Alarm User Guide
IGSS Version 10.0

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.

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

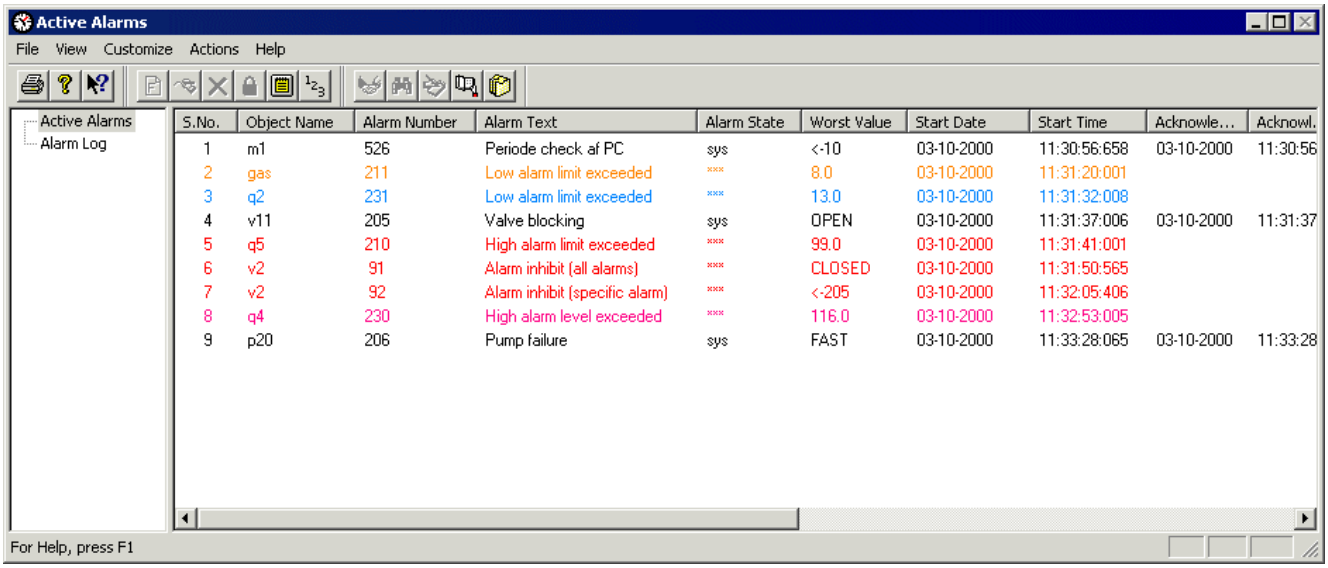
The alarm icon is permanently displayed, either in the taskbar in the bottom of the screen, provided that the taskbar is enabled for your application, or in a predefined spot on the screen, irrespective of which process diagram is currently being displayed.

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

Active Alarms	Alarm Log
	the alarm list AND the 'old' 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 log display limits

The alarm log will only display alarm log entries if the number of alarm log entries is below the defined maximum number of alarm log entries permitted. If the number of alarm log entries exceeds the maximum, you must create and apply an alarm filter to display the desired alarm log entries.

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

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.

Interpret the contents of the list

The complete alarm list and alarm log provide the following information about the process alarm:

- 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

- You can adjust the information displayed or printed in the alarm list or log according to your own requirements. Not all of the above details need to be included in the list.

See also

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 al
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.

Alarm Number	Description
46	Connection to the PLC program is missing. The physical connection may be in order, but for some reas 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.
87	This alarm is used when the Data Collector encounters an unexpected error. The alarm text is "Interna The Data Collector will attempt to recover and if no more errors occur the alarm will be ended. If the D not recover, the Data Collector will be terminated and restarted by the IGSS Master. When this alarm 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 su** group on the **Data Collection** tab in the **System Configuration** form.
88	Logging of **LOG**, **BCL** and alarms to disk is stopped for any reason. Any error writing to the LOG, BCL a 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 c 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 valu
95	The current disk usage exceeds the High Alarm value of the predefined System object. The default val All writing to the harddisk is suspended when this alarm occurs and log files (*.log) or base class files 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 that it is unable to find a matching alarm text for. This situation could arise if an alarm text was modifi lation of the configuration.
100	(reserved for future use by the system)

See Also

"Driver error codes in the Alarm List" on page 14

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 soft-ware	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 15

"List of general driver error codes" on page 15

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 15

"Driver error codes in the Alarm List" on page 14

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 number	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

Alarm number	Alarm text	Communications error text
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 Clear-CommError() in	COMMERRORI
25	Errors reported by Clear-CommError() in	COMMERRORO
40	In remote PLC reported by protocol	PLCSYSERR
41	Message protocol errors while input	PROTOCERRI
42	Message protocol errors while output	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 Alarm-Net	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 description** 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
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

Worst value[1]	Error Description	Internal error text
0x00e1	**Cause:** An event telegram was received with a bad type value. **Action:** Check the PLC program that sends the telegrams	_7TPOLLED_BAD-TYPE
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 address request with wrong type. **Action:** Check the PLC program that sends the telegrams	_7TPOLLED_BAD-CONT
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_MINOR-STATE_ERROR
0x00e6	**Cause:** Unable to establish call **Action:** Check modem and phone line	_7TPOLLED_ DIALUP_CON-NECT_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_DIS-CONNECT_TIME-OUT
0x00e9	**Cause:** No valid response to historical data request **Action:** Check quality of phone line.	_7TPOLLED_ DIALUP_HIST-DATA_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 Configuration** form > **Modem** > **Remote**.	_7TPOLLED_ DIALUP_PREE-VENT_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_ILLE-GAL_NODE_NO

Worst value[1]	Error Description	Internal error text
0x00ed	**Cause:** Unable to establish call to PLC. **Action:** Check phone number, modem and cable.	_7TPOLLED_ DIALUP_CON-NECT_FAILED
0x00ee	**Cause:** Timeout writing scan complete indication to the PLC **Action:** Check for correct Data Group and Word Offset and value in the **System Configuration** form > **Modem** > **Remote**	_7TPOLLED_ DIALUP_POST-EVENT_TIMEOUT
0x00ef	**Cause:** Too long outbound message. **Action:** Check for correct segment size in **System Configuration** form.	_7TPOLLED_OUT-BOUND_LEN_ ERR
0x00f0	**Cause:** Too long outbound mailbox message **Action:** Check for correct segment size and mailbox size in the **System Configuration** form.	_7TPOLLED_MAIL-BOX_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 7T	_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_ELINK-DOWN
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_ENO-MOREBUF
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_EIL-LEGALNODE

[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 right 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 23

Inhibit Notifier Alarms

"Remove Notifier Inhibition" on page 26

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 21

Inhibit Notifier Alarms

"Remove Notifier Inhibition" on page 26

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

Select this option to inhibit all new alarms that have been configured for the selected object and originate from the object from being forwarded to the Notifier module for processing. The active alarm will not be

inhibited and must be processed normally. All alarms from the object will still be registered in the Active Alarms form and will not be sent to the Notifier module.

