default. The alarm list format presently in use is saved as the system default, automatically updating the system default. Once the system default has been updated or changed, you cannot restore the original system default format again.

> The option to save a format as the system default is normally not accessible to users and must be enabled by a System Designer with administrator rights on the local machine.

See Also

" The system default List format" on page 105

The system default List format

The Alarm List or Alarm Log contains by default the following information in the order shown:

- S.No. = Sequence Number
- Start Date
- Start Time
- Acknowledge Time
- End Time
- Object Name
- Worst Value
- Alarm Text
- Area Name
- Object Description
- Value
- Priority

- [Alarm Number](#)
- [Acknowledge Date](#)
- [End Date](#)
- [Alarm State](#)
- [Driver Id.](#)
- [Node Id.](#)
- [User name](#)
- [The Icons](#)

Restore the Alarm list default format

You can restore the alarm list format to the system default, restoring all the columns selected for display, column rankings, column header names and column widths with the column layout from the system default format.

To restore the system default alarm list format

1. Click in the alarm list or event list pane (right pane) of the **Active Alarms** form to bring the list view in focus.

2. Click **Customize**> **Alarm List Format** to open the **Alarm List Format** form. You can also click the **Format List** button in the toolbar to open the **Alarm List Format** form.

3. In the **Formats** group (lower part of the **Alarm List Format** form), select the Alarm List Format you want to restore the system default layout for. The upper part of the **Alarm List Format** form, will change, reflecting the column layout options for the selected Alarm List Format.

4. Click the **Default** button to insert the system default column layout into the selected alarm list format. The upper part of the **Alarm List Format** form, will change, displaying the system default column layout for the selected Alarm List Format.

5. Click the **OK** button to apply the alarm list format and close the **Active Alarms** form.

You can update the system default list format, creating your own column layout as the system default.

See Also

" The system default List format" on page 105

"Update the System default alarm list format" on page 106

Update the System default alarm list format

The column layout in the system default Alarm List Format can changed, creating your own column layout as the system default. The new column layout will be applied to the selected Alarm List Format every time the **Default** button in the **Alarm List Format** form is clicked to restore the default column layout.

The System Default Alarm List Format is specific to the configuration on the local machine and cannot be distributed to other machines or configurations.

⚠️ Once you have changed the system default Alarm List Format, you cannot restore it. The changes become the new system default.

By default, the menu option to update the system default Alarm List Format is disabled and must be enabled in order to update the system default.

Enable update of system default Alarm List Format update using the registry editor (This station only)

To enable updating system default Alarm List Format for all configuration operators on the local machine.

1. Open the **Registry Editor** form on the local machine. Click **Start** and type "Regedit.exe" in the search field of the **Windows Start** menu.

2. In the **Settings** folder in HKEY_CURRENT_USER\Software\Schneider Electric\IGSS32\V13.00.00\Alarm32_HKLM, right-click on the **allow save default** key and select **Modify**.

3. In the **Value Data** field of the **Edit DWORD (32-bit) Value** form, enter "1" and click **OK** to save.

4. Click **File** > **Exit** to exit the **Registry Editor** form and save the registry values.

Enable update of system default Alarm List Format update using the Configuration database (other stations)

You can use the Configuration database to enable this operator station or other IGSS stations update the system default Alarm List Format.

Microsoft Access must be installed on the machine in order to edit the configuration database.

1. On the local machine, start the Microsoft Access program and open the configuration database found in the configuration folder.

2. In **Tables** pane of Microsoft Access, double-click the **RegSettings** table to open the **RegSettings** table in the right pane of Microsoft Access.

3. In the **ValueName** column, find the **allow save default** key for the IGSS station you want to edit. The station identification is visible in the **Path** column and is expressed as StationA, StationB and so on.

4. In the **Value** column, enter "1" to enable updating the system default Alarm List Format for the selected IGSS station.

5. Click **Ctrl+S** to save the changes and click **File** > **Exit** to close the Microsoft Access program.

💡 You can find a list of the Station identification and the station name in the registry key HKEY_CURRENT_USER\Software\Schneider Electric\IGSS32\V13.00.00\CommDrv_HKLM\StationDatabase folder. The **Stationno** key is the station identification and the value in the **Stationno** key is the station name as it is defined in the **Configuration** tab of the **System Configuration** form.

See Also

"Save the list format as the default format" on page 108

Save the list format as the default format

When updating the system default Alarm List format, the Alarm List Format presently applied to the Active Alarms form is used. You can save the Alarm List Format as the system default Alarm List Format, effectively updating the system default.

By default, the menu option to update the system default Alarm List Format is disabled and must be enabled in order to update the system default.

To update the system default Alarm List Format you must:

1. Apply a the Alarm list Format you want to turn into the system default

If the alarm list format you want to use already is applied to the **Active Alarms** form, you can skip this step.

1. Click in the alarm list or event list pane (right pane) of the **Active Alarms** form to bring the list view in focus.

2. Click **Customize** > **Alarm List Format** to open the **Alarm List Format** form. You can also click the **Format** List button in the toolbar to open the **Alarm List Format** form.

3. In the **Formats** group (lower part of the **Alarm List Format** form), select the Alarm List Format you want to use. The upper part of the **Alarm List Format** form, will change, reflecting the column layout options for the selected Alarm List Format.

4. Click the **OK** button to apply the alarm list format to the **Active Alarms** form.

2. Save the Alarm List Format as the system default

In the **Active Alarms** form, click **Customize** > **Save as Format Default**.

See Also

"Update the System default alarm list format" on page 106

Sort the Alarm List

Change the sorting order in the list

The alarms or events in the alarm or event list are displayed using the default sort order. You can change the sort order of the displayed alarms or events, displaying the order which is relevant for your particular alarm processing, for example sorting the alarms in the list by alarm priority first and then the Alarm start date.

> The sort format can be applied to the Event list, Event log and Alarm log as well.

You can change the sort order in the Alarm list in two ways:

- Applying a Sort Format to the list
- Directly on the list

Applying a Sort format to the list

You can apply an existing sort format to the Alarm or event list. A Sort format is a collection of saved sort order set up, including sorting direction which can be applied to the alarm or event list. Sort formats can be created, edited and deleted freely by operators but cannot be distributed to other IGSS stations or other machines.

You can also restore the default sort order from the system by using Sort formats.

Directly in the list

You can change the sorting order directly in the Alarm/Event list or log by clicking on the column title you wish to use as sorting criterion. The sorting direction will toggle between ascending and descending when you click the column header, sorting the records in the Alarm/Event list or log.

See Also

"Create a new Sort format" on page 109

"Edit a Sort Format" on page 111

"Apply a Sort Format" on page 110

"Delete a Sort Format" on page 112

"Restore the default Sort Format" on page 112

Create a new Sort format

You can create a new Sort format to save the sort order of the alarm or event list in the Sort format and applying the Sort format to the alarm or event list.

Once an new Sort format has been created, other operators can also apply the format to the alarm or event list by selecting the format.

Sort Formats are available to all IGSS users and can be applied by any IGSS user of the configuration.

The Sort Format is specific to the IGSS configuration on the local machine and cannot be distributed to other machines or IGSS configurations.

The sort format can be applied to the Event list, Event log and Alarm log as well.

To create a new Sort Format

1. Click in the alarm or event list pane (right pane) of the **Active Alarms** form to bring the list view in focus.

2. Click **Customize** > **Set Sort order** to open the **Set Sort Order** form. You can also click the **Sort Order** button in the toolbar to open the **Set Sort Order** form.

3. In the **Set Sort Order** form, click the **New** button to open the **New Format** dialog and enter a format name. The format name is not required to be unique and it is possible to create identical format names. It is recommended to create unique names to better distinguish formats from each other.

4. In the **Formats** group (lower part of the **Sort Order** form), make sure the new alarm list format is selected.

5. In the upper part of the **Set Sort Order** form, **Sort** group

    1. Select the column you want to change the sort order for and click the **Move Up**or **Move Down** buttons to change the sort order, moving the selected column up or down the column list.

    2. Select the **Ascending** / **Descending** options to change the sort direction of the selected column.

6. Select a new column and repeat step 5 until you are satisfied with the new sort order.

7. Click the **Save** button to save the column layout to the new Sort Format.

8. Click the **OK** button to apply the new Sort Format to the **Active Alarms** form.

See Also

"Edit a Sort Format" on page 111

"Apply a Sort Format" on page 110

"Delete a Sort Format" on page 112

"Restore the default Sort Format" on page 112

Apply a Sort Format

You can apply an existing Sort Format to the **Active Alarms** form, changing the sort order of the records in the Alarm or event list. Only one sort order can be applied to the **Active Alarms** form at a time.

The sort order is applied to all users and cannot differentiate between IGSS users.

> The sort format can be applied to the Event list, Event log and Alarm log as well.

To apply a new Sort Format

1. Click in the alarm list or event list pane (right pane) of the **Active Alarms** form to bring the list view in focus.

2. Click **Customize** > **Set Sort Order** to open the **Set Sort Order** form. You can also click the **Sort Order** button in the toolbar to open the **Set Sort Order** form.

3. In the **Formats** group (lower part of the **Set Sort Order** form), select the Sort Format you want to apply. The upper part of the Set Sort Order form, will change, reflecting the sorting order for the selected Sort Format.

4. Click the **OK** button to apply the new sort order to the **Active Alarms** form.

See Also

"Create a new Sort format" on page 109

"Edit a Sort Format" on page 111

"Delete a Sort Format" on page 112

"Restore the default Sort Format" on page 112

Edit a Sort Format

You can edit an existing Sort Format, changing the column layout, order and header names.

> The sort format can be applied to the Event list, Event log and Alarm log as well.

To edit a Sort Format

1. Click in the alarm list or event list pane (right pane) of the **Active Alarms** form to bring the list view in focus.

2. Click **Customize** > **Set Sort Order** to open the **Set Sort Order** form. You can also click the **Sort Order** button in the toolbar to open the **Set Sort Order** form.

3. In the **Formats** group (lower part of the **Set Sort Order** form), select the Sort Format you want to edit. The upper part of the **Set Sort Order** form, will change, reflecting the sorting order for the selected Sort Format.

4. In the upper part of the **Set Sort Order** form, **Sort** group, select the column you want to change the sort order for and click the **Move Up** or **Move Down** buttons to change the sort order, moving the selected column up or down the column list.

5. Select the **Ascending** / **Descending** options to change the sort direction of the selected column.

6. Select a new column and repeat step 5 until you are satisfied with the new sort order.

7. Click the **Save** button to save the column layout to the selected Sort Format.

8. Click the **OK** button to apply the new sort format to the Active Alarms form.

See Also

"Create a new Sort format" on page 109

"Apply a Sort Format" on page 110

"Delete a Sort Format" on page 112

"Restore the default Sort Format" on page 112

Delete a Sort Format

You can delete an Sort Format, removing it from the list of formats.

> The sort format can be applied to the Event list, Event log and Alarm log as well.

