

Lesson 10:

Configuring Events



IGSS

**Interactive Graphical
SCADA System**



Contents of this lesson



Topics:

- **What is an event ?**
- **The Event List**
- **Creating events**
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GSS

What is an event ?



An event is a registration of a system, user defined or periodical event in IGSS. Each event is shown in the Event List and, optionally, in the Alarm List.

The event types are:

- OP Connect/Disconnect
- Periodical
- System start/stop
- User defined
- User login/logout
- Writing stopped/started
- Error packet

The Event List



Active Events

Shows all events from the last hour or the 500 latest events.

Active Events		S.No.	Start Date	Start Time	Event	Info 1	Info 2	Info 3
Event Log		1	29-09-2004	15:05:58:088	User login/logout	Logout	Mike	PFR-HOME
		2	29-09-2004	14:26:25:276	Stop p1			
		3	29-09-2004	14:26:21:300	Start p1			
		4	29-09-2004	14:16:51:000	Email report to municipal authorities			
		5	29-09-2004	14:16:28:197	User login/logout	Login	Mike	PFR-HOME
		6	29-09-2004	14:16:11:944	User login/logout	Logout	Per	PFR-HOME
		7	29-09-2004	14:15:50:593	User login/logout	Login	Per	PFR-HOME
		8	29-09-2004	14:10:57:462	Start/stop writing of data files	Start Write		
		9	29-09-2004	14:10:57:462	Start/stop of configuration	Data collection started		

Event Log

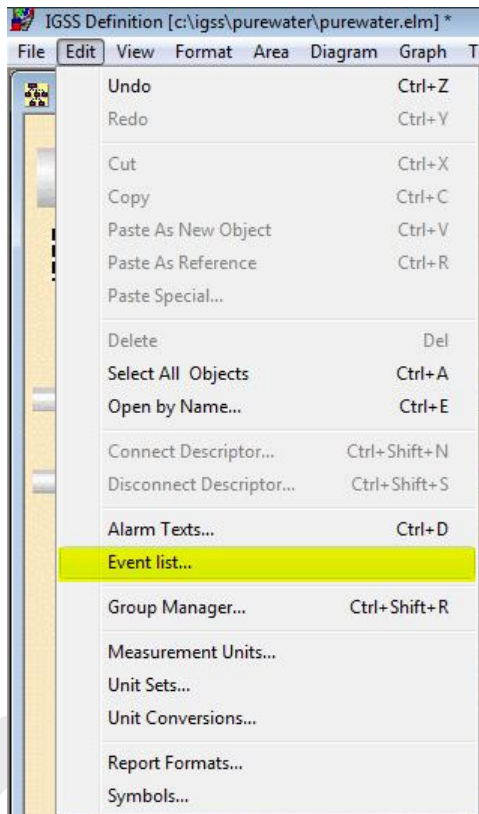
Shows the events which have the "To history" option enabled

Active Events		S.No.	Start Date	Start Time	Event	Info 1	Info 2	Info 3
Event Log		1	19-10-2004	15:39:34:004	Change alarm limit for q1			
		2	19-10-2004	15:15:37:175	Start/stop of configuration	Data collection started		
		3	19-10-2004	15:15:37:175	Writing of data files stopped/started	Start Write		
		4	19-10-2004	15:13:40:419	Start/stop of configuration	Data collection Stopped		
		5	19-10-2004	15:13:40:419	Writing of data files stopped/started	Stop Write		
		6	19-10-2004	14:11:15:850	Writing of data files stopped/started	Start Write		
		7	19-10-2004	14:11:15:850	Start/stop of configuration	Data collection started		
		8	19-10-2004	14:10:44:073	Start/stop of configuration	Data collection Stopped		
		9	19-10-2004	14:10:44:073	Writing of data files stopped/started	Stop Write		
		10	19-10-2004	12:51:34:689	Start/stop of configuration	Data collection started		

