



# IGSS Dashboard



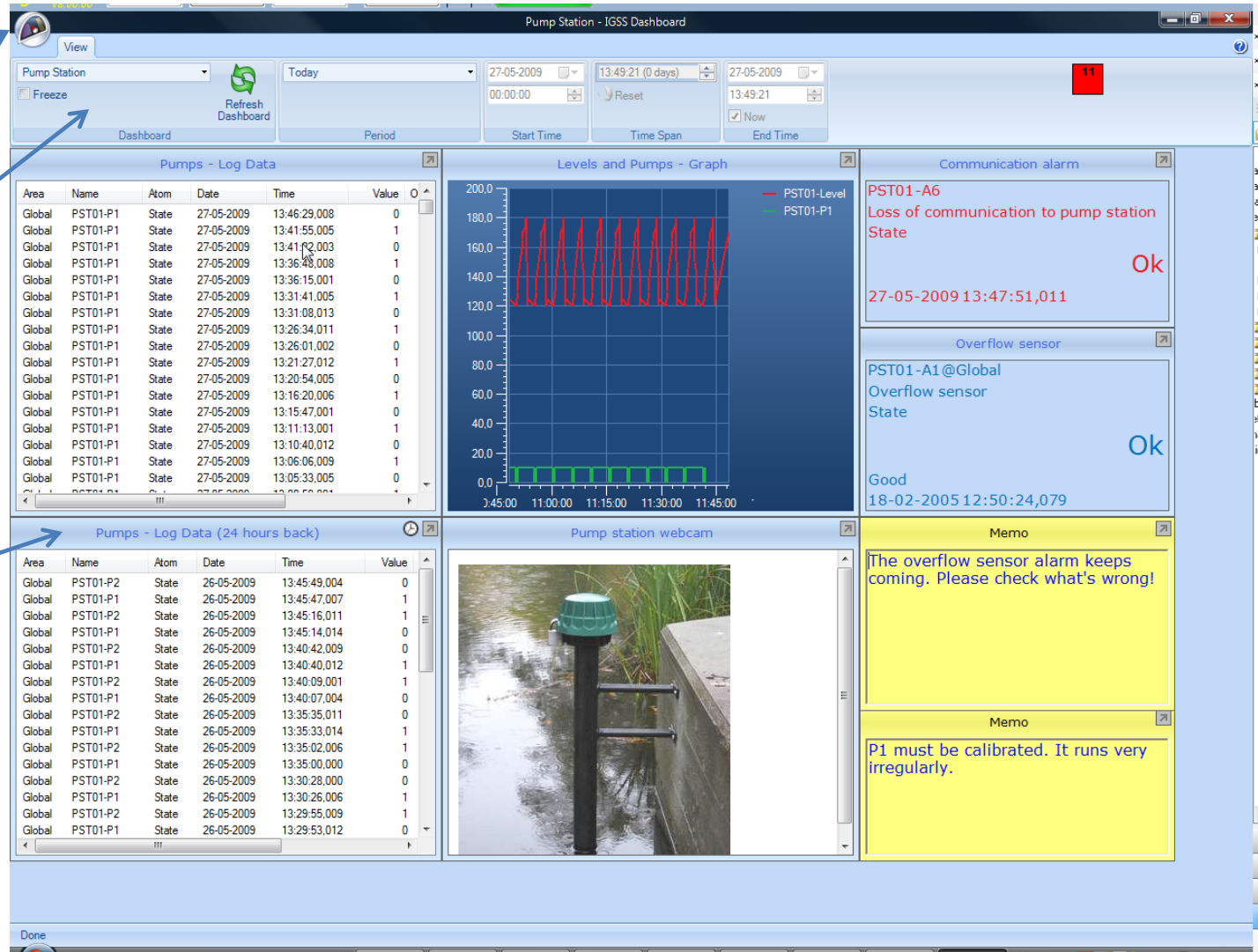
**INSIGHT  
AND  
OVERVIEW**

# Here's a dashboard !

Application button  
(Doughnut)