> Once a format has been deleted, it cannot be restored. You must recreate it again if you want to apply the format to the **Active Alarms** form.

To delete an Sort Format

1. Click in the alarm list or event list pane (right pane) of the **Active Alarms** form to bring the list view in focus.

2. Click **Customize**> **Set Sort Order** to open the **Set Sort Order** form. You can also click the **Sort Order** button in the toolbar to open the **Set Sort Order** form.

3. In the **Formats** group (lower part of the **Set Sort Order** form), select the Sort Format you want to delete. The upper part of the **Set Sort Order** form, will change, reflecting the sorting order for the selected Sort Format..

4. Click the **Delete** button to delete the selected Sort Format

5. Click the **OK** button to close the **Active Alarms** form.

See Also

"Create a new Sort format" on page 109

"Edit a Sort Format" on page 111

"Apply a Sort Format" on page 110

"Restore the default Sort Format" on page 112

Restore the default Sort Format

When IGSS is installed, the program already contains a system default sort order already applied to Active Alarms list. When you create and apply sort formats to the Active Alarms list, the sort order will change to the new sort order.

You can restore the default sort order to the Active Alarms list by updating a sort format with the default sort order and then applying the sort format to the Active Alarms list.

> The sort format can be applied to the Event list, Event log and Alarm log as well.

To restore the default sort format

1. Click in the alarm list or event list pane (right pane) of the **Active Alarms** form to bring the list view in focus.

2. Click **Customize**> **Set Sort Order** to open the **Set Sort Order** form. You can also click the **Sort Order** button in the toolbar to open the **Set Sort Order** form.

3. In the **Formats** group (lower part of the **Set Sort Order** form), select the Sort Format you want to restore the default sort order for. The upper part of the **SeetSort Order** form, will change, reflecting the sort order and sorting directions of the columns.

4. Click the **Default** button to insert the default sort order and sort direction into the selected sort format. The upper part of the **Set Sort Order** form, will change, displaying the new sort order. Format.

5. Click the **OK** button to apply the sort format and close the **Active Alarms** form.

See Also

"Create a new Sort format" on page 109

"Edit a Sort Format" on page 111

"Apply a Sort Format" on page 110

"Delete a Sort Format" on page 112

1.10 Printing Alarms

Direct alarm message printing

In addition to being displayed in the Active Alarms list, an alarm message can also be sent directly to the alarm printer whenever the alarm is triggered. The alarm message print will not affect normal alarm processing and the alarm can be acknowledged and processed normally through the **Active Alarms** form.

Required setup for direct alarm message printing

An alarm printer must be set up in the **System Configuration** form > **Reports** tab > **Alarm Printer** group in order to print the alarm messages.

- If the **To Printer** check box is selected, the alarm message will be sent directly to the alarm printer and also displayed in the **Active Alarms** form.

- If the **To Printer** check box is cleared, the alarm message will not be printed and will only be displayed in the **Active Alarms** form.

Enable alarm print for each alarm

You must also enable sending alarm messages directly to the alarm printer for each alarm number in the **To Printer** check box on the **Edit Alarm Description** form.

> The **Edit Alarm Description** form is found in **Supervise** > **Tools** > **Alarms** > **Alarm Details** form > **Edit** button.

Print only alarms from a global alarm filter

You can also only print alarms that match a global alarm filter by selecting the global alarm filter in the **Match global alarm filter** field in the **System Configuration** form > **Reports** tab > **Alarm Printer** group.

Only one global alarm filter can be selected at a time for the station.

If no filter is selected, all alarms will be passed on to the alarm printer. This is the default setting of the **Match global alarm filter** field.

The Alarm Print Format

The direct alarm message print will use the alarm print format as the print format when printing alarms, either directly or when manually printing the alarm list. The alarm list format presently in use in the **Active Alarms** form is not used to print alarm details.

You can update the alarm print format with the present alarm list format, but only if this is enabled on the local machine.

See Also

"The Alarm Print Format" on page 75

"Printing the alarm list /alarm log" on page 77

"Define special filter parameters" on page 93

The Alarm Print Format

The Alarm Print Format is used to determine the layout of the alarm message print and is applied when directly printing alarm messages. The columns to be printed, the order of the columns and the width of the columns are specified in the Alarm Print Format which is then applied as the print layout.

The Alarm Print Format is specific to the IGSS configuration on the local machine and cannot be distributed to other machines or IGSS configurations.

Edit the format

By default, the menu option to update the Alarm Print Format is disabled, limiting the Alarm Print Format to the column layout defined in the system default .

If the menu option to update the Alarm Print Format is enabled, you can change the alarm print format, specifying which alarm list columns to print and in which order they are displayed as well as the column width. The Alarm Print Format will be overwritten with your changes, but you can restore the system default alarm print format later if necessary.

You cannot create additional Alarm Print Formats, only edit the existing Alarm Print Format.

Enable Alarm Print Format update using the registry editor (This station only)

To enable updating Alarm Print Format for all configuration operators on the local machine.

1. Open the **Registry Editor** form on the local machine. Click **Start** and type "Regedit.exe" in the search field of the **Windows Start** menu.

2. In the **Settings** folder in HKEY_CURRENT_USER\Software\Schneider Electric\IGSS32\V13.00.00\Alarm32_HKLM, right-click on the **allow save alarm print format** key and select **Modify**.

3. In the **Value Data** field of the **Edit DWORD (32-bit) Value** form, enter "1" and click **OK** to save.

4. Click **File** > **Exit** to exit the **Registry Editor** form and save the registry values.

Enable Alarm Print Format update using the Configuration database (other stations)

You can use the Configuration database to enable this operator station or other IGSS stations update Alarm Print Format.

Microsoft Access must be installed on the machine in order to edit the configuration database.

1. On the local machine, start the Microsoft Access program and open the configuration database found in the configuration folder.

2. In **Tables** pane of Microsoft Access, double-click the **RegSettings** table to open the **RegSettings** table in the right pane of Microsoft Access.

3. In the **ValueName** column, find the **allow save alarm print** key for the IGSS station you want to edit. The station identification is visible in the **Path** column and is expressed as Sta-tionA, StationB and so on.

4. In the **Value** column, enter "1" to enable updating the Alarm Print Format for the selected IGSS station.

5. Click **Ctrl+S** to save the changes and click **File** > **Exit** to close the Microsoft Access program.

> 💡 You can find a list of the Station identification and the station name in the registry key HKEY_CURRENT_USER\Software\Schneider Elec-tric\IGSS32\V13.00.00\CommDrv_HKLM\StationDatabase folder. The **Sta-tionno** key is the station identification and the value in the **Stationno** key is the station name as it is defined in the **Configuration** tab of the **Sys-tem Configuration** form.

Update the Alarm Print Format

1. In the **Active Alarms** form, click the **Customize** menu > **Alarm Print Format** button to open the **Alarm Print Format** form.

2. Note the **Formats** group is inaccessible as you cannot create new Alarm Print Formats.

3. In the **Alarm Print Format** form,you can:

   - Rearrange the order of the columns
   - Add columns to the displayed columns list
   - Remove columns from the displayed columns list
   - Change the column widths
   - Rename column headers

4. Click the **OK** button to close the Alarm Print Format form and update the Alarm Print Format.

Restore default Alarm Print Format

You can restore the default Alarm Print format by clicking the **Default** button in the **Alarm Print Format** form.

The Alarm Print Format form is opened by clicking the **Active Alarms** form > **Customize** menu > **Alarm Print Format** button.

See Also

"Direct alarm message printing" on page 73

"Rearrange the columns" on page 100

"Rename a column" on page 101

"Remove columns" on page 101

"Add columns" on page 102

"Change the column width" on page 103

Printing the alarm list /alarm log

Printing out the Alarm List or Alarm Log as it is displayed in the Active Alarm list or the Alarm Log list.

Set up the print page

1. In the **Active Alarms** form, click **File** > **Page Setup** to open the **Page Setup** form.
2. Change the page orientation, page margins and the paper size if necessary. Note that some printers will disable some of these options.
3. Click the **OK** button to save the page set up and close the **Page Setup** form.

Print the Alarm list

1. In the **Active Alarms** form, click **File** > **Print** to open the **Print** dialog.
2. In the **Print** dialog, you can:
   - change the printer to be used
   - set number of copies to be printed
   - define the font to be applied to the print
   - select to include alarm notes to the print
   - adjust the information to the paper width*
3. Click the **OK** button to print the alarm list and close the **Print** form.

*Cut to Paper Width: If this function is selected, the contents of the displayed Alarm List or Log is cut off if it exceeds the right margin of the printing paper.
If this function is not selected and the contents of the list exceeds the width of one print page, printing is continued on a second page. In this way you may join two printed pages to see the entire contents of the list on paper.

See Also

"Direct alarm message printing" on page 73

Alarm: Command line interface

The command line interface is an alternative to the graphical interface to this program. It allows you to manipulate the program either directly from a command prompt or from the **Job Scheduler** Module.

Using this interface, you can automatically print the **Alarm List** with a fixed interval or activated on an event in the IGSS system. You can also send the output in an e-mail or export it as a comma-separated file (.csv)

Printing

There is no -print command as this function is subsumed in each command line parameter. All the listed Alarm command line parameters will therefore automatically send the alarm list to the printer, except the -af<filter name> parameter.

Syntax conventions

The following symbols are used:

Symbol	Description
Bold	Required parameter.
<placeholder>	Placeholder for a variable parameter.
| (pipe symbol)	Separates required parameters. You must use at least one of these parameters in the syntax and you may use two or more of them. **NOTE:** To separate these parameters, put a space between them.
[parameter**]**	Optional parameter that you may include in the command line.

Syntax

Use the following syntax (separate parameters with a space):

Alm -f<filter name> [-ds<start date>] [-ts<start time>] [-de<end date>] [-te<end time>] [-all] [-note] [-page]

> You must check the **Prompt for period** box in the **Defining Filters for Alarm List** dialog when you create a filter that you will access from the command line. If disabled, Alarm will use the default period.

> ⚠ All Alarm command line parameters must be entered in lower case.