A new system alarm number 93 with the text *Notifier Inhibit* will be created in the **Active Alarms** form to track the alarm inhibition.

You can reactivate the inhibited Notifier alarms in the **Active Alarm** form or directly on the object in the Supervise module.

See Also

Inhibit Notifier

"Remove Notifier Inhibition" on page 26

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

"Inhibiting Alarms" on page 21

"Reactivating inhibited alarms" on page 23

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 user right to remove an alarm is connected to the **Enable Inhibit alarms menu** check box found on the **Supervise & Language** tab of the **System Configuration** form. If the **Enable Inhibit alarms menu** check box has been selected, you can remove alarms.

1.6 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: 

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 right 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: 

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 

if you wish to print out your comment together with alarm information.

See also

1.7 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

1.8 Customizing, Sorting and Filtering

Change the list format

Rearrange the columns

1. Open the **Alarm List** and make sure focus is on the right side of the list by clicking it with the mouse cursor.
2. In the **Customize** menu, select **Alarm List Format....** .
3. The **Configure Columns** dialogue appears on the screen.
4. The columns are arranged in the order shown in the **Columns Displayed** list.
5. To change that order, select the title you wish to advance to the left or move to the right, and press Move Up or Move Down respectively.
6. Save your settings with OK; the **Alarm List** or **Event List** will now rearrange its columns accordingly.

- With Default and OK you can at any time reset the format to its original status. This may be the default setting or a default format which you have set yourself using the Save Format as Default command.

See also

Rename a column

1. In the **Customize** menu, select **Alarm List Format....** .
2. The **Configure Columns** dialogue appears on the screen.
3. In the **Columns Displayed** list, select the column whose title you wish to rename.
4. The selected name will appear in the window immediately above the list.

5. Now, overwrite the 'old' name by the new one and confirm with OK.

- With Default and OK you can at any time reset the format to its original status . This may be the default setting or a default format which you have set yourself using the Save Format as Default command.

See also

Remove columns

Using menu functions

1. In the **Customize** menu, select **Alarm List Format....** .
2. The **Configure Columns** dialogue appears on the screen.
3. In the **Columns Displayed** list, select the title you wish to delete.
4. Click on <- Remove to delete the title.
5. Confirm with OK

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.

- With Default and OK you can at any time reset the format to its original status. This may be the default setting or a default format which you have set yourself using the Save Format as Default command.
- 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.

See also

Add columns

Using menu functions

1. In the **Customize** menu, select **Alarm List Format**..
2. The **Configure Columns** dialogue appears on the screen.
3. In the **Available Columns** list, select the column title you wish to add.

4. Click on ADD -> to insert the name in the **Columns Displayed** list.
5. Confirm with OK.

- With Default and OK you can at any time reset the format to its original status. This may be the default setting or a default format which you have set yourself using the Save Format as Default command.

Directly in the list

1. 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.

- 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.

See also

Change the column width

Using menu functions

1. In the **Customize** menu, select **Alarm List Format**.
2. The **Configure Columns** dialogue appears on the screen.
3. In the **Columns Displayed** list, select the title of the column whose width you wish to change.
4. The current width of this column is displayed in the **Width** field.

5. Enter a new value to change the size of the column and confirm with OK:

Directly in the list

1. Click on the right-hand edge of the column whose size you wish to reduce or widen, 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 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.

- With Default and OK you can at any time reset the format to its original status. This may be the default setting or a default format which you have set yourself using the Save Format as Default command.

See also

Save the selected list format as default

Save the list format as the default format

Background information

A specific format of the alarm list can be saved in order to act as the default format for all subsequent display operations. The characteristics of this format are defined in the **Configure Columns** dialogue. As a result, any settings that might be carried out in the **Configure Columns** dialogue at later stages can be conveniently reset to the preset default format by simply pressing the **Default** button of this dialogue.

Procedure

1. Go **Customize** → **Alarm List Format ...**. The **Configure Columns** dialogue appears.
2. Set the format of the alarm list as required.
3. Confirm with **OK**.
4. Now, select **Customize** → **Save Format as Default** and activate this command with a mouse click. The format set in the **Configure Columns** dialogue will now act as the default format. As a result, pressing the **Default** button in the **Configure Columns** dialogue will have the effect of reverting all format changes to the preset default format.

- If no user-specific default format was set, or if the system designer has disabled the **Save Format as Default command,** pressing the **Default** button in the **Configure Columns** dialogue restores the IGSS default format.

See also

Sort the alarm messages

Change the sorting order in the list

There are two different ways to sort the lines of the list and define the sorting criteria:

- using the functions of the **Customize** menu
- directly in the list

- The alarm list is displayed and you wish to have all alarms sorted according to their time of occurrence so that the most recent alarm is shown at the top of the list. This information is registered in the Start Time column.

Using menu functions

1. In the **Customize** menu, select the edit function **Set Sort Order ...**
2. The **Sorting Order** dialogue appears on the screen.
3. In the table, click on the **Start Time** entry.
4. Select Descending and keep on clicking on Move Up to step by step move **Start Time** to the top of the list.
5. Confirm with OK
6. The alarm messages are now sorted so that the most recent alarms are at the top of the list and the oldest alarms are displayed at the end of the list.
7. Generally, you define the priorities of the sorting criteria by sorting the column titles in the table using Move Up and Move Down, and for each sorting criterion you decide whether it is to be applied in Ascending or Descending order.

Directly in the list

You can change the sorting order directly in the alarm list (or: alarm log) by clicking on the column title you wish to use as sorting criterion. For our example:

1. Click on the column title **Start Time**.
2. You will see that the list is immediately sorted in chronological order, i.e. the most recent alarms are shown on the top of the list.
3. If you click once again on **Start Time**, the order is reversed and the 'oldest' messages are moved to the top of the list.

- The default sorting criterion is: Alarm State
- With Default and OK you can at any time reset the format to its original status. This may be the default setting or a default format which you have set yourself using the Save Format as Default command.