Ribbon  
(context sensitive)

Widgets



**Pumps - Log Data**

Area	Name	Atom	Date	Time	Value
Global	PST01-P1	State	27-05-2009	13:46:29,008	0
Global	PST01-P1	State	27-05-2009	13:41:55,005	1
Global	PST01-P1	State	27-05-2009	13:41:12,003	0
Global	PST01-P1	State	27-05-2009	13:36:48,008	1
Global	PST01-P1	State	27-05-2009	13:36:15,001	0
Global	PST01-P1	State	27-05-2009	13:31:41,005	1
Global	PST01-P1	State	27-05-2009	13:31:08,013	0
Global	PST01-P1	State	27-05-2009	13:26:34,011	1
Global	PST01-P1	State	27-05-2009	13:26:01,002	0
Global	PST01-P1	State	27-05-2009	13:21:27,012	1
Global	PST01-P1	State	27-05-2009	13:20:54,005	0
Global	PST01-P1	State	27-05-2009	13:16:20,006	1
Global	PST01-P1	State	27-05-2009	13:15:47,001	0
Global	PST01-P1	State	27-05-2009	13:11:13,001	1
Global	PST01-P1	State	27-05-2009	13:10:40,012	0
Global	PST01-P1	State	27-05-2009	13:06:06,009	1
Global	PST01-P1	State	27-05-2009	13:05:33,005	0

**Levels and Pumps - Graph**

The graph displays two data series: PST01-Level (red line) and PST01-P1 (green line). The Y-axis ranges from 0.0 to 200.0. The X-axis shows time from 10:45:00 to 11:45:00. The PST01-Level series shows a regular oscillating pattern between approximately 100 and 180. The PST01-P1 series shows a series of rectangular pulses between 0 and 20.

**Communication alarm**

PST01-A6  
Loss of communication to pump station  
State  
Ok  
27-05-2009 13:47:51,011

**Overflow sensor**

PST01-A1@Global  
Overflow sensor  
State  
Ok  
Good  
18-02-2005 12:50:24,079

**Pumps - Log Data (24 hours back)**

Area	Name	Atom	Date	Time	Value
Global	PST01-P2	State	26-05-2009	13:45:49,004	0
Global	PST01-P1	State	26-05-2009	13:45:47,007	1
Global	PST01-P2	State	26-05-2009	13:45:16,011	1
Global	PST01-P1	State	26-05-2009	13:45:14,014	0
Global	PST01-P2	State	26-05-2009	13:40:42,009	0
Global	PST01-P1	State	26-05-2009	13:40:40,012	1
Global	PST01-P2	State	26-05-2009	13:40:09,001	1
Global	PST01-P1	State	26-05-2009	13:40:07,004	0
Global	PST01-P2	State	26-05-2009	13:35:35,011	0
Global	PST01-P1	State	26-05-2009	13:35:33,014	1
Global	PST01-P2	State	26-05-2009	13:35:02,006	1
Global	PST01-P1	State	26-05-2009	13:35:00,000	0
Global	PST01-P2	State	26-05-2009	13:30:28,000	0
Global	PST01-P1	State	26-05-2009	13:30:26,006	1
Global	PST01-P2	State	26-05-2009	13:29:56,009	1
Global	PST01-P1	State	26-05-2009	13:29:53,012	0

**Pump station webcam**

The webcam shows a live video feed of a pump station structure with a green cap on top, situated in a body of water.

**Memo**

The overflow sensor alarm keeps coming. Please check what's wrong!

**Memo**

P1 must be calibrated. It runs very irregularly.

# The goal of the Dashboard

- Quick overview of process status
- Quick overview of key values in the process
- Provide analysis tools for the user to determine corrective action
- Provide dashboards for non-IGSS users  
(The dashboard client only needs an ODBC connection to the server – not charged as an operator station)

# How the Dashboard works ...

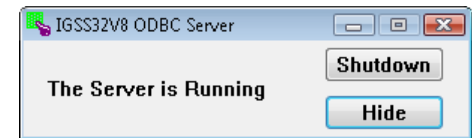
## Configuration's report folder

Dashboard 1.DASH	15-04-2009 10:58	DASH File
Dashboard 2.DASH	15-04-2009 11:03	DASH File
Dashboard 3.DASH	15-04-2009 10:58	DASH File

Dashboard 1

## IGSS ODBC Server

The server must be running.  
Delivers data to the Dashboard.