Parameter	Description
-f<filter name>	Define the alarm list filter to use for the print. If the name contains spaces, enclose the name in quotation marks (""). You can also use the root filters: "Active Alarms" and "Alarm Log". Do not include a space between the parameter -f and the filter name.
-af<filter name>	Change the filter used in the Active Alarm list. The Active Alarm

Parameter	Description
	list will start with this filter selected. This parameter will not send the alarm list to the printer.
-ds<start date>	Start date in the format yyyy/mm/dd or as an offset defined with the $ parameter (offset in days).
-ts<start time>	Start time in the format hh:mm:ss or as an offset defined with the $ parameter (offset in seconds).
-de<end date>	End date in the format yyyy/mm/dd or as an offset defined with the $ parameter (offset in days).
-te<end time>	End time in the format hh:mm:ss or as an offset defined with the $ parameter (offset in seconds).
-all	All columns are printed (otherwise the columns exceeding one page are not printed) This is equivalent to clearing the **Cut to paper Width** check box in the **Print** form.
-note	Includes alarm notes on the printout. This is equivalent to selecting the **Include Notes** check box in the **Print** form.
-page	Inserts page breaks after alarm notes. This is equivalent to selecting the **New page after note** check box in the **Print** form.
-landscape	Landscape makes alarm print in landscape mode.
-item	Define the contents to include in the Alarm print: • 0: Active Alarms • 1: Alarm log • 2: Active Events • 3 Event log
-format<name>	Name of the format to be used. If no format is defined, then the default format is used.
-csv	Output is to be exported as a comma-separated file (.CSV) and not printed. The comma-separated file must either be saved at a location using the -file<path> parameter and/or sent as an attachment to an e-mail message using the -mail<address> parameter. ⚠ The -csv parameter must be specified using lowercase letters only. You can add a title to the e-mail message by using the -title para-

Parameter	Description
	meter.
-file<path>	The full path to the destination file, including the name of the .csv file. The default filename is yyyy-mm-dd-hh-mm-ss.csv The default file path is the GSS folder of the local IGSS install-ation.
-mail<address>	The output is to be sent as an attachment to the recipient's e-mail address. If the output is to be sent to more than one e-mail recip-ient, separate any additional e-mail addresses with a semicolon. You do not need to use the -file<path> to include the .csv in the e-mail message, but if you do use the -file<path> parameter, then the specified file will be included in the e-mail message. If you do not use the -file<path> parameter, the default file name will be used for the e-mail attachment. Do not include a space between the parameter -mail and the e-mail address.
-title	The subject line in the e-mail message.
-lfmt<format>	Name the alarm list format to be applied to the alarm report, where the <format> is the format name to be applied.
-appenddate	Adds the current date and time to the filename. If you have used the -ds (start date) and/or -ts (start time) para-meters , the defined start date and start time will be used instead.
-ymdfolders	Creates year, month and day sub folders to store alarm list reports when saving alarm list reports as a .CSV file to a specified destination. This parameter should be used with the -file<path> parameter.

The parameter elements may not contain parameters of another alarm parameter. For example -affil-ter-all contains the filter name filter-all where -all at the same time is a valid alarm parameter

Job Scheduler example

This example prints the alarms matching the **Analog Alarms** filter. The start date is set to the previous day ($date-1) and end date is set to today $(date). Start time (-ts) and end time (-te) are both set to 7:00 a.m. All columns are printed and alarm notes are included.

Program path:

```
"[IGSS InstallPath]\Gss\Alm.exe"
```

Parameters:

```
-f"Analog Alarms" -ds$(date-1) -ts07:00:00 -de$(date) -te07:00:00 -all
-note
```

Working folder:

-

Command prompt example

This command line prints all alarms matching the **Purification** filter from the previous day. The printout shows all columns and includes alarm notes.

```
Alm -fPurification -ds$-1 -ts00:00:00 -de$ -te00:00:00 -all -note
```

Alarm Command Line Example

Alm -f"Priority5 and 6" -all -csv -maildk-igss-support@schneider-electric.com

1.11 System Alarm

The System Alarm

In the IGSS software, there is an object called **System**. This object is used by the IGSS system to generate alarms under specific conditions.

- The **System** object, which is a predefined analog object, can be viewed in the **Object Browser** in the **Definition** program. If this object is deleted or renamed, the IGSS system will crash and freeze up until the object is restored.

A system alarm is triggered from the **System** object under the following four conditions.

1. When the amount of free space on the hard disk of the IGSS single user or server PC is nearly gone
2. When the path to the IGSS application's **report folder** is incorrect
3. When there are insufficient Windows user permissions given to the report folder when running in a multi-user environment
4. When the occurrence of an Event in the Event list is also to be displayed in the Active Alarm list

Let's look at the alarm messages displayed for each situation.

1. Insufficient hard disk space

When the IGSS system registers a low level of hard disk space, then the **System** alarm is triggered and a System alarm warning message is displayed:

Figure 1: Basic System alarm message

You must then shut the IGSS system down and remove enough files from the hard disk to free up at least 20% of hard disk capacity. Then start the IGSS system up again.

The occurrence of this alarm by itself is rare because hard disk capacity nowadays is hardly ever exceeded by normal **SCADA**[1] systems.

However, the alarm is triggered in connection with the presence of other conditions, which need attention by the user. These are described in the next two cases.

2. Error in connection with the IGSS application's report folder: cannot find the report folder

When this situation occurs, the **ALL LOGGING STOPPED** alarm, as shown in Figure 1 above, will be triggered as well as a dialog box with an alarm message. When this happens, the **ALL LOGGING STOPPED** alarm can be ignored as the true cause of the alarm state.

This alarm arises typically when configuring a multi-user system and looks like this:
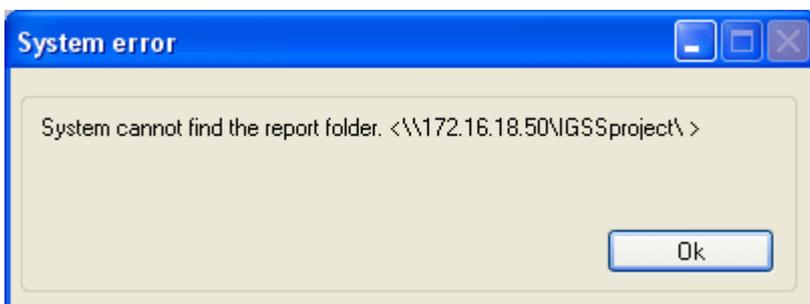

Figure 2: Cannot find the report folder warning

[1]Supervisory Control & Data Acquisition

This message indicates that the path to the IGSS application's report folder has somehow been incorrectly keyed in. Therefore, check first in the **System Configuration** module on the server PC on the **Configuration** tab under **Report folder**. Check the following two things:

1. Make sure that you've correctly keyed in the UNC path to the report folder, i.e. \\<IP address>or <PC name>\<report folder name>\

   - Remember to include the last forward slash after the name of the report folder.

2. Make sure that you've spelled everything correctly

This should remedy the problem.

3. Error in connection with the IGSS application's report folder: access denied

When this situation occurs, the **ALL LOGGING STOPPED** alarm, as shown above, will be triggered as well as a dialog box with an alarm message. When this happens, the **ALL LOGGING STOPPED** alarm can be ignored as the true cause of the alarm state.

This alarm arises typically when configuring a multi-user system and looks like this:
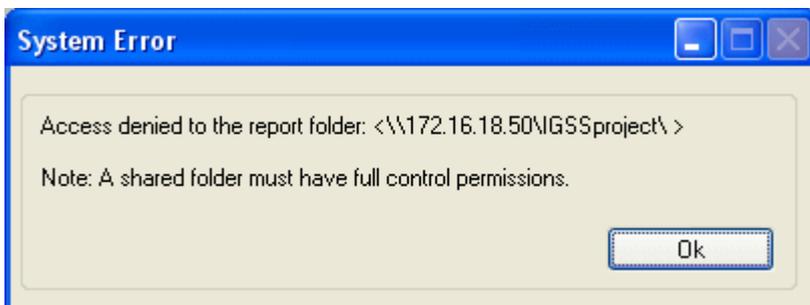

Figure 3: Access denied warning

This message indicates that sharing and/or setting of permissions on the report folder has not been correctly carried out. Do the following:

1. Use Windows Explore to find the folder where the IGSS application resides.
2. Right click on the folder name and choose **Sharing and Security...**
3. Share the folder and then click on the **Permissions** button to set user permissions to **Full Control**.
4. Click **OK** to save and exit.

This should remedy the problem.

4. Display an Event in the Active Alarms list

This last example of the triggering of a **System** alarm is not related to an error situation. Here the **System** object is used to display the occurrence of an **Event** in the **Active Alarms** list. For a detailed explanation click this link Event.

Chapter 2: The Event List

2.1 What is the Event List ?

Use the Event List to get a quick overview of the most important system and object events. The events in the list are user-defined and can be configured from the **Definition** or the **Supervise** modules.

The Event List is displayed in the bottom half of the **Active Alarms** form. It contains two root nodes, Active Events and Event Log. For both of these root nodes, filters can be defined exactly as in the Alarm List.

You can hide the Event list in the **Active Alarms** form by clearing the **Show Event list** check box on the **Alarms** tab in the **System Configuration** form.

The columns of the Event list can be rearranged and the events can be sorted just like the Alarm List columns.

See Also

Event Types

"Active Events and the Event Log" on page 85

"The fields in the Event List" on page 86

"Showing events in the Alarm List" on page 87

"Printing event alarms" on page 88

2.2 Active Events and the Event Log

The Event List has two root nodes in the tree view.

- The **Active Events** node displays all events from the last hour or the 500 latest events.
- The **Event Log** node displays all historical and active events. The maximum number of events displayed in the list is determined by the **Max. alarm log entries** field on the **Alarm** tab of the **System Configuration** form.

  Note that the max. number of entries include both alarms and events.

For both nodes filters can be defined. The filters will appear below the root node. The root node can be expanded to show the filters or collapsed to hide the filters.

In this example, we have defined a filter extracting user login/logout information. We know that the event type has been named "User login/logout" so this is our filter criterion.

See Also

"Define a new filter" on page 91

2.3 The fields in the Event List

The table below shows an explanation of the fields specific to the Event List. The name of the event is defined either in the Definition or the Supervise Modules.

For an overview of the event types, click the header in the table.

Event type	Event	Info 1	Info 2	Info 3	Info 4
OP Connect/Disconnect	User-defined name	"Connect", "Disconnect", "Lost connection", "LAN B"	IGSS station name	-	
Periodical	User-defined name	-	-	-	
System start/stop	User-defined name	"Data collection started" or "Data collection stopped"	-	-	
User defined	User-defined name	-	Object name	Area name	Atom value
User login/logout	User-defined name	"Login" or "Logout"	User name	IGSS station name	
Writing stopped/started	User-defined name	"Start write" or "Stop write"	-	-	
Error packet	User-defined name	Driver number, node number	Error group (decimal or hexadecimal)	Error code, subcode (decimal or hexadecimal)	

2.4 Showing events in the Alarm List

Enabling alarms on events

When new events are defined, it is possible to enable the **Alarm on event** check box.

This means that the event will appear both in the Event List and in the Alarm List.

The operator will thus see the number of alarms change in the **Alarm Icon** and see the alarm in the list.

Viewing events in the Alarm List

The alarm will be shown as alarm number 90. The alarm text will be the event name. The alarm properties including alarm and acknowledgment colors are taken from alarm number 90. If required, the alarm properties can be changed in the **Definition** module.

This example shows a number of events at the top of the **Alarm List**.

Acknowledging event alarms

From the **Alarm List** the operator can acknowledge the alarm. Once acknowledged, the alarm is also ended and is archived in the **Alarm Log**.