See also

Filter out specific information from the list

Define a new filter

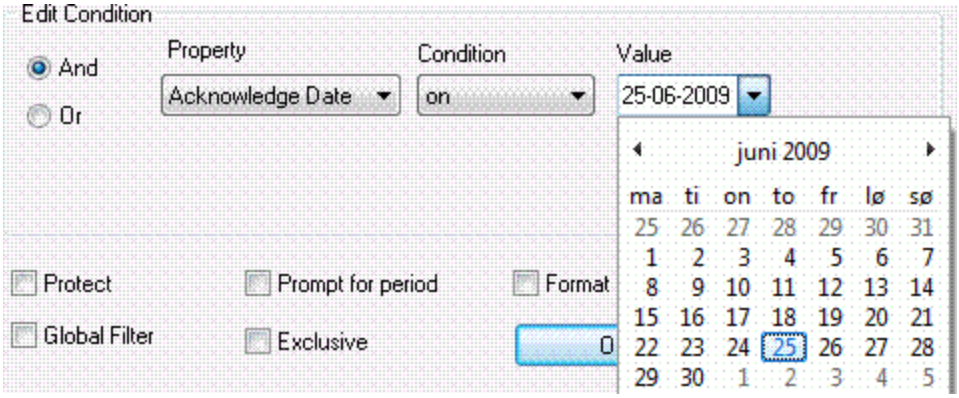
The **Customize** menu provides three functions that help you to define and edit filter criteria for for filters in the **Alarm List** or **Event List**: **New Filter Edit Filter** and **Delete Filter**.

- To set a new filter, you must have selected **Active Alarms**/**Alarm Log** or **Active Events/Event Log** in the **Tree View** in the left-hand section of the screen.
- You wish to see all acknowledged messages that have occurred in the period from April 10 to April 15, 1997. We will define and save three filter conditions and logically link them by an AND operator. This filter criterion is then saved under the name of "Filter1".

Procedure

1. Press **Customize** → **New Filter**.
2. The dialogue **Defining Filters for Alarm List** is opened.

3. Under **Edit Conditions**, define the **Begin Date.**



4. Click **Add to List** to save the first condition in the **Existing Filter Conditions** table.
5. Select the logical operator **AND.**
6. Now define the **End Date** and again save it with **Add to List**.
7. Again, select **AND** as the logical operator.
8. Finally, define the third condition:
   Property: Acknowledge Date
   Condition: between
   Value: set date and time of the interval
9. Save the third condition with **Add to List**.
10. Now name the new filter 

11. Confirm / Save with 
.

To display a list containing only those messages that meet the new filter criteria, close the **Defining Filters for Alarm List** dialogue and navigate to the **Tree View**, on the left-hand section of the screen. Click Active Alarms and select Filter1.

- The Alarm Log has the default filter **Past 1day Log** which may have been enabled or disabled for your application by the system design engineer. This standard filter can neither be changed nor deleted.

Format as 'Alarm Print'

If this option is selected, up to three extra lines will be shown for each alarm. These will show the historic object value, as it was, when the alarm was started, acknowledged or ended. This format is equal to the format used for alarm list printouts.

See also

Edit an existing filter

The **Customize** menu of the Menu Bar provides THREE functions that help you to define and edit filter criteria for the display of the alarm list or the alarm log: **New Filter, Edit Filter and Delete Filter**.

To edit an existing filter, you must have selected **Active Alarms**/**Alarm Log** or **Active Events/Event Log** in the **Tree View** in the left-hand section of the screen, and in the tree branch - the filter you wish to change.

Procedure

1. In the Menu Bar, select **Customize→ Edit Filter**.
2. The dialogue **Defining Filters for Alarm List** is opened.
3. In the list **Existing Filter Conditions**, select the filter criterion you wish to change.
4. Under **Edit Conditions**, modify the filter condition and confirm with **OK.**
5. In the **Save Filter as** box you may save the modified filter under the same name, or create an additional filter by saving it under a new name.

- The **Alarm Log** has the default filter **Past 1day Log** which may have been enabled or disabled for your application by the system design engineer. This standard filter can neither be changed nor deleted.

Note: If the filter is protected, you must have the **Can Administer** right to edit it. User rights are defined in the **User Administration** program.

See also

Set a default Active Alarm list filter

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

The default filter will be applied when you open the Alarm Module.

1. Select the filter you want to set as the default. The system default is the root filter named **Active Alarms**.
2. Select **Customize → Set as Default Filter** or click the corresponding icon in the toolbar,  . Notice that the padlock is recessed when you select the default filter.

Set a default Alarm log filter

If the alarm log limit of 10,000 records is exceeded, the Alarm log list will not be displayed.

If you want to see the alarm log list, you must create an Alarm log filter in order to filter and display the Alarm log list.

You can create a default alarm log filter which will automatically filter the alarm log list when you click the **Alarm log** folder in the left pane of the **Alarm list** form.

To create a default Alarm log list filter, you must create an Alarm log filter and make sure to include an asterisk '*' to the filter name.

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".

You can only have one default Alarm log list filter.

See Also

"Define a new filter" on page 54

Delete an existing filter

The **Customize** menu of the Menu Bar provides THREE functions that help you to define and edit filter criteria for the display of the alarm list or the alarm log: **New Filter, Edit Filter and Delete Filter**.

To delete an existing filter, you must have selected **Active Alarms**/**Alarm Log** or **Active Events/Event Log** in the **Tree View** in the left-hand section of the screen, and in the tree branch - the filter you wish to remove.

Procedure

1. In the Menu Bar, select **Customize→ Delete Filter**.

CAREFUL

The filter is deleted IMMEDIATELY and WITHOUT any further confirmation !

- The **Alarm Log** has the default filter **Past 1day Log** which may have been enabled or disabled for your application by the system design engineer. This standard filter can neither be changed nor deleted.

See also

1.9 Printing Alarms

Direct alarm message printing

The system designer defines the alarm printer in the **System Configuration** program. For each object in the configuration the system designer decides whether or not to print alarm messages directly. If the option is enabled, the alarm message will be printed on the alarm printer.

The operator has no access to the above functions.

If enabled by the system designer, the plant operator has the right to save the current alarm list format as the default format for direct alarm message printing.

See also

Use the alarm list format for direct message printing

A specific format of the alarm list can be saved in order to act as the default format for message logging on the alarm printer. The characteristics of this format are defined in the **Configure Columns** dialogue. As a result, any settings that might be carried out in the **Configure Columns** form at later stages can be conveniently reset to the preset default format by clicking the **Default** button in the **Configure Columns** form .

Procedure

1. Go **Customize → Alarm List Format ...**. The **Configure Columns** dialogue appears.
2. Set the format of the alarm list as required.
3. Confirm with **OK**.
4. Now, select **File → Save Format for Alarm Printer** and activate this command with a mouse click. The format set in the **Configure Columns** dialogue will now act as the default format for alarm printing. As a result, pressing the **Default** button in the **Configure Columns** dialogue will have the effect of reverting all format changes to the preset default format.

