

# ESFVISU

## visualization player, version 1.2

### Content:

<b>1 TECHNICAL REQUIREMENTS.....</b>	<b>3</b>
1.1 HARDWARE.....	3
1.2 SOFTWARE.....	3
1.3 PROCESS INTERFACE.....	3
1.4 IMPORT FROM ETS .....	3
1.5 MICROSOFT INTERNET EXPLORER, VERSION 6; DIRECTX, VERSION 9.0B.....	3
<b>2 FIRST STEPS.....</b>	<b>4</b>
2.1 STEP 1: LOAD VISUALIZATION PROJECT.....	4
2.2 STEP 2: LOAD WORKSHEET.....	5
<b>3 USER INTERFACE.....</b>	<b>6</b>
3.1 MENU.....	6
3.2 TOOLBAR.....	7
3.3 TOOL WINDOWS.....	8
<b>4 FUNCTIONS.....</b>	<b>9</b>
4.1 LOAD VISUALIZATION PROJECT.....	9
4.2 LOAD WORKSHEET.....	10
4.3 MESSAGES.....	11
4.4 PLOT CONTROL FUNCTIONS.....	12
4.5 FULL SCREEN MODE.....	14
4.5.1 Full screen toolbar.....	14
4.5.2 The Onscreen Keyboard.....	15
4.6 TEMPORARY LOGIN.....	15

## Address

### ESF Software GmbH

Europaallee 14 + 16  
D-67657 Kaiserslautern  
Federal Republic of Germany

Telefon: +49 (0) 631 / 303200 - 0

Telefax: +49 (0) 631 / 303200 - 9



[office@esf-software.com](mailto:office@esf-software.com)



[www.esf-software.com](http://www.esf-software.com)

## Copyright

Copyright ©2006 ESF Software GmbH

All Rights reserved

## Trademarks

EIB® is a registered trademark of the EIB association (EIBA).

LON® is a registered trademark of Echelon Corporation registered in the United States and other countries.

OPC® is a registered trademark of OPC Foundation.

Sax Basic Engine is a trademark of Sax Software Corporation.

Adobe Acrobat® is a registered trademarks of Adobe Systems Incorporated.

Microsoft®, ActiveX®, DirectX®, Windows®, Windows NT®, Excel®, Visual Basic® are registered trademarks of Microsoft Corporation.

All trademarks and registered trademarks are the property of their respective owners.

# 1 Technical requirements

## 1.1 Hardware

<b>Processor</b>	Pentium IV or equal, running at 1200 MHz.
<b>Main memory</b>	256 MB
<b>Free disk space</b> (additional disc space requirements depend on the configured archives)	40 GB
<b>Screen resolution</b>	1024 x 768 Pixel
<b>Colors</b>	Color depth min. 16 Bit per Pixel.
<b>Interfaces</b>	Serial or USB interface to connect EIB with EIBA FALCON driver.

## 1.2 Software

WINDOWS 95	NO
WINDOWS 98, First Edition	NO
WINDOWS 98, Second Edition	YES
WINDOWS ME	YES
WINDOWS NT	NO
WINDOWS 2000, all versions	YES
WINDOWS XP, all versions	YES

## 1.3 Process interface

For the purpose of European Installation Bus (EIB), the FALCON driver of the EIBA (EIB Association) is used.

Optional the ESFVISU is equipped with an OPC (OLE for Process Control)- client, so that instead of EIB, or additional to EIB, OPC- servers, that are available for a multitude of automation systems, can be used for the processing connection.

**Attention:** Under Windows 2000 the FALCON driver has to be installed manually from the setup CD !

## 1.4 Import from ETS

ETS 2 version 1.3	YES, use ETS, "OPC - Export"
ETS 2 versions 1.1, 1.2 and 1.3	YES, use print report redirected to file.
Older ETS – versions	NO

## 1.5 Microsoft Internet Explorer, Version 6; DirectX, Version 9.0b

These applications are required; they can be installed or updated from the setup CD.

## 2 First steps

The visualization player is used to show a visualization project, which has been configured with the visualization editor.

Each visualization project relates to one logical process model, whereas each logical process models relates to one or more process interfaces. A visualization project comprises a collection of worksheets, each worksheet showing a certain aspect of the project.

The visualization player is a companion of the visualization editor, which is used to create and edit process images.

Process messages are displayed in the player's message window. Moreover, the player comprises an alarm management component.