2.5 Printing event alarms

Prepare the Event List for printing

1. In the **Customize** menu, select **Alarm Print Format**.
2. Do the following:

    - In the **Columns Displayed** list, remove all unwanted columns.
    - In the **All Columns** list, select the columns specific to the **Event List** one-by-one and click the **Add** button. These fields will be printed when a new event occurs. For all other alarms, the fields will be empty.
    - In the **Columns Displayed** list, use the **Move Up** and **Move Down** buttons to adjust the order.

Show picture

3. Click the **OK** button.

Print the Event List

1. In the **File** menu, select **Print**.
2. If required, change the print settings.
3. Click **Print**.

    - The list will now be printed according to the setup in the **Alarm Print Format** dialog box.

Print events on the alarm printer

In order to have all events printed on the alarm printer as soon as they occur, set up the following:

1. In the **System Configuration** program, click the **Reports** tab.

2. In the **Alarm printer** section, select **Direct** (one line at a time on a matrix printer) or **Windows** (the page is printed when the page is filled).

3. Click the **Printer** button and select the relevant printer.

4. Close the program and save changes.

5. Open the **Definition** program

6. In the **Edit** menu, select **Alarm Texts**.

7. Select alarm text number 98 named **Event** and click **Edit**.

8. In the **Edit Alarm Description** dialog box, select the **To Print** check box.

[Show picture](#)

9. Click **OK** and then **Close**.

10. In the **File** menu, select **Install Configuration**.

- If you select **Online Update** in this case, the change will not be applied. The **Data Collection** must be restarted for the change to take effect.

4. From the **IGSS Master** > **Home** Tab, click the **Restart** button to re- start the configuration .

- New events will now be printed on the alarm printer. The alarm number will be 98 and the alarm text will be "Event".

2.6 Updating and Freezing the Event List

Update the list

Background information

The process values shown in the **Alarm List** and **Event List** are not continuously refreshed. They are updated whenever the **Worst Value** of the object value has changed, or at specific intervals set by the System Integrator during system design. IGSS therefore provides an **Update** facility so you can read and load the newest process values whenever needed.

Procedure

1. In the **Tree View**, select the list you wish to update.

2. Move into the selected list in the right-hand section of the screen.

3. In the **Tool Menu**, click **Actions** > **Update**.

4. The entire list is updated.

- For the options of the **Actions** menu to become available, you must have moved the cursor out of the **Tree View** into the alarm list or alarm log !

Shortcut

1. You are inside the list.

2. Simply click the right mouse button.

3. This opens the **Actions** function box so that you can now conveniently activate the **Update** function.

See also

Freeze the list

Background information

In situations where you have a cluster of alarms in rapid succession it might be useful to freeze the list for a short period at its current status. The freeze period is predefined by the development engineer during system design and cannot be changed by the operator.

Default setting: 30 seconds

Procedure

1. In the **Tree View**, select the list you wish to freeze.

2. Move into the selected list in the right-hand section of the screen.

3. In the **Actions** menu, select **Freeze**.

   - For the options of the **Actions** menu to become available, you must have moved the cursor out of the **Tree View** into the **Alarm List** or the **Event List**.

Shortcut

1. You are inside the list and a message line is selected.

2. Click the right mouse button.

3. This opens the **Actions** function box so that you can now conveniently activate the **Freeze** function.

   - A seconds counter in the screen title bar indicates the 'frozen' status and the number of seconds still to go.

See also

2.7 Customizing, Sorting and Filtering

Filter the Event list

Define a new filter

You can create a filter to reduce the records displayed in the list panes of the **Active Alarms** form to only those records that meet the filter criteria.

To create a new filter

1. In the left pane of the **Active Alarms** form, select the record type to be displayed: Active Alarms, Alarm log, Active Events or Event log. The new filter will only be applied to the selected display type.

2. Click **Customize** > **New Filter** to open the **Defining Filters** form. You can also click the **New Filter** button in the toolbar to open the **Defining Filters** form.

3. In the **Filter name** field on the **Defining Filters** form, enter a filter name.

   The filter name is not required to be unique and it is possible to create identical filter names. It is recommended to create unique filter names to better distinguish filters from each other.

4. In the **Edit Condition** group:

   1. In the **Property** field, select the filter property from the drop down list.

   2. In the **Condition** field, select the filter condition of the property from the drop down list. The displayed properties depend on the selected property.

   3. In the **Value** field, select the filter value from the drop down list. The filter value will be applied to the condition.

5. Click the **Add** button to submit the filter condition to the filter.

6. If you need to create successive filter conditions, select a logical operator to apply to the next filter condition (And / Or) and repeat steps 4 and 5 above.

7. Click the **OK** button to save the filter and close the **Defining Filters** form.

> A filter can only contain a maximum of 10 filter criteria.

See Also

"Filter the Active Alarms form " on page 45

"Multiple alarm filter conditions" on page 47

"Edit an existing filter" on page 92

"Delete an existing filter" on page 93

"Define special filter parameters" on page 93

Edit an existing filter

You can edit existing filters, adding new filter conditions, deleting or adjusting existing conditions.

> Some filters have been write-protected to disable editing. If this is the case, you must have sufficient user rights to edit a write-protected filter. User rights are determined by the User Group you are member of in the IGSS User Administration module.

To edit an existing filter

1. In the left pane of the **Active Alarms** form, select the record type to be displayed: Active Alarms, Alarm log, Active Events or Event log.
2. Click **Customize** > **Edit Filter** to open the **Defining Filters** form. You can also click the **Edit Filter** button in the toolbar to open the **Defining Filters** form.
3. To rename the filter, enter a new filter name in the **Filter name** field on the **Defining Filters** form.

   The filter name is not required to be unique and it is possible to create identical filter names. It is recommended to create unique filter names to better distinguish filters from each other.
4. To edit an existing condition, select the filter condition you want to edit in the **Filter Conditions** group.
     1. In the **Edit Condition** group:
     2. In the **Property** field, select a new filter property from the drop down list.
     3. In the **Condition** field, select a new filter condition of the property from the drop down list. The displayed properties depend on the selected property.
     4. In the **Value** field, select a new filter value from the drop down list. The filter value will be applied to the condition.
5. To delete an existing condition, select the filter condition you want to edit in the **Filter Conditions** group and click the **Delete** button.
6. To add a new Filter condition,
     1. In the **Property** field, select the filter property from the drop down list.
     2. In the **Condition** field, select the filter condition of the property from the drop down list. The displayed properties depend on the selected property.
     3. In the **Value** field, select the filter value from the drop down list. The filter value will be applied to the condition.
     4. Select the relevant logical operator to apply to the new filter condition.
     5. Click the **Add** button to submit the filter condition to the filter.
7. Click the **OK** button to save the filter and close the **Defining Filters** form.

See Also

"Filter the Active Alarms form " on page 45

"Define a new filter" on page 91

"Delete an existing filter" on page 93

"Define special filter parameters" on page 93

Delete an existing filter

You can delete an existing filters from the local machine, removing it from the **Active Alarms** forms.

Deleting a filter does not require user confirmation and will be removed immediately. A deleted filters can not be restored and you must recreate the filter if you regret deleting the filter.

Filters are saved locally on the machine and are available to all operators who use the IGSS configuration on the local machine. If you delete a filter, you will remove access to the filter for all operators that use the machine.

To delete a filter

1. In the left pane of the **Active Alarms** form, select the record type to be displayed: Active Alarms, Alarm log, Active Events or Event log. The new filter will only be applied to the selected display type.

2. Click **Customize** > **Delete Filter** to delete the filter. You can also click the **Delete Filter** button in the toolbar to delete the filter.

   There is no user confirmation dialog to confirm the removal of the filter.

See Also

"Define a new filter" on page 91

"Edit an existing filter" on page 92

"Define special filter parameters" on page 93

Define special filter parameters

You can apply the following parameters to an existing filter to change the characteristics of the filter, specializing the filter in some cases and expanding the filter functionality in others.

All parameters can be combined with each other.

Create a Global filter

All filters are by default local filters and are saved on the local machine. A filter defined by one operator station will not be accessible to other users on other operator stations.

You can make a filter global across the IGSS configuration by selecting the **Global** check box in the **Defining Filters** form when creating or editing a filter.

A global filter is saved in the IGSS configuration and distributed to all online stations when they connect to the IGSS server. Global filters are also synchronized between IGSS servers in a dualized (hot standby) IGSS server environment.

Global alarm filters can be assigned to the selected alarm printer for the station in the **System Con-figuration** form > **Reports** tab > **Alarm** group to only print alarms that satisfy the global filter conditions.

Create a Write-protected filter

By default, any operator can edit or delete a filter, as well as create a new filter. You can prevent operator from editing a filter by protecting the individual filter. When you protect a filter, only operators that are IGSS users and have access to the Can use System Commands global rights may edit a protected filter.

Write-protecting a filter therefore requires the IGSS User Administration module is enabled, set up and in use on the IGSS configuration.

You can write protect a filter by selecting the **Protect** check box in the **Defining Filters** form when creating or editing a filter.

You can combine the Write Protected filter with the User limited filter for additional filter protection.

Create a filter which prompts for a filter period

By default, the filter is applied to all records in the active alarm list, active event list, alarm log or event log regardless of start or end date and time.

You can create a filter which requires the user to enter the start date and time and the end date and time of the alarm or event before applying the filter to the event or log list.

Select the **Prompt for Period** check box in the **Defining Filters** form when creating or editing a filter to create a period-defined filter that can apply user input for start and end dates.

Create a user limited (Exclusive) filter

A user limited (Exclusive) filter is a filter which only certain IGSS users may apply to the log list or event list. Any operator can apply any log or list filter by default, but you can prevent a filter from being applied by users who do not have sufficient rights by using the **Exclusive** parameter on the filters.

The **IGSS User Administration** module must be enabled, set up and in use on the IGSS configuration and the **Exclusive** parameter must be applied to at least one filter to enable user limited filters.

If the **IGSS User Administration** module is enabled and the **Exclusive** parameter applied to at least one filter, then only the users with the **Can Administer** Global Right may apply any filter. Users without the **Can Administer** global right can only apply filters that have the **Exclusive** check box selected.

The **Exclusive** parameter is applied to a filter by selecting the **Exclusive** check box in the **Defining Filters** form when creating or editing a filter.

You can combine the User limited filter with the Write Protected filter for additional filter protection.

Create an Alarm Report filter

The Alarm Report contains additional alarm statistics when printed which the active alarm list does not display.

You can set up the active alarm list to display the additional alarm statistics from the Alarm Report by selecting the **Format as 'alarm print'** check box in the **Defining Filters** form.

The following columns are displayed in the Active Alarm list:

- The object value when the alarm was started
- The object value when the alarm was acknowledged
- The object value when the alarm was ended

Remove an IGSS Mobile filter

By default, all filters are enabled by be used by IGSS Mobile users. You can remove access to the filter from IGSS Mobile Users by clearing the **Include in IGSS Mobile** check box in the **Defining Filters** form.