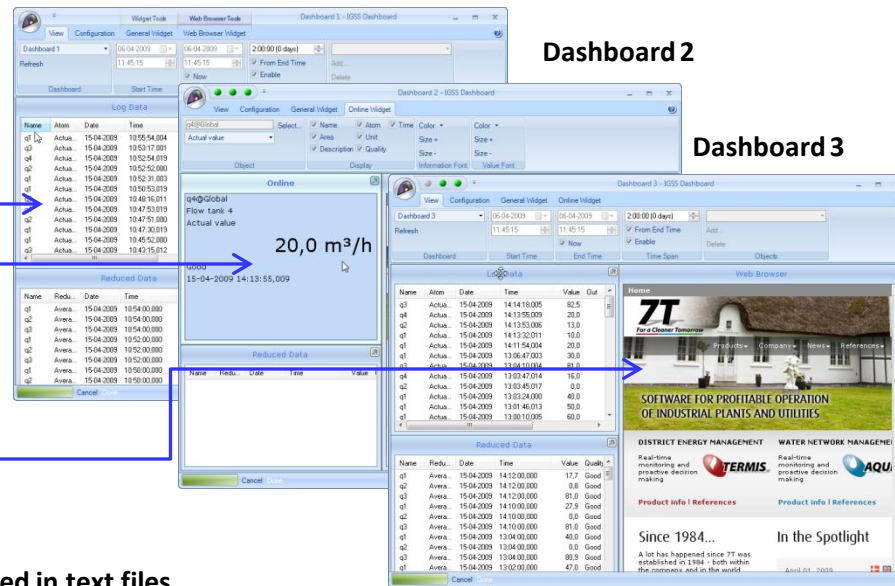
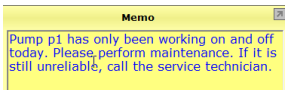


Dashboard 2

Dashboard 3

## Views available in the Dashboard – called Widgets

- LOG data
- Reduced data (BCL)
- Graph data
- Online data
- Audit Trail
- Memo sticker
- Web pages

## Memo text is saved in text files

Each memo is saved in a separate .txt file in the configuration's report folder.

## Setup and Startup

- Dashboard can be started automatically.  
This is set up in System Configuration.



# Dashboards and memos are files

## **DASH and TXT files are saved in the report folder**

- A dashboard is saved as a .dash file
- A .dash file can be used as a dashboard template
- DASH files can be backed up (System Configuration)
  
- Memo text is saved in .txt files
- TXT files can be reused in multiple dashboards

# Comparison: Diagram vs Dashboard

Dashboard	Diagram in Supervise
Focuses on key process values	Focuses on physical process setup
Shaped by users' experience	Shaped by the physical world
Quick overviews	Detailed process diagrams
Combines LOG and BCL values with online values and graphs in one view	Combines online values and graphs (LOG and BCL accessible through Object Historian)
Automatic update of all data types	Automatic update of online values and graphs
Special features in maximized widgets	Same features in normal and maximized view

# Exercise: Create a pump station dashboard



The final dashboard

**Pump Station - IGSS Dashboard**

View: Pump Station, Freeze, Refresh Dashboard, Today, 27-05-2009, 13:49:21 (0 days), 27-05-2009, 00:00:00, 13:49:21, Now