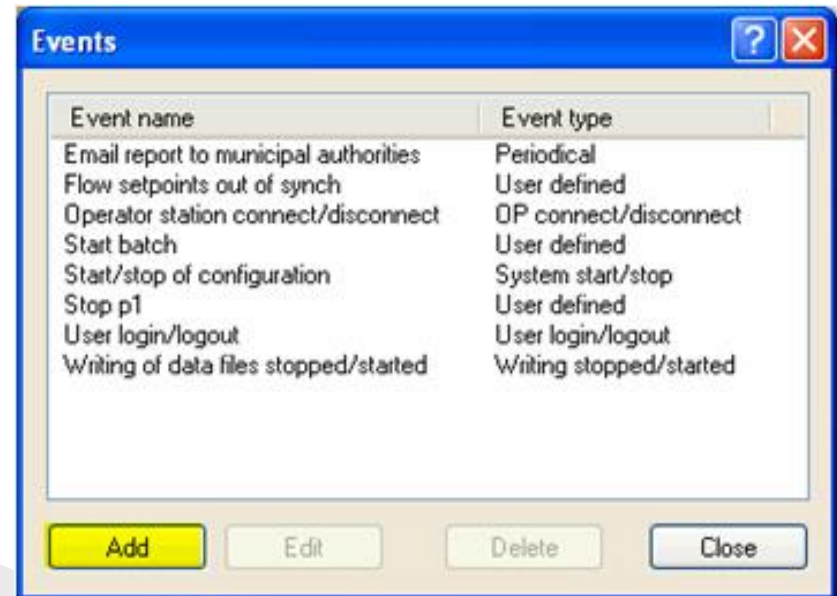
Creating events

In Definition

1. In the **Edit** menu, select **Event List**.



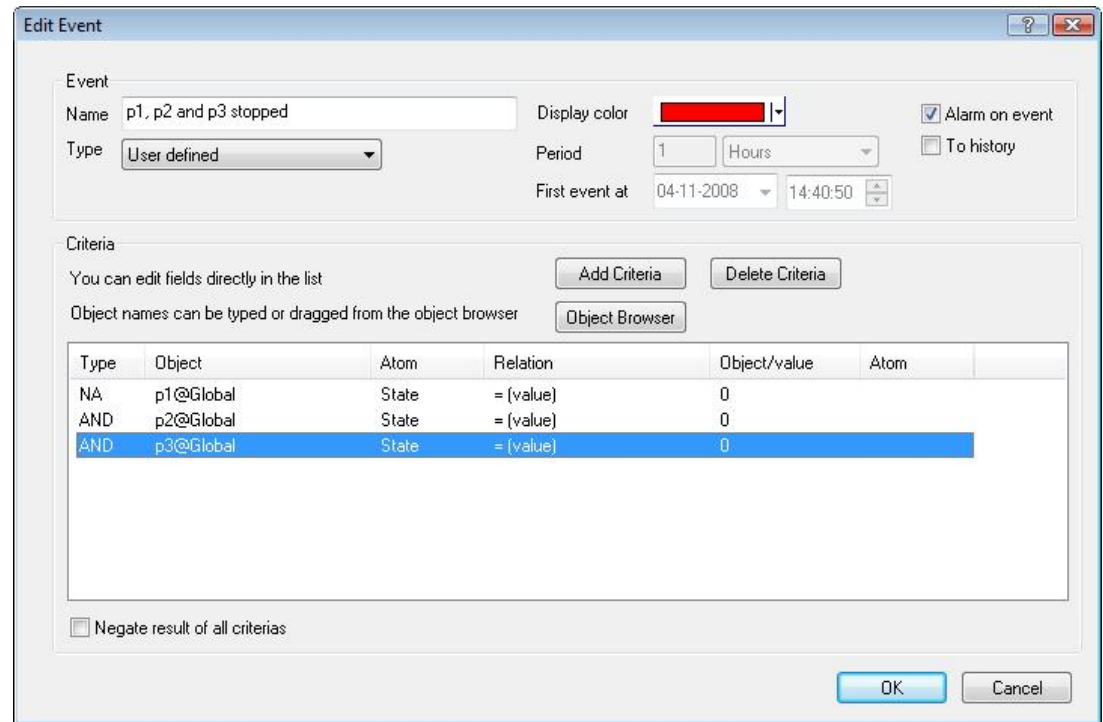
2. Click the **Add** button.