See Also

"Define a new filter" on page 91

"Edit an existing filter" on page 92

"Direct alarm message printing" on page 73

Set a default Active Alarms or Active Events list filter

You can set a specific list filter as the default list filter. The default filter will be applied to the active alarm list or Active Events when you open the Alarm Module.

In a multi-user environment, this setting only applies to the machine on which it is set. The default list filter can therefore not be uploaded to the IGSS server and distributed to the other operator stations.

To set a default active alarm list filter

1. In the upper left pane of the **Active Alarms** form, navigate to the filter you want to make the default filter in the Active Alarms node.
2. Click **Customize** > **Set as Default Filter** to make the selected filter the default filter for the Active Alarm list. You can also click the **Set as Default Filter** button in the toolbar.

To set a default Event list filter

1. In the lower left pane of the **Active Alarms** form, navigate to the filter you want to make the default filter in the Active Events node.
2. Click **Customize** > **Set as Default Filter** to make the selected filter the default filter for the Active Events list. You can also click the **Set as Default Filter** button in the toolbar.

See Also

"Define a new filter" on page 91

"Set a default Alarm log or Event log filter" on page 96

Set a default Alarm log or Event log filter

If the alarm or event log contains records that exceed the user-defined maximum alarm or event log limit, the latest alarm or event logs will be displayed. To find older alarm or event logs, you must create and apply an alarm or event log filter to display the desired alarm or event log entries.

You can create a default log filter which will automatically filter the log list when you click the respective folder (**Alarm log** or **Event log**) in the lower left pane of the **Active Alarms** form.

Creating a default log list filter is different than creating an Active Alarm list filter or Active Event list filter.

To create a default log list filter, you must create an log list filter and prefix the filter name with an asterisk (*)

For example, if you create an alarm log filter called "Pump alarms ", you can set the filter as the default Alarm log list filter by changing the name of the filter to "*pump alarms".

Multiple default log filters

You can only apply one default Alarm log list filter and one Event log list filter although you can define many log list filters with a prefixed asterisk in the filter name.

The default log list filter is sorted alphabetically and the first appearing filter with a prefixed asterisk will be applied as the default log list filter.

For example, there are two log list filters defined: *Afilter and *Bfilter. The log list filter named *Afilter will be applied as the default log list filter as it comes before *Bfilter when sorted alphabetically.

See Also

"Define a new filter" on page 91

"Set a default Active Alarms or Active Events list filter" on page 95

The Event List Format

Create a new Alarm List Format

You can change the physical appearance of the Alarm or Event list, adding columns to the list and removing columns from the list. As each column displays alarm or event information, you can define how much information the alarm or event list is to display to the operators.

> The alarm list format can be applied to the Event list, Event log and Alarm log as well.

You can create a new Alarm List Format to save the column layout of the alarm list or event list in the alarm list format and applying the Alarm List Format to the alarm list or event list.

Once an new Alarm List Format has been created, other operators can also apply the format to the alarm list or event list by selecting the format.

- 96 -

Alarm List Formats are available to all IGSS users and can be applied by any IGSS user of the configuration.

The Alarm List Format is specific to the IGSS configuration on the local machine and cannot be distributed to other machines or IGSS configurations.

To create a new Alarm List Format

1. Click in the alarm list or event list pane (right pane) of the **Active Alarms** form to bring the list view in focus.

2. Click **Customize** > **Alarm List Format** to open the **Alarm List Format** form. You can also click the **Format List** button in the toolbar to open the **Alarm List Format** form.

3. In the **Alarm List Format** form, click the **New** button to open the **New Format** dialog and enter a format name. The format name is not required to be unique and it is possible to create identical format names. It is recommended to create unique names to better distinguish formats from each other.

4. In the **Formats** group (lower part of the **Alarm List Format** form), make sure the new alarm list format is selected.

5. In the upper part of the **Alarm List Format** form, you can:

   - Rearrange the order of the columns

   - Add new columns to the columns displayed

   - Remove existing columns from the columns displayed

   - Change the column header name

   - Change the column width

6. Click the **Save** button to save the column layout to the new Alarm List Format.

7. Click the **OK** button to apply the new alarm list format to the **Active Alarms** form.

See Also

"Apply an Alarm List Format to the Active Alarms form" on page 98

"Delete an Alarm List Format" on page 99

"Rearrange the columns" on page 100

"Remove columns" on page 101

"Add columns" on page 102

"Change the column width" on page 103

"Rename a column" on page 101

Apply an Alarm List Format to the Active Alarms form

You can apply an existing Alarm List Format to the **Active Alarms** form, changing the layout and appear-
ance of the columns in the Alarm list, event list, alarm log list and the event log list. only one Alarm List
Format can be applied to the Active Alarms form at a time.

Alarm List Formats are applied to all users and cannot differentiate between IGSS users.

> The alarm list format can be applied to the Event list, Event log and Alarm log as well.

To apply a new Alarm list Format

1. Click in the alarm list or event list pane (right pane) of the **Active Alarms** form to bring the list
   view in focus.

2. Click **Customize** > **Alarm List Format** to open the **Alarm List Format** form. You can also
   click the **Format List** button in the toolbar to open the **Alarm List Format** form.

3. In the **Formats** group (lower part of the **Alarm List Format** form), select the Alarm List
   Format you want to apply. The upper part of the Alarm List Format form, will change, reflecting
   the column layout options for the selected Alarm List Format.

4. Click the **OK** button to apply the new alarm list format to the **Active Alarms** form.

See Also

"Create a new Alarm List Format" on page 96

"Delete an Alarm List Format" on page 99

Edit an Alarm List Format

You can edit an existing Alarm List Format, changing the column layout, order and header names.

> The alarm list format can be applied to the Event list, Event log and Alarm log as well.

To edit an Alarm List Format

1. Click in the alarm list or event list pane (right pane) of the **Active Alarms** form to bring the list
   view in focus.

2. Click **Customize** > **Alarm List Format** to open the **Alarm List Format** form. You can also
   click the **Format List** button in the toolbar to open the **Alarm List Format** form.

3. In the **Formats** group (lower part of the **Alarm List Format** form), select the Alarm List
   Format you want to edit. The upper part of the **Alarm List Format** form, will change, reflecting
   the column layout options for the selected Alarm List Format.

4. In the upper part of the **Alarm List Format** form, you can:

   - Rearrange the order of the columns

   - Add new columns to the columns displayed

   - Remove existing columns from the columns displayed

   - Change the column header name

   - Change the column width

5. Click the **Save** button to save the column layout to the new Alarm List Format.

6. Click the **OK** button to apply the new alarm list format to the **Active Alarms** form.

See Also

"Create a new Alarm List Format" on page 96

"Apply an Alarm List Format to the Active Alarms form" on page 98

"Delete an Alarm List Format" on page 99

"Rearrange the columns" on page 100

"Remove columns" on page 101

"Add columns" on page 102

"Change the column width" on page 103

"Rename a column" on page 101

Delete an Alarm List Format

You can delete an Alarm List Format, removing it from the list of formats.

The alarm list format can be applied to the Event list, Event log and Alarm log as well.

Once a format has been deleted, it cannot be restored. You must recreate it again if you want to apply the format to the **Active Alarms** form.

To delete an Alarm List Format

1. Click in the alarm list or event list pane (right pane) of the **Active Alarms** form to bring the list view in focus.

2. Click **Customize**> **Alarm List Format** to open the **Alarm List Format** form. You can also click the **Format List** button in the toolbar to open the **Alarm List Format** form.

3. In the **Formats** group (lower part of the **Alarm List Format** form), select the Alarm List Format you want to delete. The upper part of the **Alarm List Format** form, will change, reflecting the column layout options for the selected Alarm List Format.

4. Click the **Delete** button to delete the selected alarm list format

5. Click the **OK** button to close the **Active Alarms** form.

See Also

"Create a new Alarm List Format" on page 96

"Apply an Alarm List Format to the Active Alarms form" on page 98

Change the list format

Rearrange the columns

The columns in the Active Alarms list are displayed in the order listed in the **Alarm List Format** form. You can change the order of the displayed columns in the **Active Alarms** form by editing the column properties in the Alarm List Format applied to the **Active Alarms** form.

> The alarm list format can be applied to the Event list, Event log and Alarm log as well.

To rearrange the columns in the Alarm list

1. Click in the alarm list or event list pane (right pane) of the **Active Alarms** form to bring the list view in focus.

2. Click **Customize** > **Alarm List Format** to open the **Alarm List Format** form. You can also click the **Format List** button in the toolbar to open the **Alarm List Format** form.

3. In the **Formats** group (lower part of the **Alarm List Format** form), select the Alarm List Format you want to edit. The upper part of the **Alarm List Format** form, will change, reflecting the column layout options for the selected Alarm List Format.

4. In the list box in the **Columns Displayed** group in the upper part of the **Alarm List Format** form, select a column and use the **Move Up** and **Move Down** buttons to rearrange the order of the column will be displayed in the Active Alarms form.

5. Click the **Save** button to save the column layout to the new Alarm List Format.

6. Click the **OK** button to apply the new alarm list format to the **Active Alarms** form.

See Also

"Create a new Alarm List Format" on page 96

"Rename a column" on page 101

"Remove columns" on page 101

"Add columns" on page 102

"Change the column width" on page 103

Rename a column

You can rename a column header, changing the title of the column as it is displayed in the **Active Alarms** form by editing the Alarm List Format applied to the **Active Alarms** form.

> The alarm list format can be applied to the Event list, Event log and Alarm log as well.

To rename a column header in the Alarm list

1. Click in the alarm list or event list pane (right pane) of the **Active Alarms** form to bring the list view in focus.

2. Click **Customize** > **Alarm List Format** to open the **Alarm List Format** form. You can also click the **Format List** button in the toolbar to open the **Alarm List Format** form.

3. In the **Formats** group (lower part of the **Alarm List Format** form), select the Alarm List Format you want to edit. The upper part of the **Alarm List Format** form, will change, reflecting the column layout options for the selected Alarm List Format.

4. In the list box in the **Columns Displayed** group in the upper part of the **Alarm List Format** form, select the column you want to change the header of

5. In the **Change Column Name** field enter the new column header to be displayed in the **Active Alarms** form.

6. Click the **Save** button to save the column layout to the new Alarm List Format.

7. Click the **OK** button to apply the new alarm list format to the **Active Alarms** form.

See Also

"Create a new Alarm List Format" on page 96

Rearrange the columns

"Remove columns" on page 101

"Add columns" on page 102

"Change the column width" on page 103

Remove columns

The columns in the Active Alarms list are displayed in the order listed in the **Alarm List Format** form. You can remove columns from the **Active Alarms** form by editing the column properties in the Alarm List Format applied to the **Active Alarms** form.

> The alarm list format can be applied to the Event list, Event log and Alarm log as well.

To remove a column from the Alarm list

1. Click in the alarm list or event list pane (right pane) of the **Active Alarms** form to bring the list view in focus.