**Pumps - Log Data**

Area	Name	Atom	Date	Time	Value	O
Global	PST01-P1	State	27-05-2009	13:46:29,008	0	
Global	PST01-P1	State	27-05-2009	13:41:55,005	1	
Global	PST01-P1	State	27-05-2009	13:41:12,003	0	
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Global	PST01-P1	State	27-05-2009	13:26:34,011	1	
Global	PST01-P1	State	27-05-2009	13:26:01,002	0	
Global	PST01-P1	State	27-05-2009	13:21:27,012	1	
Global	PST01-P1	State	27-05-2009	13:20:54,005	0	
Global	PST01-P1	State	27-05-2009	13:16:20,006	1	
Global	PST01-P1	State	27-05-2009	13:15:47,001	0	
Global	PST01-P1	State	27-05-2009	13:11:13,001	1	
Global	PST01-P1	State	27-05-2009	13:10:40,012	0	
Global	PST01-P1	State	27-05-2009	13:06:06,009	1	
Global	PST01-P1	State	27-05-2009	13:05:33,005	0	

**Levels and Pumps - Graph**

Graph showing PST01-Level (red line) and PST01-P1 (green line) over time. The Y-axis ranges from 0.0 to 200.0. The X-axis shows time from 10:45:00 to 11:45:00.

**Communication alarm**

PST01-A6  
Loss of communication to pump station  
State  
Ok  
27-05-2009 13:47:51,011

**Overflow sensor**

PST01-A1@Global  
Overflow sensor  
State  
Ok  
Good  
18-02-2005 12:50:24,079

**Pumps - Log Data (24 hours back)**

Area	Name	Atom	Date	Time	Value	O
Global	PST01-P2	State	26-05-2009	13:45:49,004	0	
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Global	PST01-P2	State	26-05-2009	13:45:16,011	1	
Global	PST01-P1	State	26-05-2009	13:45:14,014	0	
Global	PST01-P2	State	26-05-2009	13:40:42,009	0	
Global	PST01-P1	State	26-05-2009	13:40:40,012	1	
Global	PST01-P2	State	26-05-2009	13:40:09,001	1	
Global	PST01-P1	State	26-05-2009	13:40:07,004	0	
Global	PST01-P2	State	26-05-2009	13:35:35,011	0	
Global	PST01-P1	State	26-05-2009	13:35:33,014	1	
Global	PST01-P2	State	26-05-2009	13:35:02,006	1	
Global	PST01-P1	State	26-05-2009	13:35:00,000	0	
Global	PST01-P2	State	26-05-2009	13:30:28,000	0	
Global	PST01-P1	State	26-05-2009	13:30:26,006	1	
Global	PST01-P2	State	26-05-2009	13:29:56,009	1	
Global	PST01-P1	State	26-05-2009	13:29:53,012	0	

**Pump station webcam**

Webcam showing a view of the pump station structure and water level.

**Memo**

The overflow sensor alarm keeps coming. Please check what's wrong!