- If no user-specific default format was set, or if the system designer has disabled the **Save Format for Alarm Printer** command, pressing the **Default** button in the **Configure Columns** dialogue restores the igss default format.

See also

Printing the alarm list /alarm log

Printing out the Alarm List or Alarm Log as it is displayed on the screen.

1. In the menu bar, select **File → Print.**
2. Make your selections in the **Print** dialogue.
3. Confirm with **OK**.

- **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

Alarm: Command line interface

Introduction

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)

Procedure

Click here to learn how to use the command line interface either with the **Job Scheduler** Module or the Windows command prompt.

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.
- The last three command line parameters are equivalent to the three check boxes in the print dialogue of the alarm program.

Parameter	Description
-f<filter name>	Name of the filter to use. If the name contains spaces, enclose the name in quotation marks (""). You can also use the root filters: "Active Alarms" and "Alarm Log".
-ds<start date>	Start date in the format yyyy/mm/dd or as an offset defined with the $ parameter (off-set in days).

Parameter	Description
-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)
-note	Includes alarm notes on the printout.
-page	Inserts page breaks after alarm notes.
-landscape	Landscape makes alarm print in landscape mode
-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. 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.
-title	The subject line in the e-mail message.

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
```

1.10 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:

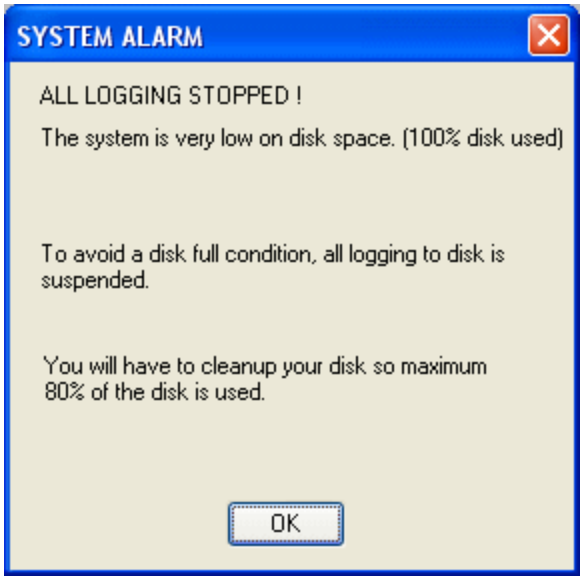


Figure 1: Basic System alarm message

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:

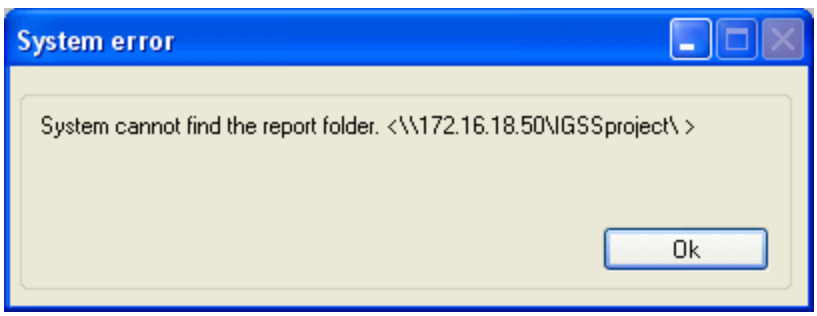


Figure 2: Cannot find the report folder warning

[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:

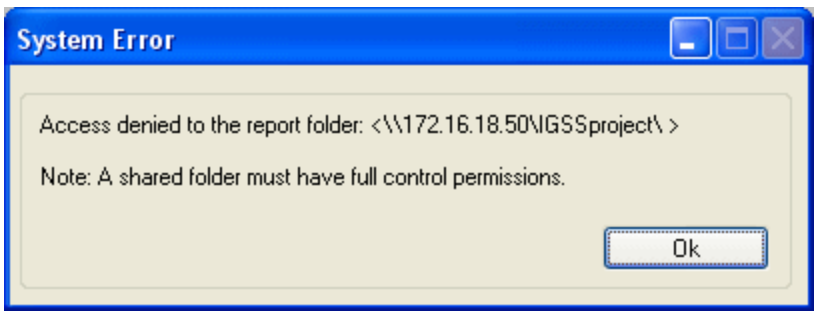


Figure 3: Access denied warning

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

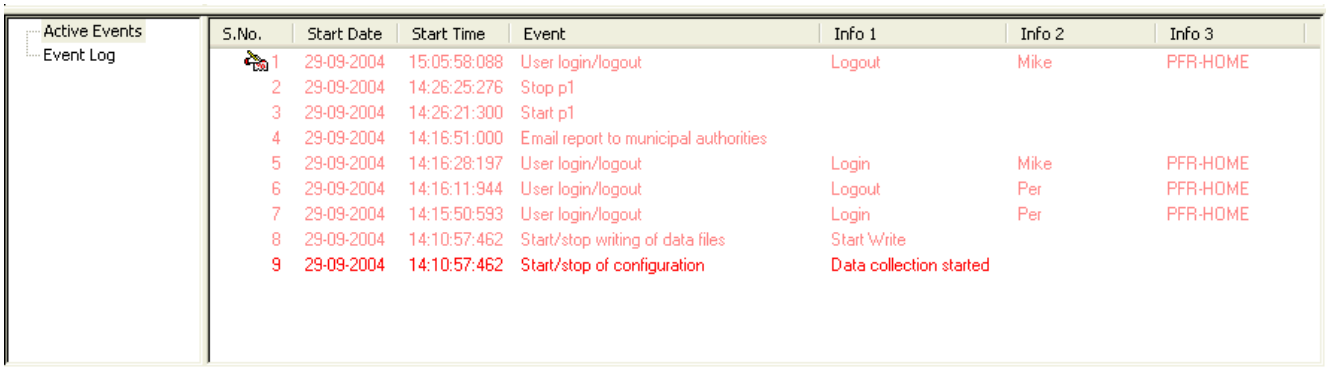
2.1 What is the Event List ?

The operator uses 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 both from the **Definition** program and the **Supervise** program.

The Event List is presented just below the Alarm List. 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.

As is the case for the Alarm List, columns can be rearranged and the events can be sorted differently.

For details about the individual event types, the fields in the list, etc., read the other topics in this book or click the **See Also** button.



2.2 Active Events and the Event Log

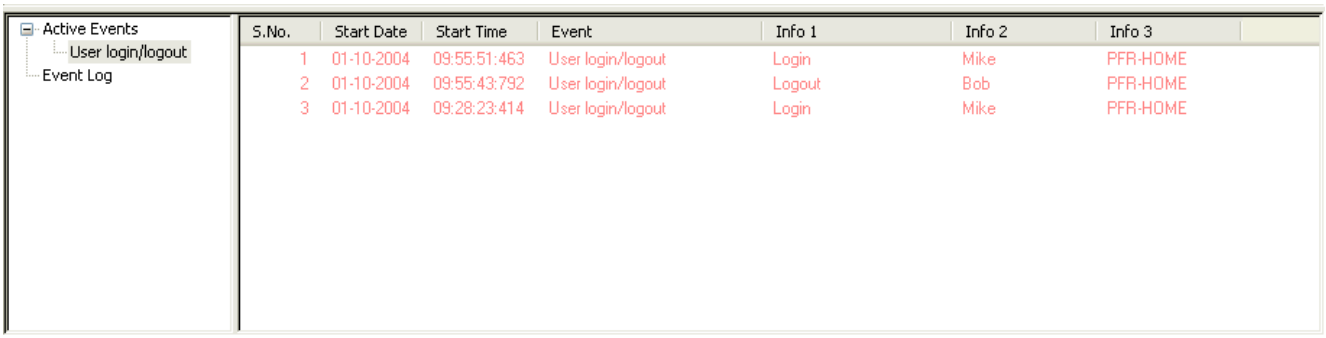
The Event List has two root nodes in the tree view.

- The **Active Events** node shows all events from the last hour or the 500 latest events.
- The **Event Log** node shows all historical and active events. The max. no. of events in the list is governed by the **Max. alarm log entries** setting on the **Alarm** tab of the **System Configuration** program. Please 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.

Defining filters is very easy. Click here for details.

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.



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.

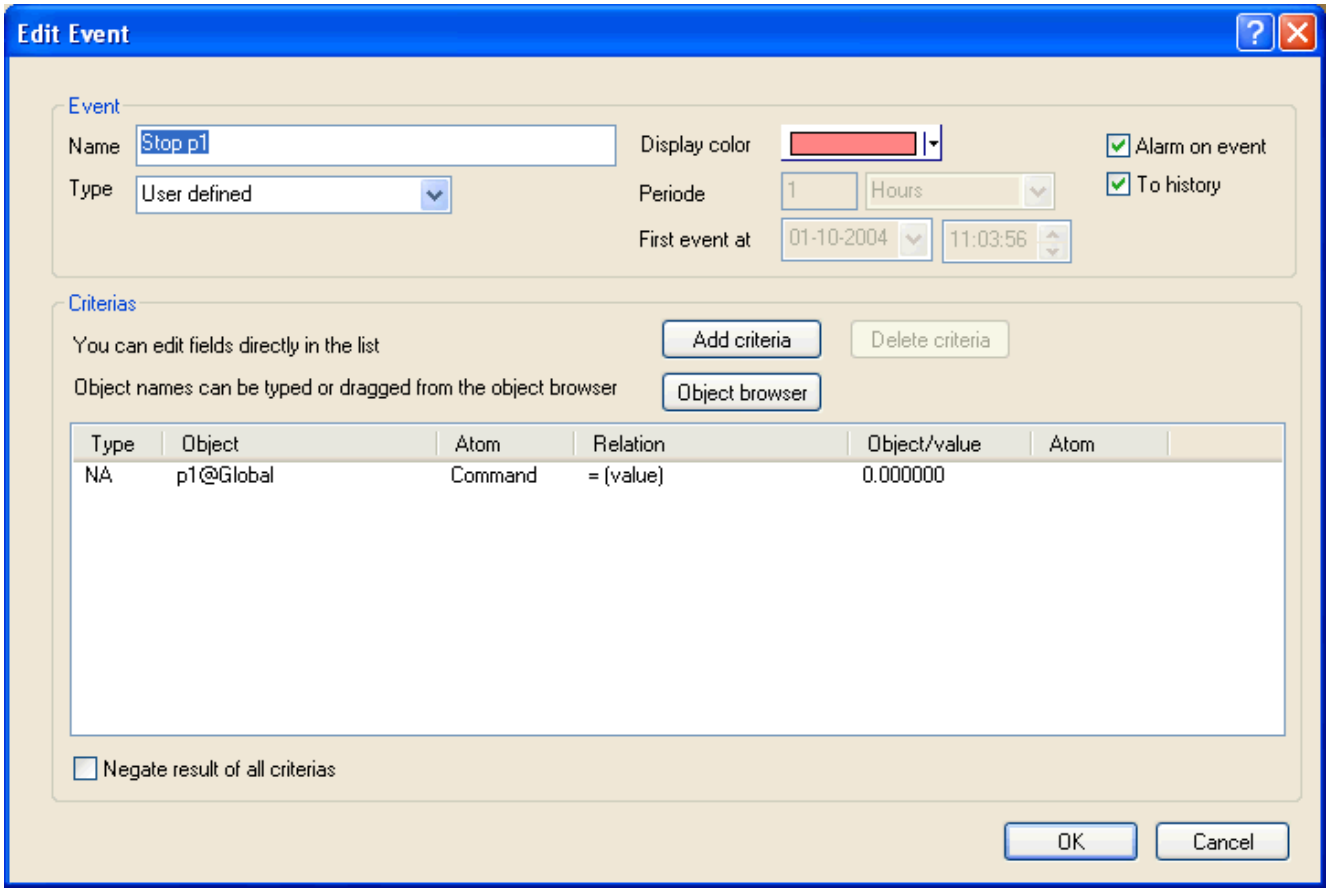
For an overview of the event types, click the header in the table.

Event type	Event	Info 1	Info 2	Info 3
OP Con-nect/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
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 hex-adecimal)	Error code, subcode (decimal or hexadecimal)

2.4 Showing events in the Alarm List

Enabling alarm on event

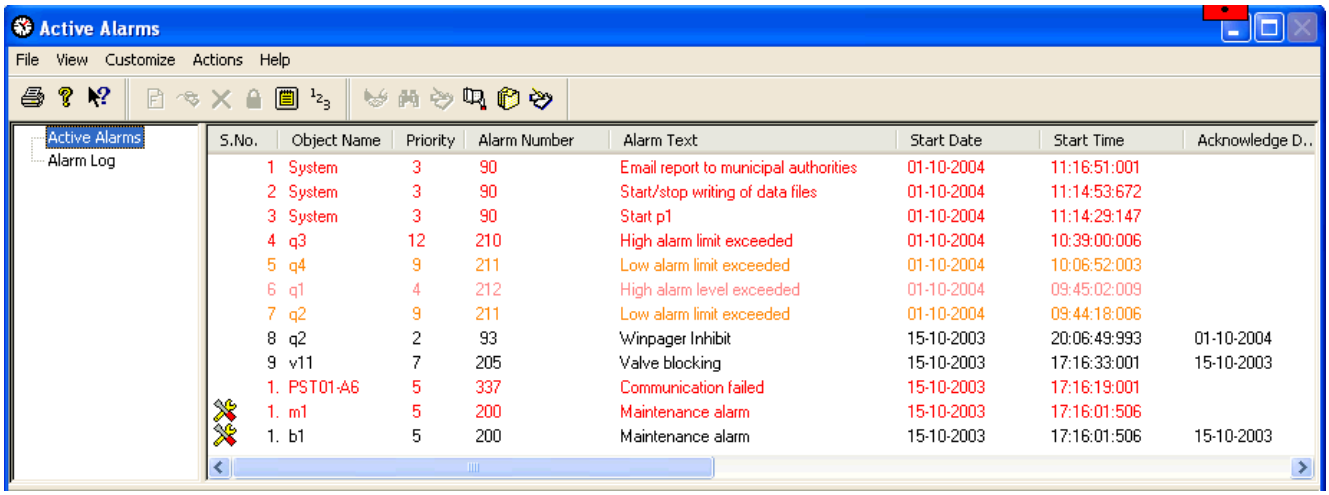
When new events are defined, it is possible to enable the **Alarm on event** check box. This means that the event will appear both in the Event List and in the Alarm List. The operator will thus see the number of alarms change in the **Alarm Icon** and see the alarm in the list.



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** program.

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

Change the list format

Rearrange the columns

1. Open the **Alarm List** and make sure focus is on the right side of the list by clicking it with the mouse cursor.
2. In the **Customize** menu, select **Alarm List Format....** .