Create user defined event



1. Name the event.
2. Choose type.
3. Choose display color.
4. Define criteria for event.



The 'Edit Event' dialog box is shown with the following configuration:

- Event Name:** p1, p2 and p3 stopped
- Type:** User defined
- Display color:** Red
- Alarm on event:**
- To history:**
- Period:** 1 Hours
- First event at:** 04-11-2008 14:40:50

Criteria Section:

You can edit fields directly in the list. Buttons: Add Criteria, Delete Criteria, Object Browser.

Object names can be typed or dragged from the object browser.

Type	Object	Atom	Relation	Object/value	Atom
NA	p1@Global	State	= (value)	0	
AND	p2@Global	State	= (value)	0	
AND	p3@Global	State	= (value)	0	

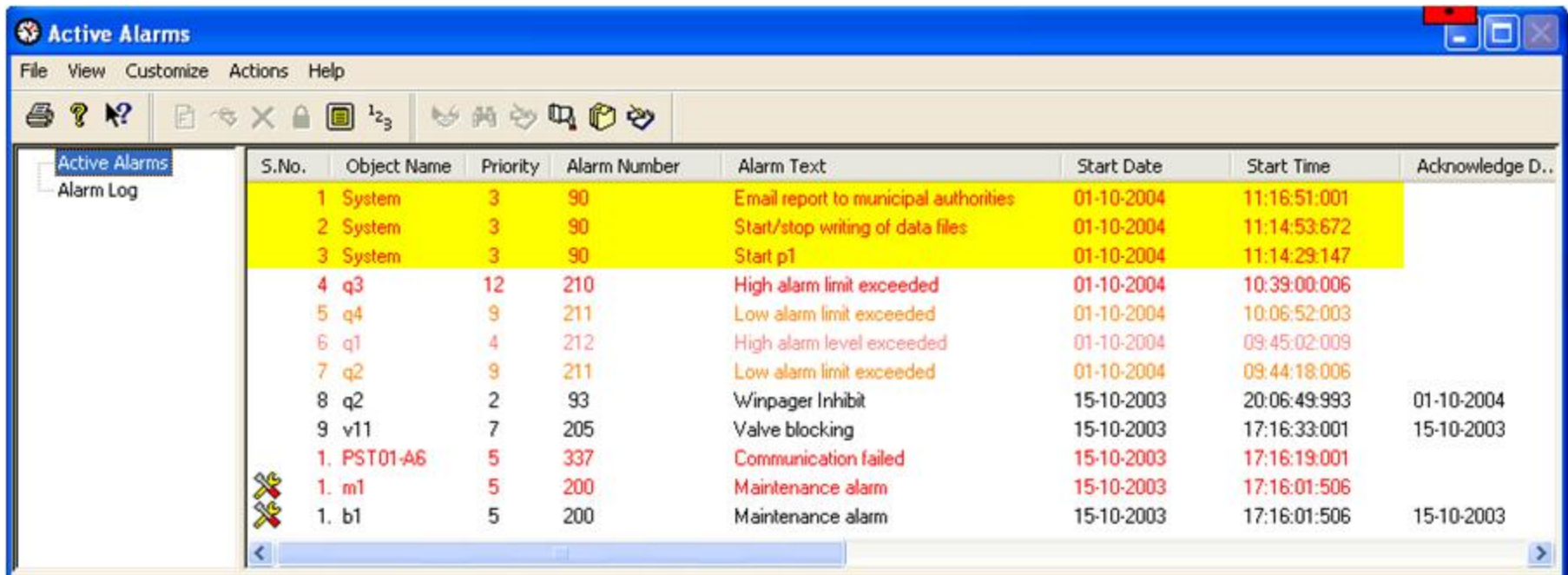
Negate result of all criteria

Buttons: OK, Cancel

Showing events as alarms

- Events with "Alarm on event" select will appear in Alarm List
- "Alarm text" is the event name
- Acknowledging an event alarm also ends the alarm
- Alarm no. 90 is assigned to event alarms