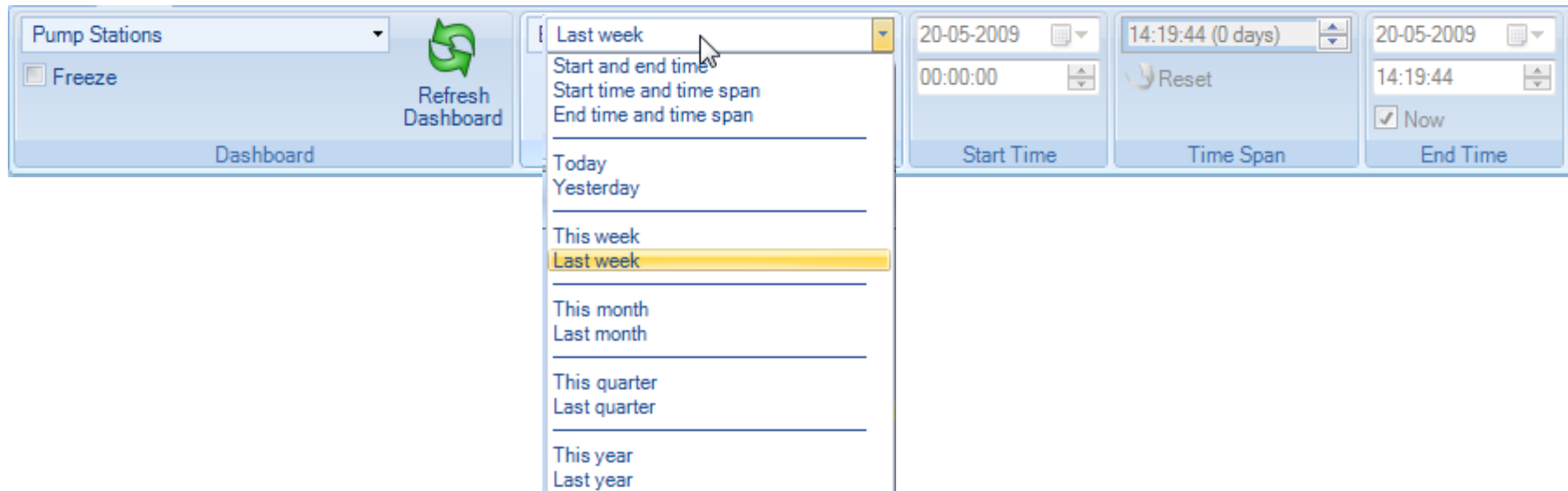
**Memo**

P1 must be calibrated. It runs very irregularly.

# View mode

- The Dashboard starts in View mode
- The only tab available is View

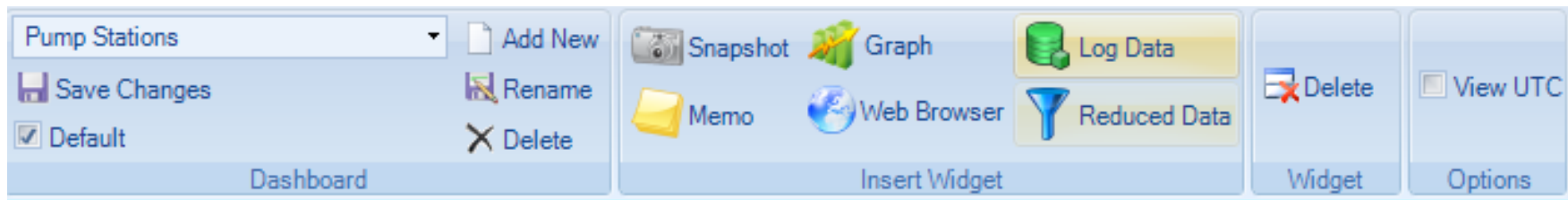
The user selects a data period.  
A time offset can be defined for  
the individual widget.

The screenshot shows a dashboard interface with a blue header bar. On the left, there is a 'Pump Stations' dropdown menu, a 'Freeze' checkbox, and a 'Refresh Dashboard' button with a green circular arrow icon. The main content area is divided into three sections: 'Start Time' (20-05-2009, 00:00:00), 'Time Span' (14:19:44 (0 days), with a 'Reset' button), and 'End Time' (20-05-2009, 14:19:44, with a 'Now' checkbox). A dropdown menu is open over the 'Time Span' section, showing a list of time periods: 'Last week' (selected), 'Start and end time', 'Start time and time span', 'End time and time span', 'Today', 'Yesterday', 'This week', 'Last week', 'This month', 'Last month', 'This quarter', 'Last quarter', 'This year', and 'Last year'.

# Configuration mode

- Press CTRL + D to enter configuration mode
- The Configuration tab allows you to add widgets to the dashboard
- When a widget is selected, the Widget and [Type-specific] tabs appear.

TIP: Hold down SHIFT when you add a widget. The focus will remain in the Configuration tab.

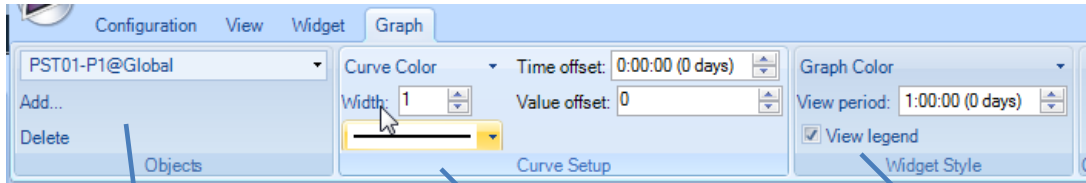


The default dashboard will be loaded on startup.