3. The **Configure Columns** dialogue appears on the screen.
4. The columns are arranged in the order shown in the **Columns Displayed** list.
5. To change that order, select the title you wish to advance to the left or move to the right, and press Move Up or Move Down respectively.
6. Save your settings with OK; the **Alarm List** or **Event List** will now rearrange its columns accordingly.

- With Default and OK you can at any time reset the format to its original status. This may be the default setting or a default format which you have set yourself using the Save Format as Default command.

See also

Rename a column

1. In the **Customize** menu, select **Alarm List Format....** .
2. The **Configure Columns** dialogue appears on the screen.
3. In the **Columns Displayed** list, select the column whose title you wish to rename.
4. The selected name will appear in the window immediately above the list.

5. Now, overwrite the 'old' name by the new one and confirm with OK.

- With Default and OK you can at any time reset the format to its original status . This may be the default setting or a default format which you have set yourself using the Save Format as Default command.

See also

Remove columns

Using menu functions

1. In the **Customize** menu, select **Alarm List Format....** .
2. The **Configure Columns** dialogue appears on the screen.
3. In the **Columns Displayed** list, select the title you wish to delete.
4. Click on <- Remove to delete the title.
5. Confirm with OK

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.

- With Default and OK you can at any time reset the format to its original status. This may be the default setting or a default format which you have set yourself using the Save Format as Default command.
- 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.

See also

Add columns

Using menu functions

1. In the **Customize** menu, select **Alarm List Format**..
2. The **Configure Columns** dialogue appears on the screen.
3. In the **Available Columns** list, select the column title you wish to add.
4. Click on ADD -> to insert the name in the **Columns Displayed** list.
5. Confirm with OK.

- With Default and OK you can at any time reset the format to its original status. This may be the default setting or a default format which you have set yourself using the Save Format as Default command.

Directly in the list

1. 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.

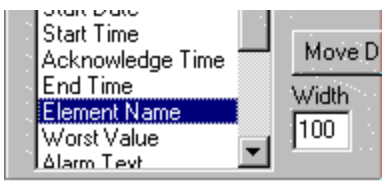
- Only a column which was removed (collapsed) directly in the list by dragging its right-hand limiting line to the left until clearance, can be retrieved again directly in the list, without using menu functions.

See also

Change the column width

Using menu functions

1. In the **Customize** menu, select **Alarm List Format**.
2. The **Configure Columns** dialogue appears on the screen.
3. In the **Columns Displayed** list, select the title of the column whose width you wish to change.
4. The current width of this column is displayed in the **Width** field.



5. Enter a new value to change the size of the column and confirm with OK:

Directly in the list

1. Click on the right-hand edge of the column whose size you wish to reduce or widen, 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 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.

- With Default and OK you can at any time reset the format to its original status. This may be the default setting or a default format which you have set yourself using the Save Format as Default command.

See also

Save the selected list format as default

Save the list format as the default format

Background information

A specific format of the alarm list can be saved in order to act as the default format for all subsequent display operations. The characteristics of this format are defined in the **Configure Columns** dialogue. As a result, any settings that might be carried out in the **Configure Columns** dialogue at later stages can be conveniently reset to the preset default format by simply pressing the **Default** button of this dialogue.

Procedure

1. Go **Customize → Alarm List Format ...**. The **Configure Columns** dialogue appears.
2. Set the format of the alarm list as required.
3. Confirm with **OK**.
4. Now, select **Customize → Save Format as Default** and activate this command with a mouse click. The format set in the **Configure Columns** dialogue will now act as the default format. As a result, pressing the **Default** button in the **Configure Columns** dialogue will have the effect of reverting all format changes to the preset default format.