2. Click **Customize** > **Alarm List Format** to open the **Alarm List Format** form. You can also click the **Format List** button in the toolbar to open the **Alarm List Format** form.

3. In the **Formats** group (lower part of the **Alarm List Format** form), select the Alarm List Format you want to edit. The upper part of the **Alarm List Format** form, will change, reflecting the column layout options for the selected Alarm List Format.

4. In the list box in the **Columns Displayed** group in the upper part of the **Alarm List Format** form, select the column you want to remove.

5. Click the **Remove** button to remove the selected column from the Active Alarms form.

6. Click the **Save** button to save the column layout to the new Alarm List Format.

7. Click the **OK** button to apply the new alarm list format to the **Active Alarms** form.

See Also

"Create a new Alarm List Format" on page 96

Rearrange the columns

"Rename a column" on page 101

"Add columns" on page 102

"Change the column width" on page 103

Directly in the list

1. Click on the right-hand limiting line of the column you wish to remove, using the left mouse button and keep the mouse button pressed.

2. The cursor changes its shape to a cross and highlights the vertical column delimiter.

3. Keep the left mouse button depressed and drag the cursor to the left until the right line covers the left line. In this way, the width of the column has been reduced to nothing and the column is removed from the list.

Only a column which was removed (collapsed) directly in the list by dragging its right-hand limiting line to the left until clearance, can be retrieved again directly in the list, without using menu functions.

The first method of removing columns is the more permanent layout change. It can only be undone by using the **ADD** button in the **Configure Columns** dialogue.

Add columns

The columns in the Active Alarms list are displayed in the order listed in the **Alarm List Format** form. You can add columns from the **Active Alarms** form by editing the column properties in the Alarm List Format

applied to the **Active Alarms** form.

The alarm list format can be applied to the Event list, Event log and Alarm log as well.

To remove a column from the Alarm list

1. Click in the alarm list or event list pane (right pane) of the **Active Alarms** form to bring the list view in focus.

2. Click **Customize** > **Alarm List Format** to open the **Alarm List Format** form. You can also click the **Format List** button in the toolbar to open the **Alarm List Format** form.

3. In the **Formats** group (lower part of the **Alarm List Format** form), select the Alarm List Format you want to edit. The upper part of the **Alarm List Format** form, will change, reflecting the column layout options for the selected Alarm List Format.

4. In the list box in the **Columns Displayed** group in the upper part of the **Alarm List Format** form, select the column you want to add.

5. Click the **Add** button to add the selected column to the Active Alarms form.

6. Click the **Save** button to save the column layout to the new Alarm List Format.

7. Click the **OK** button to apply the new alarm list format to the **Active Alarms** form.

See Also

"Create a new Alarm List Format" on page 96

Rearrange the columns

"Rename a column" on page 101

"Remove columns" on page 101

"Change the column width" on page 103

Directly in the list

Place the crosshair cursor onto the limiting line of the collapsed column and drag it to the right until the retrieved column has reached the width required.

Change the column width

You can change the column width as it is displayed in the **Active Alarms** form by editing the Alarm List Format applied to the **Active Alarms** form or directly in the Active Alarms list.

The alarm list format can be applied to the Event list, Event log and Alarm log as well.

To change a column width by editing the format

1. Click in the alarm list or event list pane (right pane) of the **Active Alarms** form to bring the list view in focus.

2. Click **Customize** > **Alarm List Format** to open the **Alarm List Format** form. You can also click the **Format List** button in the toolbar to open the **Alarm List Format** form.

3. In the **Formats** group (lower part of the **Alarm List Format** form), select the Alarm List Format you want to edit. The upper part of the **Alarm List Format** form, will change, reflecting the column layout options for the selected Alarm List Format.

4. In the list box in the **Columns Displayed** group in the upper part of the **Alarm List Format** form, select the column you want to change the width of

5. In the **Width** field enter the new column width of the column (expressed in pixels) displayed in the **Active Alarms** form.

6. Click the **Save** button to save the column layout to the new Alarm List Format.

7. Click the **OK** button to apply the new alarm list format to the **Active Alarms** form.

To change a column width directly in the Active Alarms list

1. Left-click on the right-hand edge of the column whose size you wish to reduce or widen and keep the mouse button pressed.

2. The cursor changes its shape to a cross and highlights the vertical column delimiting line.

3. Maintaining the left mouse button depressed, drag the line to the left or to the right.

4. Release the mouse button as soon as you have obtained the required column width.

See Also

"Create a new Alarm List Format" on page 96

Rearrange the columns

"Rename a column" on page 101

"Remove columns" on page 101

"Add columns" on page 102

The default Event List format

The default List or Sort Format

IGSS contains a system default for the Alarm List format and the Sort Order formats. The system default formats are saved on the local machine of the operator station and can be restored to the **Active Alarms**

form by the operator if necessary. You can see the contents of the system default list format in the **See Also** section below.

Changing the System Default List Format

You can also update the system default formats from the **Active Alarms** form if you want to use another default format than the original system default. The alarm list format presently in use is saved as the system default, automatically updating the system default. Once the system default has been updated or changed, you cannot restore the original system default format again.

> The option to save a format as the system default is normally not accessible to users and must be enabled by a System Designer with administrator rights on the local machine.

See Also

" The system default List format" on page 105

The system default List format

The Alarm List or Alarm Log contains by default the following information in the order shown:

- S.No. = Sequence Number
- Start Date
- Start Time
- Acknowledge Time
- End Time
- Object Name
- Worst Value
- Alarm Text
- Area Name
- Object Description
- Value
- Priority
- Alarm Number
- Acknowledge Date
- End Date
- Alarm State
- Driver Id.
- Node Id.
- User name
- The Icons

Restore the Alarm list default format

You can restore the alarm list format to the system default, restoring all the columns selected for display, column rankings, column header names and column widths with the column layout from the system default format.

To restore the system default alarm list format

1. Click in the alarm list or event list pane (right pane) of the **Active Alarms** form to bring the list view in focus.

2. Click **Customize** > **Alarm List Format** to open the **Alarm List Format** form. You can also click the **Format List** button in the toolbar to open the **Alarm List Format** form.

3. In the **Formats** group (lower part of the **Alarm List Format** form), select the Alarm List Format you want to restore the system default layout for. The upper part of the **Alarm List Format** form, will change, reflecting the column layout options for the selected Alarm List Format.

4. Click the **Default** button to insert the system default column layout into the selected alarm list format. The upper part of the **Alarm List Format** form, will change, displaying the system default column layout for the selected Alarm List Format.

5. Click the **OK** button to apply the alarm list format and close the **Active Alarms** form.

You can update the system default list format, creating your own column layout as the system default.

See Also

" The system default List format" on page 105

"Update the System default alarm list format" on page 106

Update the System default alarm list format

The column layout in the system default Alarm List Format can changed, creating your own column layout as the system default. The new column layout will be applied to the selected Alarm List Format every time the **Default** button in the **Alarm List Format** form is clicked to restore the default column layout.

The System Default Alarm List Format is specific to the configuration on the local machine and cannot be distributed to other machines or configurations.

> ⚠️ Once you have changed the system default Alarm List Format, you cannot restore it. The changes become the new system default.

By default, the menu option to update the system default Alarm List Format is disabled and must be enabled in order to update the system default.

Enable update of system default Alarm List Format update using the registry editor (This station only)

To enable updating system default Alarm List Format for all configuration operators on the local machine.

1. Open the **Registry Editor** form on the local machine. Click **Start** and type "Regedit.exe" in the search field of the **Windows Start** menu.

2. In the **Settings** folder in HKEY_CURRENT_USER\Software\Schneider Electric\IGSS32\V13.00.00\Alarm32_HKLM, right-click on the **allow save default** key and select **Modify**.

3. In the **Value Data** field of the **Edit DWORD (32-bit) Value** form, enter "1" and click **OK** to save.

4. Click **File** > **Exit** to exit the **Registry Editor** form and save the registry values.

Enable update of system default Alarm List Format update using the Configuration database (other stations)

You can use the Configuration database to enable this operator station or other IGSS stations update the system default Alarm List Format.

Microsoft Access must be installed on the machine in order to edit the configuration database.

1. On the local machine, start the Microsoft Access program and open the configuration database found in the configuration folder.

2. In **Tables** pane of Microsoft Access, double-click the **RegSettings** table to open the **RegSettings** table in the right pane of Microsoft Access.

3. In the **ValueName** column, find the **allow save default** key for the IGSS station you want to edit. The station identification is visible in the **Path** column and is expressed as StationA, StationB and so on.

4. In the **Value** column, enter "1" to enable updating the system default Alarm List Format for the selected IGSS station.

5. Click **Ctrl+S** to save the changes and click **File** > **Exit** to close the Microsoft Access program.

> You can find a list of the Station identification and the station name in the registry key HKEY_CURRENT_USER\Software\Schneider Electric\IGSS32\V13.00.00\CommDrv_HKLM\StationDatabase folder. The **Stationno** key is the station identification and the value in the **Stationno** key is the station name as it is defined in the **Configuration** tab of the **System Configuration** form.

See Also

"Save the list format as the default format" on page 108

Save the list format as the default format

When updating the system default Alarm List format, the Alarm List Format presently applied to the Active Alarms form is used. You can save the Alarm List Format as the system default Alarm List Format, effectively updating the system default.

By default, the menu option to update the system default Alarm List Format is disabled and must be enabled in order to update the system default.

To update the system default Alarm List Format you must:

1. Apply a the Alarm list Format you want to turn into the system default

If the alarm list format you want to use already is applied to the **Active Alarms** form, you can skip this step.

1. Click in the alarm list or event list pane (right pane) of the **Active Alarms** form to bring the list view in focus.
2. Click **Customize** > **Alarm List Format** to open the **Alarm List Format** form. You can also click the **Format** List button in the toolbar to open the **Alarm List Format** form.
3. In the **Formats** group (lower part of the **Alarm List Format** form), select the Alarm List Format you want to use. The upper part of the **Alarm List Format** form, will change, reflecting the column layout options for the selected Alarm List Format.
4. Click the **OK** button to apply the alarm list format to the **Active Alarms** form.

2. Save the Alarm List Format as the system default

In the **Active Alarms** form, click **Customize** > **Save as Format Default**.

See Also

"Update the System default alarm list format" on page 106

Sort the Event List

Change the sorting order in the list

The alarms or events in the alarm or event list are displayed using the default sort order. You can change the sort order of the displayed alarms or events, displaying the order which is relevant for your particular alarm processing, for example sorting the alarms in the list by alarm priority first and then the Alarm start date.

> The sort format can be applied to the Event list, Event log and Alarm log as well.

You can change the sort order in the Alarm list in two ways:
- Applying a Sort Format to the list
- Directly on the list

Applying a Sort format to the list

You can apply an existing sort format to the Alarm or event list. A Sort format is a collection of saved sort order set up, including sorting direction which can be applied to the alarm or event list. Sort formats can be created, edited and deleted freely by operators but cannot be distributed to other IGSS stations or other machines.