# Details and tips about the individual widgets

# Graph widget

TIP: Change the title of the graph on the Widget tab.

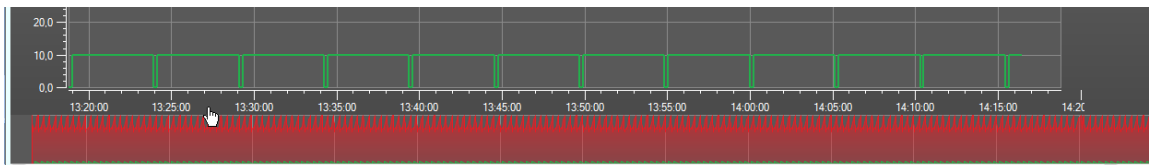
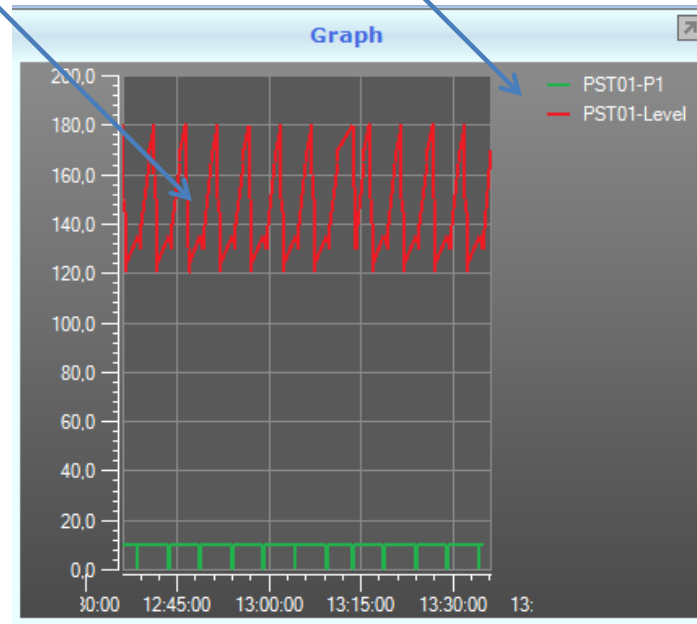


Add/Remove objects

Line setup

Graph setup

TIP: Drag to move on the scale or time axis.  
Ctrl + click to zoom or expand the scale or time axis.



In maximized mode, the user can view the whole period.

# Log data widget

Name
  Value
  Out
  User Selected Header Text

Atom
  Date
  Quality

Description
  Time
  Area

Add...  
 Delete  
 Objects

Columns

Time Offset

Add objects to the data list

Which columns do you want to show?

**TIP:**  
Change the title of the graph on the Widget tab.

**TIP:**  
You can also drag objects into the data list from the Object Browser in Supervise.

Pumps - Log Data

Area	Name	Atom	Date	Time	Value	O
Global	PST01-P1	State	03-06-2009	16:26:45.003	1	
Global	PST01-P1	State	03-06-2009	16:25:58.013	1	
Global	PST01-P1	State	03-06-2009	16:25:45.003	0	
Global	PST01-P1	State	03-06-2009	16:21:36.001	1	
Global	PST01-P1	State	03-06-2009	16:21:10.009	1	
Global	PST01-P1	State	03-06-2009	16:20:49.013	1	
Global	PST01-P1	State	03-06-2009	16:20:36.014	0	
Global	PST01-P1	State	03-06-2009	16:16:01.002	1	
Global	PST01-P1	State	03-06-2009	16:15:40.004	1	
Global	PST01-P1	State	03-06-2009	16:11:18.007	1	
Global	PST01-P1	State	03-06-2009	16:10:52.014	1	
Global	PST01-P1	State	03-06-2009	16:10:31.015	1	
Global	PST01-P1	State	03-06-2009	16:10:18.004	0	
Global	PST01-P1	State	03-06-2009	16:06:09.000	1	
Global	PST01-P1	State	03-06-2009	16:05:43.009	1	
Global	PST01-P1	State	03-06-2009	16:05:09.000	0	
Global	PST01-P1	State	03-06-2009	16:01:00.000	1	

# Reduced data widget

Area
  Date
  Quality
 Selected Header Text

Name
  Time
  Description

Reduction
  Value
  Source

Objects      Columns      Time Offset

Add objects to the data list

Which columns do you want to show?