- If no user-specific default format was set, or if the system designer has disabled the **Save Format as Default command,** pressing the **Default** button in the **Configure Columns** dialogue restores the IGSS default format.

See also

Sort the alarm messages

Change the sorting order in the list

There are two different ways to sort the lines of the list and define the sorting criteria:

- using the functions of the **Customize** menu
- directly in the list

- The alarm list is displayed and you wish to have all alarms sorted according to their time of occurrence so that the most recent alarm is shown at the top of the list. This information is registered in the Start Time column.

Using menu functions

1. In the **Customize** menu, select the edit function **Set Sort Order ...**
2. The **Sorting Order** dialogue appears on the screen.
3. In the table, click on the **Start Time** entry.
4. Select Descending and keep on clicking on Move Up to step by step move **Start Time** to the top of the list.
5. Confirm with OK
6. The alarm messages are now sorted so that the most recent alarms are at the top of the list and the oldest alarms are displayed at the end of the list.
7. Generally, you define the priorities of the sorting criteria by sorting the column titles in the table using Move Up and Move Down, and for each sorting criterion you decide whether it is to be applied in Ascending or Descending order.

Directly in the list

You can change the sorting order directly in the alarm list (or: alarm log) by clicking on the column title you wish to use as sorting criterion. For our example:

1. Click on the column title **Start Time**.
2. You will see that the list is immediately sorted in chronological order, i.e. the most recent alarms are shown on the top of the list.
3. If you click once again on **Start Time**, the order is reversed and the 'oldest' messages are moved to the top of the list.

- The default sorting criterion is: Alarm State
- With Default and OK you can at any time reset the format to its original status. This may be the default setting or a default format which you have set yourself using the Save Format as Default command.

See also

Filter out specific information from the list

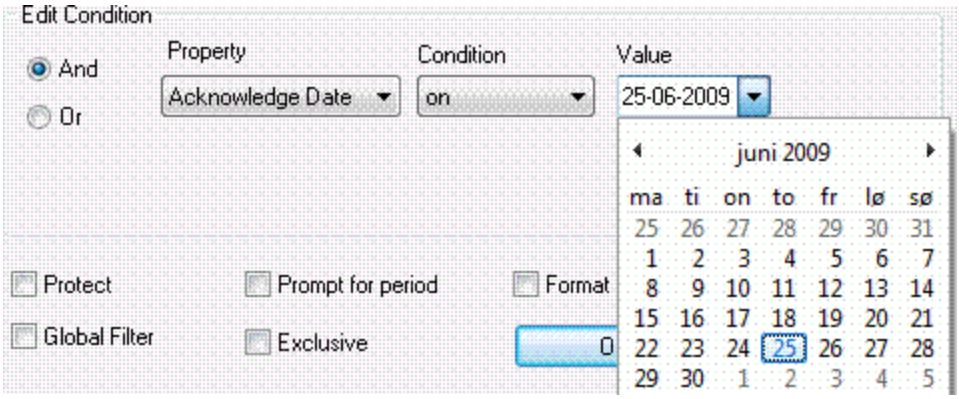
Define a new filter

The **Customize** menu provides three functions that help you to define and edit filter criteria for for filters in the **Alarm List** or **Event List**: **New Filter Edit Filter** and **Delete Filter**.

- To set a new filter, you must have selected **Active Alarms**/**Alarm Log** or **Active Events/Event Log** in the **Tree View** in the left-hand section of the screen.
- You wish to see all acknowledged messages that have occurred in the period from April 10 to April 15, 1997. We will define and save three filter conditions and logically link them by an AND operator. This filter criterion is then saved under the name of "Filter1".

Procedure

1. Press **Customize → New Filter**.
2. The dialogue **Defining Filters for Alarm List** is opened.
3. Under **Edit Conditions**, define the **Begin Date.**



4. Click **Add to List** to save the first condition in the **Existing Filter Conditions** table.
5. Select the logical operator **AND.**
6. Now define the **End Date** and again save it with **Add to List**.
7. Again, select **AND** as the logical operator.
8. Finally, define the third condition:
   Property: Acknowledge Date
   Condition: between
   Value: set date and time of the interval
9. Save the third condition with **Add to List**.
10. Now name the new filter 

11. Confirm / Save with 
.

To display a list containing only those messages that meet the new filter criteria, close the **Defining Filters for Alarm List** dialogue and navigate to the **Tree View**, on the left-hand section of the screen. Click Active Alarms and select Filter1.

- The Alarm Log has the default filter **Past 1day Log** which may have been enabled or disabled for your application by the system design engineer. This standard filter can neither be changed nor deleted.

Format as 'Alarm Print'

If this option is selected, up to three extra lines will be shown for each alarm. These will show the historic object value, as it was, when the alarm was started, acknowledged or ended. This format is equal to the format used for alarm list printouts.

See also

Edit an existing filter