<input checked="" type="checkbox"/>	Alarm on event
<input type="checkbox"/>	To history



The screenshot shows the 'Active Alarms' window with a menu bar (File, View, Customize, Actions, Help) and a toolbar. A table displays the following data:

S.No.	Object Name	Priority	Alarm Number	Alarm Text	Start Date	Start Time	Acknowledge D..
1	System	3	90	Email report to municipal authorities	01-10-2004	11:16:51:001	
2	System	3	90	Start/stop writing of data files	01-10-2004	11:14:53:672	
3	System	3	90	Start p1	01-10-2004	11:14:29:147	
4	q3	12	210	High alarm limit exceeded	01-10-2004	10:39:00:006	
5	q4	9	211	Low alarm limit exceeded	01-10-2004	10:06:52:003	
6	q1	4	212	High alarm level exceeded	01-10-2004	09:45:02:009	
7	q2	9	211	Low alarm limit exceeded	01-10-2004	09:44:18:006	
8	q2	2	93	Winpager Inhibit	15-10-2003	20:06:49:993	01-10-2004
9	v11	7	205	Valve blocking	15-10-2003	17:16:33:001	15-10-2003
1.	PST01-A6	5	337	Communication failed	15-10-2003	17:16:19:001	
1.	m1	5	200	Maintenance alarm	15-10-2003	17:16:01:506	
1.	b1	5	200	Maintenance alarm	15-10-2003	17:16:01:506	15-10-2003

Try it yourself ...



Exercise: Create and show events

Find presentations and
exercises on
www.7t.dk/igss

IGSS



Exercise: Create and Show Events

Purpose In this exercise you will learn how to create different types of events. The event types can be divided into three main categories:

- System events
- Periodical events
- User defined events

The events will be shown in the **Event List** which is shown just below the **Alarm List**. The list is fully user defined, so you decide yourself which events to show.

The events can be defined both from the **Definition** and **Supervise** programs.

Task 1: Create a system event In this task we will define an event to occur every time the configuration is started or stopped.

1. In the **Definition** program, open the **Edit** menu and select **Event List**.
 2. Click the **Add** button.
 3. In the **Edit Event** dialog box, do the following:
 - In the **Name** field, type `Start/stop of configuration`. This is the text that will appear in the **Event List**.
 - Under **Type**, select **System Start/stop**.
 - Select the **To history** check box to save the event in the event log.
 - Click **OK**.
-



Edit Event [?] [X]

Event

Name: Start/stop of configuration Display color: 1

Type: System start/stop Period: 1 Hours Alarm on event

First event at: 13-03-2005 17:33:42 To history

Criteria

You can edit fields directly in the list Add Criteria Delete Criteria

Object names can be typed or dragged from the object browser Object Browser

Type	Object	Atom	Relation	Object/value	Atom
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Negate result of all criterias

OK Cancel



Task 2: Create a periodical event In this task we will create a monthly event which tells the operator to email a report to the municipal authorities.

1. In the **Events** dialog box, click the **Add** button.
2. In the **Edit Event** dialog box, do the following:
 - Under **Name** type Email report to municipal authorities.
 - Under **Type** select **Periodical**.
 - Select the **Alarm on event** and **To history** check boxes. The first option will make the event appear in the **Alarm list**.
 - Under **Period** select 1 month.
 - Under **First event at** select the date of yesterday.

Edit Event

Event

Name: Email report to municipal authorities Display color: [Red]