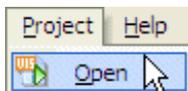
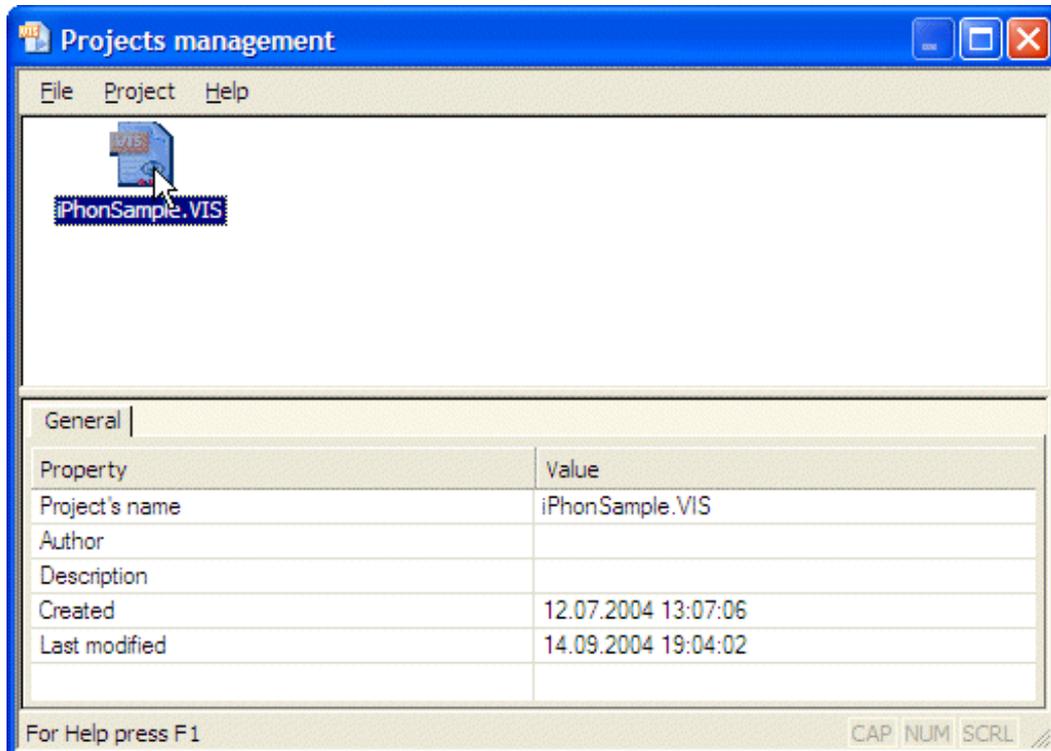


In order to clearly distinguish different applications, we use different colors for the application's icons, **yellow** for the **visualization editor** and **player**.

To start the visualization player use the WINDOWS program manager or just double click on the player's icon in the ESFVISU control panel.

### 2.1 Step 1: Load visualization project

Select menu option **File - Projects** or click on  **Organize..** in the tasks tool window to open the project management dialog.

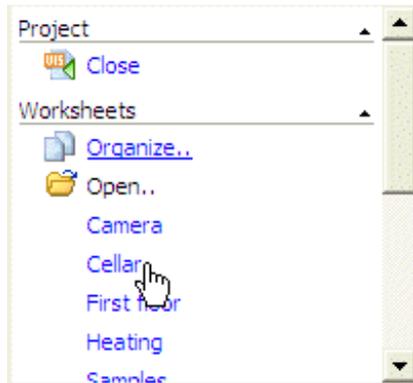


Select menu option **Project - Open** or just double click on the project's symbol to open the visualization project in the player.

## 2.2 Step 2: Load worksheet

The tasks tool window can be used to load visualization worksheets. Its contents changes according to the state of the player.

### Tasks tool window:



#### When no project has been loaded:

Open project management dialog; open project out of last recently used project's list.