The **Customize** menu of the Menu Bar provides THREE functions that help you to define and edit filter criteria for the display of the alarm list or the alarm log: **New Filter, Edit Filter and Delete Filter**.

To edit an existing filter, you must have selected **Active Alarms**/**Alarm Log** or **Active Events/Event Log** in the **Tree View** in the left-hand section of the screen, and in the tree branch - the filter you wish to change.

Procedure

1. In the Menu Bar, select **Customize→ Edit Filter**.
2. The dialogue **Defining Filters for Alarm List** is opened.
3. In the list **Existing Filter Conditions**, select the filter criterion you wish to change.
4. Under **Edit Conditions**, modify the filter condition and confirm with **OK.**
5. In the **Save Filter as** box you may save the modified filter under the same name, or create an additional filter by saving it under a new name.

- The **Alarm Log** has the default filter **Past 1day Log** which may have been enabled or disabled for your application by the system design engineer. This standard filter can neither be changed nor deleted.

Note: If the filter is protected, you must have the **Can Administer** right to edit it. User rights are defined in the **User Administration** program.

See also

Set a default Active Alarm list filter

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

The default filter will be applied when you open the Alarm Module.

1. Select the filter you want to set as the default. The system default is the root filter named **Active Alarms**.
2. Select **Customize → Set as Default Filter** or click the corresponding icon in the toolbar,  . Notice that the padlock is recessed when you select the default filter.

Delete an existing filter

The **Customize** menu of the Menu Bar provides THREE functions that help you to define and edit filter criteria for the display of the alarm list or the alarm log: **New Filter, Edit Filter and Delete Filter**.

To delete an existing filter, you must have selected **Active Alarms**/**Alarm Log** or **Active Events/Event Log** in the **Tree View** in the left-hand section of the screen, and in the tree branch - the filter you wish to remove.

Procedure

1. In the Menu Bar, select **Customize→ Delete Filter**.

CAREFUL

The filter is deleted IMMEDIATELY and WITHOUT any further confirmation !

- The **Alarm Log** has the default filter **Past 1day Log** which may have been enabled or disabled for your application by the system design engineer. This standard filter can neither be changed nor deleted.

See also

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.

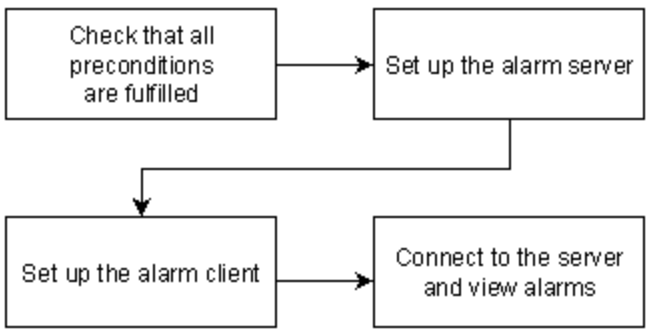
- Main plant responsible for alarm surveillance of one or more secondary plants
- Production operations HQ in a large production complex located away from actual production lines responsible for total production surveillance.
- Evening, night shift or weekend duty personnel carrying out surveillance responsibilities from their private residences.

3.2 How it works

The Super Alarm workflow

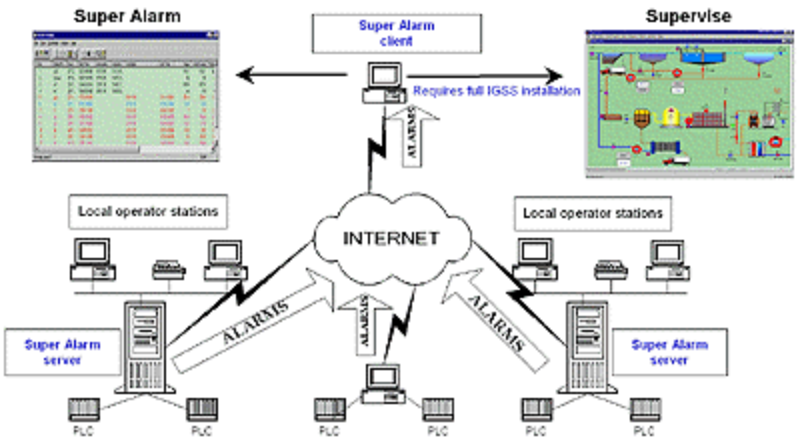
The following flowchart gives you an overview of the workflow involved in setting up and using Super Alarm.

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**.

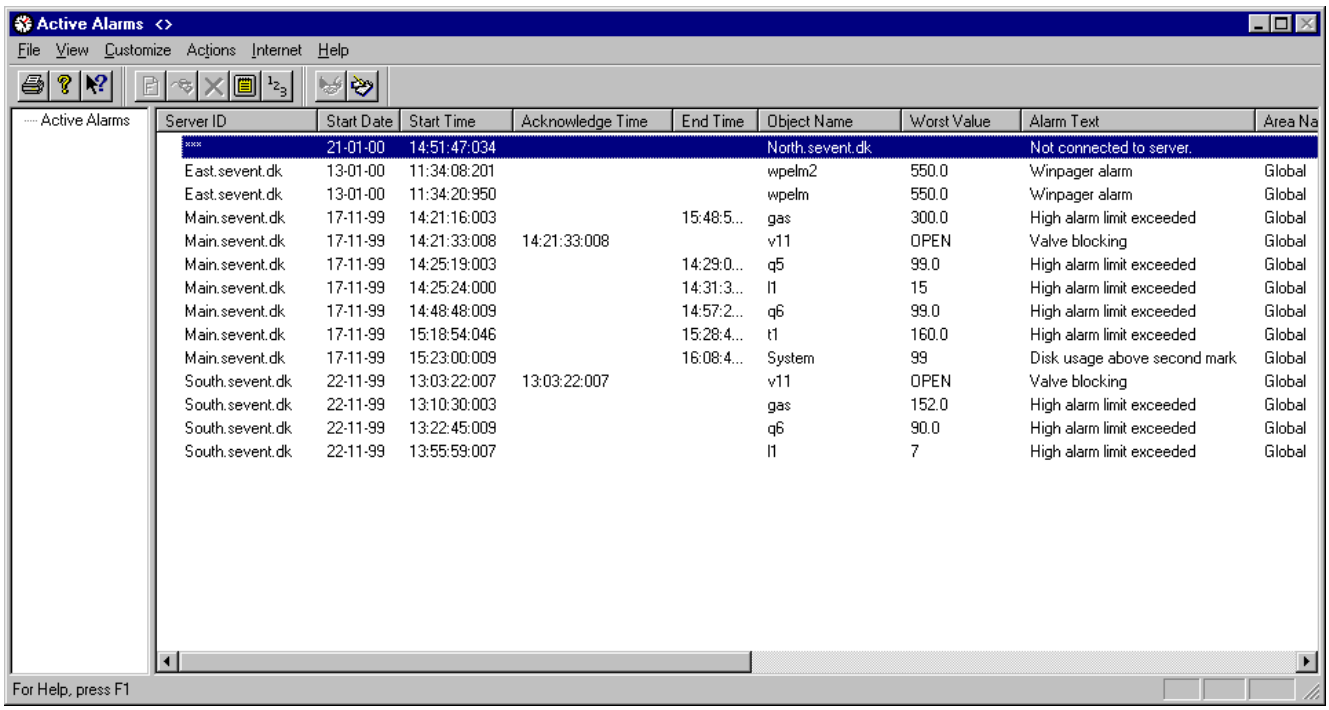
If you get three asterisks (***) in the **Server ID** column, the alarm client is not connected to the alarm server. In that case, check that the TCP/IP connection between the server and the client is properly configured.

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

Introduction

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)

Procedure

Click here to learn how to use the command line interface either with the **Job Scheduler** Module or the Windows command prompt.

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.

- The last three command line parameters are equivalent to the three check boxes in the print dialogue of the alarm program.

Parameter	Description
-f<filter name>	Name of the filter to use. If the name contains spaces, enclose the name in quotation marks (""). You can also use the root filters: "Active Alarms" and "Alarm Log".
-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)
-note	Includes alarm notes on the printout.
-page	Inserts page breaks after alarm notes.
-landscape	Landscape makes alarm print in landscape mode
-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. 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.
-title	The subject line in the e-mail message.

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
```