You can also restore the default sort order from the system by using Sort formats.

Directly in the list

You can change the sorting order directly in the Alarm/Event list or log by clicking on the column title you wish to use as sorting criterion. The sorting direction will toggle between ascending and descending when you click the column header, sorting the records in the Alarm/Event list or log.

See Also

"Create a new Sort format" on page 109

"Edit a Sort Format" on page 111

"Apply a Sort Format" on page 110

"Delete a Sort Format" on page 112

"Restore the default Sort Format" on page 112

Create a new Sort format

You can create a new Sort format to save the sort order of the alarm or event list in the Sort format and applying the Sort format to the alarm or event list.

Once an new Sort format has been created, other operators can also apply the format to the alarm or event list by selecting the format.

Sort Formats are available to all IGSS users and can be applied by any IGSS user of the configuration.

The Sort Format is specific to the IGSS configuration on the local machine and cannot be distributed to other machines or IGSS configurations.

> The sort format can be applied to the Event list, Event log and Alarm log as well.

To create a new Sort Format

1. Click in the alarm or event list pane (right pane) of the **Active Alarms** form to bring the list view in focus.
2. Click **Customize** > **Set Sort order** to open the **Set Sort Order** form. You can also click the **Sort Order** button in the toolbar to open the **Set Sort Order** form.

3. In the **Set Sort Order** form, click the **New** button to open the **New Format** dialog and enter a format name. The format name is not required to be unique and it is possible to create identical format names. It is recommended to create unique names to better distinguish formats from each other.

4. In the **Formats** group (lower part of the **Sort Order** form), make sure the new alarm list format is selected.

5. In the upper part of the **Set Sort Order** form, **Sort** group

   1. Select the column you want to change the sort order for and click the **Move Up**or **Move Down** buttons to change the sort order, moving the selected column up or down the column list.

   2. Select the **Ascending** / **Descending** options to change the sort direction of the selected column.

6. Select a new column and repeat step 5 until you are satisfied with the new sort order.

7. Click the **Save** button to save the column layout to the new Sort Format.

8. Click the **OK** button to apply the new Sort Format to the **Active Alarms** form.

See Also

"Edit a Sort Format" on page 111

"Apply a Sort Format" on page 110

"Delete a Sort Format" on page 112

"Restore the default Sort Format" on page 112

Apply a Sort Format

You can apply an existing Sort Format to the **Active Alarms** form, changing the sort order of the records in the Alarm or event list. Only one sort order can be applied to the **Active Alarms** form at a time.

The sort order is applied to all users and cannot differentiate between IGSS users.

> The sort format can be applied to the Event list, Event log and Alarm log as well.

To apply a new Sort Format

1. Click in the alarm list or event list pane (right pane) of the **Active Alarms** form to bring the list view in focus.

2. Click **Customize** > **Set Sort Order** to open the **Set Sort Order** form. You can also click the **Sort Order** button in the toolbar to open the **Set Sort Order** form.

3. In the **Formats** group (lower part of the **Set Sort Order** form), select the Sort Format you want to apply. The upper part of the Set Sort Order form, will change, reflecting the sorting order for

the selected Sort Format.

4. Click the **OK** button to apply the new sort order to the **Active Alarms** form.

See Also

"Create a new Sort format" on page 109

"Edit a Sort Format" on page 111

"Delete a Sort Format" on page 112

"Restore the default Sort Format" on page 112

Edit a Sort Format

You can edit an existing Sort Format, changing the column layout, order and header names.

The sort format can be applied to the Event list, Event log and Alarm log as well.

To edit a Sort Format

1. Click in the alarm list or event list pane (right pane) of the **Active Alarms** form to bring the list view in focus.
2. Click **Customize** > **Set Sort Order** to open the **Set Sort Order** form. You can also click the **Sort Order** button in the toolbar to open the **Set Sort Order** form.
3. In the **Formats** group (lower part of the **Set Sort Order** form), select the Sort Format you want to edit. The upper part of the **Set Sort Order** form, will change, reflecting the sorting order for the selected Sort Format.
4. In the upper part of the **Set Sort Order** form, **Sort** group, select the column you want to change the sort order for and click the **Move Up** or **Move Down** buttons to change the sort order, moving the selected column up or down the column list.
5. Select the **Ascending** / **Descending** options to change the sort direction of the selected column.
6. Select a new column and repeat step 5 until you are satisfied with the new sort order.
7. Click the **Save** button to save the column layout to the selected Sort Format.
8. Click the **OK** button to apply the new sort format to the Active Alarms form.

See Also

"Create a new Sort format" on page 109

"Apply a Sort Format" on page 110

"Delete a Sort Format" on page 112

Delete a Sort Format

You can delete an Sort Format, removing it from the list of formats.

The sort format can be applied to the Event list, Event log and Alarm log as well.

Once a format has been deleted, it cannot be restored. You must recreate it again if you want to apply the format to the **Active Alarms** form.

To delete an Sort Format

1. Click in the alarm list or event list pane (right pane) of the **Active Alarms** form to bring the list view in focus.

2. Click **Customize**> **Set Sort Order** to open the **Set Sort Order** form. You can also click the **Sort Order** button in the toolbar to open the **Set Sort Order** form.

3. In the **Formats** group (lower part of the **Set Sort Order** form), select the Sort Format you want to delete. The upper part of the **Set Sort Order** form, will change, reflecting the sorting order for the selected Sort Format..

4. Click the **Delete** button to delete the selected Sort Format

5. Click the **OK** button to close the **Active Alarms** form.

See Also

Restore the default Sort Format

When IGSS is installed, the program already contains a system default sort order already applied to Active Alarms list. When you create and apply sort formats to the Active Alarms list, the sort order will change to the new sort order.

You can restore the default sort order to the Active Alarms list by updating a sort format with the default sort order and then applying the sort format to the Active Alarms list.

The sort format can be applied to the Event list, Event log and Alarm log as well.

To restore the default sort format

1. Click in the alarm list or event list pane (right pane) of the **Active Alarms** form to bring the list view in focus.

2. Click **Customize**> **Set Sort Order** to open the **Set Sort Order** form. You can also click the **Sort Order** button in the toolbar to open the **Set Sort Order** form.

3. In the **Formats** group (lower part of the **Set Sort Order** form), select the Sort Format you want to restore the default sort order for. The upper part of the **SeetSort Order** form, will change, reflecting the sort order and sorting directions of the columns.

4. Click the **Default** button to insert the default sort order and sort direction into the selected sort format. The upper part of the **Set Sort Order** form, will change, displaying the new sort order. Format.

5. Click the **OK** button to apply the sort format and close the **Active Alarms** form.

See Also

"Create a new Sort format" on page 109

"Edit a Sort Format" on page 111

"Apply a Sort Format" on page 110

"Delete a Sort Format" on page 112

Chapter 3: The Super Alarm Program

3.1 What is Super Alarm ?

Definition

Super Alarm allows you to receive alarms from plants at remote locations via the Internet. These alarms can be viewed on so-called client PCs at one or more locations geographically removed from the plant.

Use

The following describes some typical situations where Super Alarm might be employed.

- Main plant responsible for alarm surveillance of one or more secondary plants
- Production operations HQ in a large production complex located away from actual production lines responsible for total production surveillance.
- Evening, night shift or weekend duty personnel carrying out surveillance responsibilities from their private residences.

3.2 How it works

The Super Alarm workflow

The following flowchart gives you an overview of the workflow involved in setting up and using Super Alarm.

For details about a step, click its box.
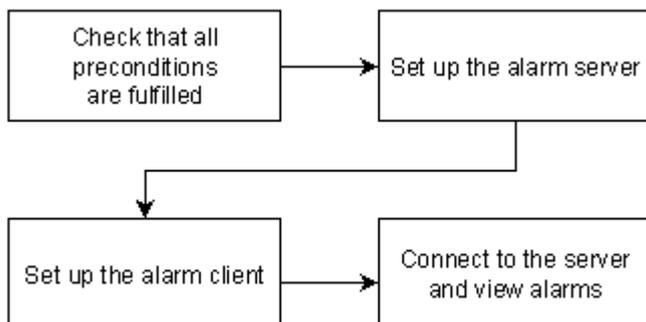
Graphical overview

The following figure shows a simple Super Alarm setup.
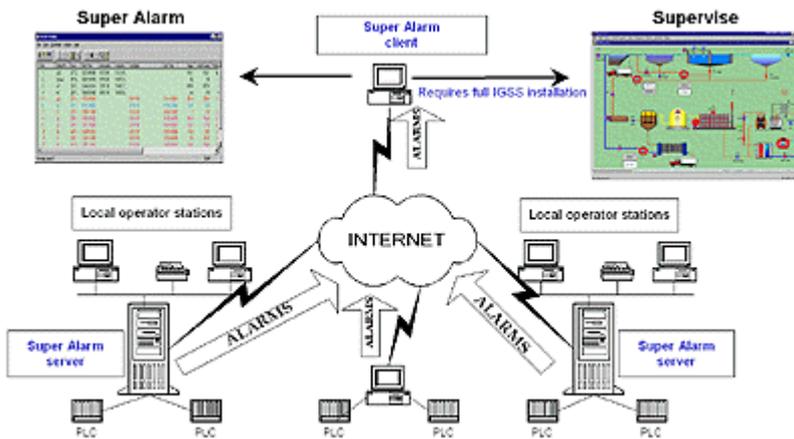
3.3 Before you begin

Before you start setting up the alarm server(s) and client(s), the following preconditions must be met:

- The **AMS/WinPager** option must have been purchased and installed on the alarm server(s).
- Each alarm that you want to view through Super Alarm must have the **To WinPager** option enabled
   (this is done as part of the alarm text definition)
- The alarm server(s) and client(s) must be connected to the Internet via TCP/IP

When these preconditions are fulfilled, click **See Also** to continue with the alarm server and client setup procedures.

See Also

3.4 Set up the alarm server

On the alarm server, you specify each user you want to authorize to view alarms via Super Alarm.

1. Open the **System Configuration**program.
2. Select the server station and click the **Access Control** tab.
3. Click **Add User**.
4. Type the appropriate user name and password and click OK.

   - The users permitted to use Super Alarm are completely separate entities from the users defined in User Administration. An authorised Super Alarm user need not necessarily be an authorised user in User Administration and vice versa.

5. Repeat steps 2 and 3 for all Super Alarm users.
6. In the **TCP/IP port** field, type the logical port number you want to use.

- It is recommended to use the default port number. Do not use port numbers lower than 4000, as they are often used for other purposes.

The Super Alarm server is now set up and the client can connect to the server using an authorized user name and password.

> To edit or remove a Super Alarm user, select the user name and click **Edit User** or **Remove User**, respectively.

3.5 Set up the alarm client

If you have a full IGSS installation, skip step 1.