Time offset can be defined from period on View tab.

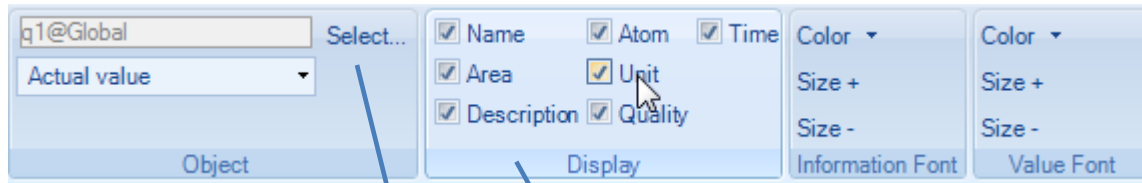
Reduced Data - Flow

Area	Name	Description	Reduction	Value	Date	Time
Global	q1	Flow water in	Maximum	80,0	04-06-2009	01:00:01
Global	q1	Flow water in	Maximum	70,0	04-06-2009	01:02:01
Global	q1	Flow water in	Maximum	70,0	04-06-2009	01:04:01
Global	q1	Flow water in	Maximum	60,0	04-06-2009	01:06:01
Global	q1	Flow water in	Maximum	50,0	04-06-2009	01:08:01
Global	q1	Flow water in	Maximum	40,0	04-06-2009	01:10:01
Global	q1	Flow water in	Maximum	30,0	04-06-2009	01:12:01
Global	q1	Flow water in	Maximum	30,0	04-06-2009	01:14:01
Global	q1	Flow water in	Maximum	20,0	04-06-2009	01:16:01
Global	q1	Flow water in	Maximum	10,0	04-06-2009	01:18:01
Global	q1	Flow water in	Maximum	100,0	04-06-2009	01:20:01
Global	q1	Flow water in	Maximum	95,0	04-06-2009	01:22:01
Global	q1	Flow water in	Maximum	95,0	04-06-2009	01:24:01
Global	q1	Flow water in	Maximum	85,0	04-06-2009	01:26:01
Global	q1	Flow water in	Maximum	75,0	04-06-2009	01:28:01
Global	q1	Flow water in	Maximum	75,0	04-06-2009	01:30:01
Global	q1	Flow water in	Maximum	65,0	04-06-2009	01:32:01
Global	q1	Flow water in	Maximum	55,0	04-06-2009	01:34:01
Global	q1	Flow water in	Maximum	45,0	04-06-2009	01:36:01
Global	q1	Flow water in	Maximum	35,0	04-06-2009	01:38:01

**TIP:**  
You can also drag objects into the data list from the Object Browser in Supervise. Select "Show data reductions".

**TIP:**  
Change the title of the graph on the Widget tab.

# Snapshot widget



What information do you want?

Format the object info and value

Add a single object

**TIP:**

You can also drag an object from the Object Browser in Supervise.



**TIP:**

Change the title of the widget on the Widget tab.