Chapter 5: Reference and Lookup

5.1 Conventions in this Manual

The following typographical conventions are used:

Convention	Description	Example
User interface element	When referring to labels and names in the user interface.	The **Data Management** tab.
User input	When the user has to type specific data in IGSS	Type the following description: Incoming flow in Tank 2
Module name	When referring to a module in IGSS	Open the **Definition** module.
Note	A note emphasizes or supplements important points of the main text. A note provides information that may apply only in special cases.	By default, the timestamp is in universal time format, **UTC**[1]. This can be changed in the Driver Log Filters dialog box.
Tip	A tip suggests alternative methods that may not be obvious in the user interface. A tip also helps the user in working more effectively with IGSS. A tip is not essential to the basic understanding of the text.	Alternative to this simple find function, you can also filter on text in the messages in Driver Log Filters dialog box.
Warning	A warning is an important note that is essential for the completion of a task. In some cases, disregarding a warning may result in undesirable functionality or loss of data.	If you disregard the System alarm, you may risk loss of data in the **LOG** and **BCL** files.

5.2 Getting Help in IGSS

IGSS comes with a comprehensive help system designed to help both system designers and operators to get started with IGSS as quickly as possible.

Documentation overview

The IGSS documentation includes the following items:

[1]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.

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\V10.0. 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 and German. If you require help files in your language, please contact 7-Technologies A/S.

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)

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 7-Technologies A/S.

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 7-Technologies A/S 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
12 = the year 2012
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.

Q

Quick Access Bar

You can customize the Quick Access Bar to include the functions you use most frequently. Simply drag the relevant function from the ribbon to the Quick Access Bar.

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.