1. It is recommended that you install the Demo version of IGSS onto your computer to run the Super Alarmprogram.

2. To start the Super Alarm program, make a shortcut to the Alarm program and add the command line parameter -s. Double-click the shortcut.

Show picture

1. Select **Internet** → **Configure Servers**.

2. Click **Add**.

3. Do one of the following:

   - In the **Server Name** box, type the computer name or host name of the alarm server (do not use the IGSS server name).
   - In the **IP Address** box, type the IP address of the alarm server.

2. In the **TCP/IP Port** number box, type the logical TCP/IP port number as specified in **System configuration** form on the alarm server.
   The default port number is automatically suggested.

3. In the **User name** box, type the name of an authorized user.

4. In the **Password** box, type the password.

5. In the **Description of server** box, you can type an optional description of the server.

Example

1. Click **OK**.

2. Repeat steps 4 to 10 for each alarm server you want to connect to.

3. Click **Close**.

- The alarms from the configured servers will now appear in the list. The **Server ID** column shows you which server sent the alarm. For an example, click **See Also**.

If you get three asterisks (***) in the **Server ID** column, the alarm client is not connected to the alarm server. In that case, check that the TCP/IP connection between the server and the client is properly configured.

3.6 Example: Viewing alarms from remote plants

In this example, the alarm client is connected to three different IGSS servers: The Main, East, and South plants.

Note that the **Server ID** column identifies the server which delivered the alarm. In this case, we have configured the servers with the full host name including the Web server name, for example, **South.sevent.dk**. Alternatively, you can use the computer name or the IP address of the alarm server. But the latter is, of course, harder to recognize for the user.

To show you what happens if the alarm client is not properly connected to the alarm server, a fourth IGSS server has been configured, **North.sevent.dk**. As you can see, three asterisks (***) appear in the **Server ID** column and the **Alarm text** "Not connected to server" is shown.

Chapter 4: Command Line Interface

4.1 Alarm: Command line interface

The command line interface is an alternative to the graphical interface to this program. It allows you to manipulate the program either directly from a command prompt or from the **Job Scheduler** Module.

Using this interface, you can automatically print the **Alarm List** with a fixed interval or activated on an event in the IGSS system. You can also send the output in an e-mail or export it as a comma-separated file (.csv)

Printing

There is no -print command as this function is subsumed in each command line parameter. All the listed Alarm command line parameters will therefore automatically send the alarm list to the printer, except the -af<filter name> parameter.

Syntax conventions

The following symbols are used:

Symbol	Description
Bold	Required parameter.
<placeholder>	Placeholder for a variable parameter.
| (pipe symbol)	Separates required parameters. You must use at least one of these parameters in the syntax and you may use two or more of them. **NOTE:** To separate these parameters, put a space between them.
[parameter**]**	Optional parameter that you may include in the command line.

Syntax

Use the following syntax (separate parameters with a space):

Alm -f<filter name> [-ds<start date>] [-ts<start time>] [-de<end date>] [-te<end time>] [-all] [-note] [-page]

You must check the **Prompt for period** box in the **Defining Filters for Alarm List** dialog when you create a filter that you will access from the command line. If disabled, Alarm will use the default period.

All Alarm command line parameters must be entered in lower case.

Parameter	Description
-f<filter name>	Define the alarm list filter to use for the print. If the name contains spaces, enclose the name in quotation marks (""). You can also use the root filters: "Active Alarms" and "Alarm Log". Do not include a space between the parameter -f and the filter name.
-af<filter name>	Change the filter used in the Active Alarm list. The Active Alarm list will start with this filter selected. This parameter will not send the alarm list to the printer.
-ds<start date>	Start date in the format yyyy/mm/dd or as an offset defined with the $ parameter (offset in days).
-ts<start time>	Start time in the format hh:mm:ss or as an offset defined with the $ parameter (offset in seconds).
-de<end date>	End date in the format yyyy/mm/dd or as an offset defined with the $ parameter (offset in days).
-te<end time>	End time in the format hh:mm:ss or as an offset defined with the $ parameter (offset in seconds).
-all	All columns are printed (otherwise the columns exceeding one page are not printed) This is equivalent to clearing the **Cut to paper Width** check box in the **Print** form.
-note	Includes alarm notes on the printout. This is equivalent to selecting the **Include Notes** check box in the **Print** form.
-page	Inserts page breaks after alarm notes. This is equivalent to selecting the **New page after note** check box in the **Print** form.
-landscape	Landscape makes alarm print in landscape mode.
-item	Define the contents to include in the Alarm print: • 0: Active Alarms • 1: Alarm log • 2: Active Events • 3 Event log
-format<name>	Name of the format to be used. If no format is defined, then the default format is used.
-csv	Output is to be exported as a comma-separated file (.CSV) and not printed.

Parameter	Description
	The comma-separated file must either be saved at a location using the -file<path> parameter and/or sent as an attachment to an e-mail message using the -mail<address> parameter. ⚠️ The -csv parameter must be specified using lowercase letters only. You can add a title to the e-mail message by using the -title parameter.
-file<path>	The full path to the destination file, including the name of the .csv file. The default filename is yyyy-mm-dd-hh-mm-ss.csv The default file path is the GSS folder of the local IGSS installation.
-mail<address>	The output is to be sent as an attachment to the recipient's e-mail address. If the output is to be sent to more than one e-mail recipient, separate any additional e-mail addresses with a semicolon. You do not need to use the -file<path> to include the .csv in the e-mail message, but if you do use the -file<path> parameter, then the specified file will be included in the e-mail message. If you do not use the -file<path> parameter, the default file name will be used for the e-mail attachment. Do not include a space between the parameter -mail and the e-mail address.
-title	The subject line in the e-mail message.
-lfmt<format>	Name the alarm list format to be applied to the alarm report, where the <format> is the format name to be applied.
-appenddate	Adds the current date and time to the filename. If you have used the -ds (start date) and/or -ts (start time) parameters , the defined start date and start time will be used instead.
-ymdfolders	Creates year, month and day sub folders to store alarm list reports when saving alarm list reports as a .CSV file to a specified destination. This parameter should be used with the -file<path> parameter.

The parameter elements may not contain parameters of another alarm parameter. For example -affil-ter-all contains the filter name filter-all where -all at the same time is a valid alarm parameter

Job Scheduler example

This example prints the alarms matching the **Analog Alarms** filter. The start date is set to the previous day ($date-1) and end date is set to today $(date). Start time (-ts) and end time (-te) are both set to 7:00 a.m. All columns are printed and alarm notes are included.

Program path:

```
"[IGSS InstallPath]\Gss\Alm.exe"
```

Parameters:

```
-f"Analog Alarms" -ds$(date-1) -ts07:00:00 -de$(date) -te07:00:00 -all
-note
```

Working folder:

-

Command prompt example

This command line prints all alarms matching the **Purification** filter from the previous day. The printout shows all columns and includes alarm notes.

```
Alm -fPurification -ds$-1 -ts00:00:00 -de$ -te00:00:00 -all -note
```

Alarm Command Line Example

Alm -f"Priority5 and 6" -all -csv -maildk-igss-support@schneider-electric.com

Documentation item	Description
Getting Started	An introduction to IGSS and its most fundamental terms and features. Getting Started is intended to get you up and running as fast as possible. The manual provides a system and architecture overview followed by a number of real-life use cases you can go through before building your first real IGSS project. The manual is available in Adobe Acrobat format (.pdf).
Module help	For each module there is a help file with the same name as the module itself, for example, Def.chm for the Definition module. The help file is invoked by clicking the in the upper right corner of the module. The Table of Contents will then allow you to browse through the topics.
Form and Dialog help	For each Form or dialog there is a help topic with the following standard information: - Overview - Preconditions - Where do I find it? - Field help Form help is invoked by clicking the help button in the upper right hand corner of the dialog box or located in the Table of Contents of the individual help file.
Thematic help	IGSS also provides thematic help. When there is a special theme that requires special attention from the user, a dedicated help file is provided. Examples include "Driver-Specific Help" and "Database Administration Help".

Where are the help files located?

The IGSS help files are located in the appropriate language folder in the installation path of IGSS, by default C:\Program Files\Schneider Electric\IGSS32\V13.0. The help files are available in English at release time.

The paths to the help files are:

Language	Path
English	[IGSS InstallPath]\ENG
Danish	[IGSS InstallPath]\DAN
German	[IGSS InstallPath]\DEU

Translated help files

Selected help files have been translated into Danish. If you require help files in your language, please contact Schneider Electric.

Help updates

The help files are continuously updated and improved. Check regularly with the IGSS Update in the IGSS Master.

5.3 Version Information (IGSS Help System)

© Schneider Electric, IGSS Version 13.0

The IGSS help files are based on software build number 10305 (initial release)

English help files

To update the help files, click the **Update IGSS Software** button on the **Information and Support** tab in the **IGSS Master**. There must be a connection from the PC to the Internet. Every time **IGSS Update** is run, IGSS help files as well as IGSS system files will automatically be updated on the PC from the web server at Schneider Electric.

You select the languages you want to update in the **Tools** menu of the **IGSS Update** form.

If you are not able to update the IGSS system directly via the Internet, the alternative is to download the updates from the Schneider Electric website as zip files. These can then be transferred onto a CD or USB memory stick, which is then the medium used to update on site.

> After updating your IGSS installation , the build numbers in various IGSS modules may change to a higher number. This signifies that the module in question has been updated with newer files. Build numbers consist of four digits, where the first digit represents the year and the last three represent the day number in the year in question. The build number can be seen in the **About** dialog box which can be activated from the **Help** menu.

An example:

Build number = 10305
18 = the year 2018
305 = The 305th day of the year

Chapter 6: **Glossary**

A

Application menu

The Application menu is the first ribbon in the IGSS Master module. Click the icon to drop down the menu. The menu contains items that were typically found in the File menu in previous versions of IGSS. In most modules, an "Options" item allows the user to define global module settings. The Application menu was introduced in the Microsoft Office 2010 package. It replaces the Application button (nicknamed Doughnut) which was introduced in IGSS V7 and V8.

D

descriptor

A descriptor is the graphical display of an object. IGSS includes many types of descriptors including: - Built-in standard symbols - Animated symbols (Symbol Factory library) - Graphics and animation - Drawing symbols - Windows controls - ActiveX controls An IGSS object can be represented with different descriptors on different diagrams.

R

Ribbon

The Ribbon is a new term/element in the Microsoft universe. The Ribbon replaces the well-known toolbars in applications. The Ribbon provides quick access to the most commonly used functions in the application. The Ribbon is divided into logical groups (the tabs) and each tab is divided into sections (the blocks in the tab). The Ribbon is context-sensitive which means that only relevant functions are accessible dependent on the current user action.

S

SCADA

Supervisory Control & Data Acquisition

U

UTC

Universal Time Coordinated (formerly Greenwich Mean Time), used as the basis for calculating time in most parts of the world. IGSS uses this time format internally in the database. You can switch between UTC and local time by enabling or disabling the "UTC" field in various dialog boxes in the system.