# Web browser widget

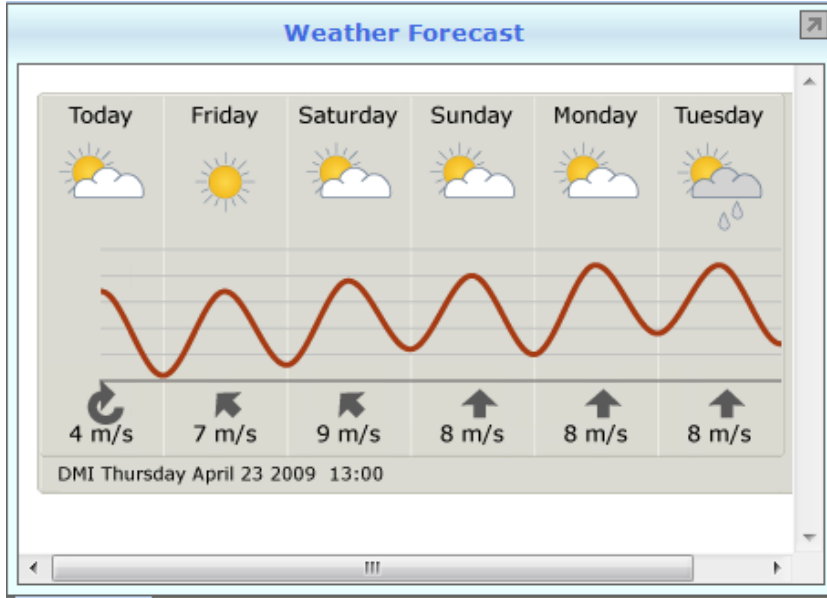
URL <input type="text" value="http://www.dmi.dk/dmi/femdgn_dk.png"/>	URL <input type="text" value="http://www.dmi.dk/dmi/index/danmark.htm"/>
Refresh Widget Every <input type="text" value="30"/> Minute(s)	Refresh Widget Every <input type="text" value="30"/> Minute(s)
<input checked="" type="checkbox"/> Never Show Scrollbars <input checked="" type="checkbox"/> Use Alternate Settings When Maximized	<input type="checkbox"/> Never Show Scrollbars
Web Browser Settings	Alternate Settings

**TIP:**  
Change the title of the widget on the Widget tab.

Enter the URL to be shown in normal size

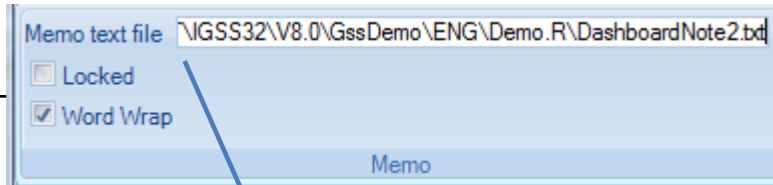
Optionally, enter an alternative URL to be shown in maximized mode.

**TIP:**  
Webcams are becoming more popular in process supervision.  
  
Simply enter the IP address of the webcam or a FILE link, if the webcam is on a local network.



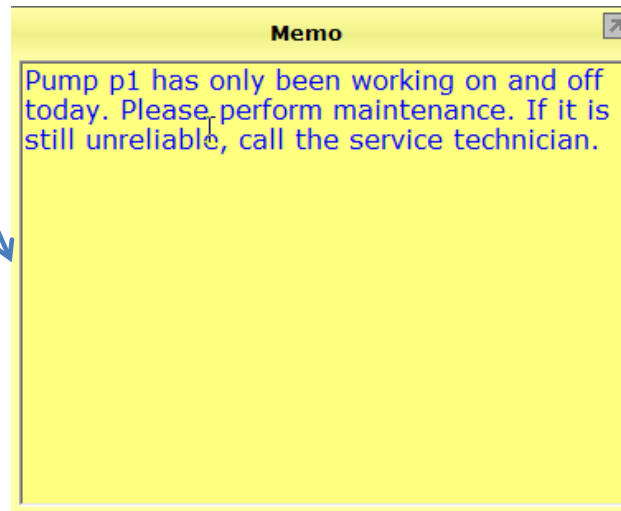
**TIP:**  
In this example, maximizing the weather forecast would show the textual forecast for the period.

# Memo widget



Enter the filename where the memo text will be saved.

Locked mode means that the user cannot change the memo text in the dashboard.



**TIP:**

Memo text can be prepared in the TXT files in the report folder. The same TXT file can be reused in different dashboards.