Type: Periodical Period: 1 Months Alarm on event

First event at: 01-04-2005 06:00:00 To history

Criteria

You can edit fields directly in the list Add Criteria Delete Criteria

Object names can be typed or dragged from the object browser Object Browser

Type	Object	Atom	Relation	Object/value	Atom

Negate result of all criteria

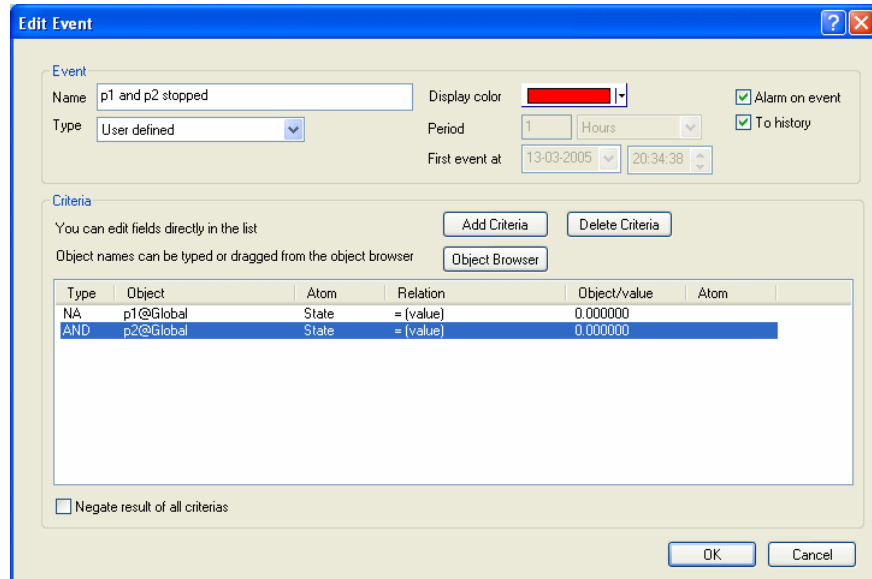
OK Cancel

Task 3: Create a user defined event One of the two pumps must be running all the time to supply the tank with water. Therefore, we want an event (and an alarm) if both pumps are stopped at the same time.

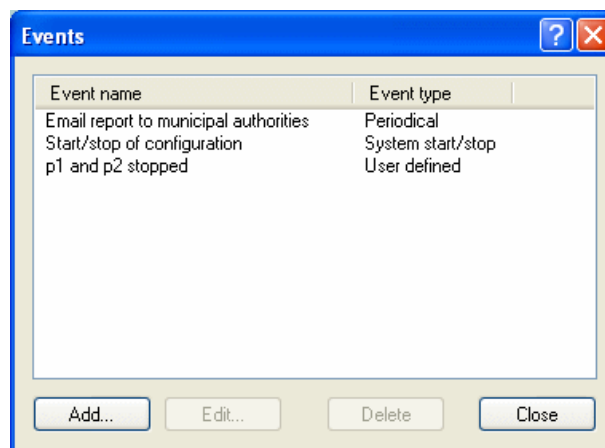
1. In the **Events** dialog box, click the **Add** button.
2. In the **Edit Event** dialog box, do the following:
 - Under **Name** type p1 and p2 stopped.
 - Under **Type** select **User defined**.



- Select the **Alarm on event** and **To history** check boxes.
- In the **Criteria** section, click the **Add Criteria** button.
- Click the **Object Browser** button and drag the object p1 to the **Object** column. Under **Atom** select **State**. Under **Relation** select **=(value)**. Under **Object/value** type 0 (corresponding to stopped).
- Repeat the previous bullet for the object p2 and under **Type** select **AND** (both criteria must be fulfilled before the event occurs).



3. Click **OK** to return to the list of events defined.



4. Click **Close** to close the dialog box.

Task 4: Test the events

We will now start the configuration and stop both pumps to trigger the user defined event.

1. In the **File** menu, select **Online Update**.



2. When the installation is completed, double-click the alarm count icon. Notice that the “Start/stop of configuration” event is now shown in the **Event List**.
3. Stop both pumps. The “p1 and p2 stopped” event now occurs in the **Event List** and alarm number 90 (alarm generated by event) appears in the **Alarm List**.

S.No.	Obje...	Alarm Num...	Alarm Text	Start Date	Start Time	Ackn...	Ackn...	End date	End Time
1	System	90	p1 and p2 stopped	13-03-2005	20:50:27.222			13-03-2005	20:50:27.222

S.No.	Start Date	Start Time	Event	Info 1	Info 2
1	13-03-2005	20:50:27.222	p1 and p2 stopped		p2
2	13-03-2005	20:47:57.747	Start/stop of configuration	Data collection started	

YOU HAVE SUCCESSFULLY COMPLETED THE EXERCISE !!