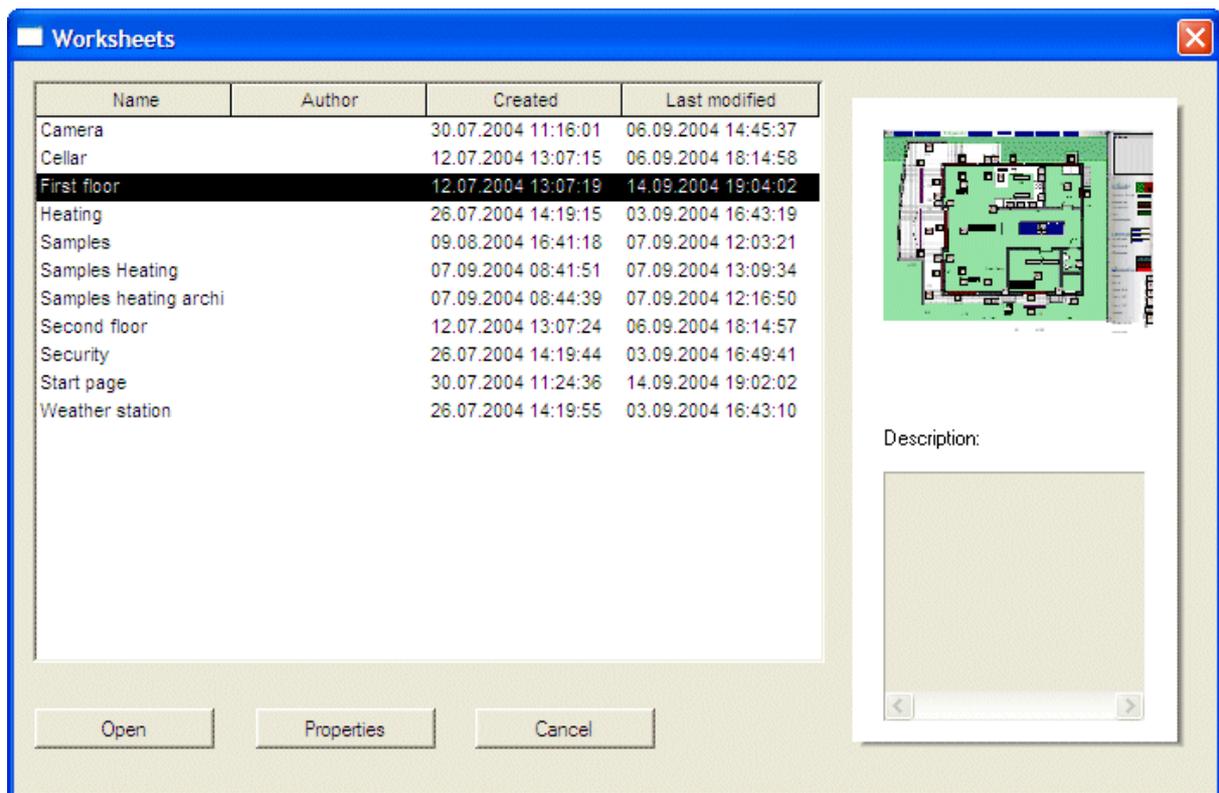
#### When a project but no worksheet has been loaded yet:

Close project; open worksheet management dialog; open worksheet out of the worksheet's list.

#### When a worksheet has been loaded and the worksheet's window is activated:

Close worksheet; open worksheets management dialog; open project's management dialog.

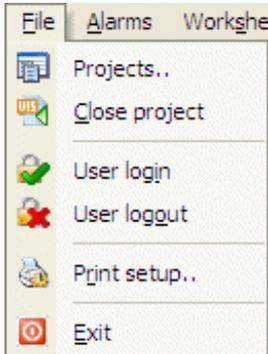
Select menu option **Worksheet – Worksheets..** to open the worksheets management dialog and select a worksheet.



**Open:** The selected worksheet will be opened.

## 3 User interface

### 3.1 Menu



**Projects:** Opens the projects management dialog. The projects management dialog is used to open visualization projects.

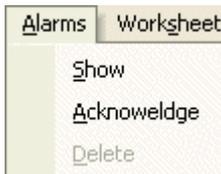
**Close project:** Closes the currently open project.

**User login:** Opens a dialog to login a user to the system.

**User logout:** Logout current user from the system.

**Print setup:** Select printer and printer properties.

**Exit:** Close player. Shortcut ALT + F4.



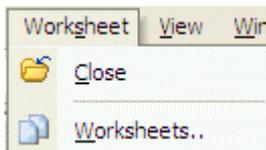
**Show:** Show alarms in the player's message window. Active alarms are displayed with red color.

**Acknowledge:** Acknowledge the selected alarm in the alarm's list. If the current user has not the right to acknowledge alarms, the login dialog will be opened.

**Delete:** Deletes selected alarms. Only acknowledged alarms can be deleted. If the current user has not the right to delete alarms, the login dialog will be opened.

If password protected has been disabled, all users are authorized to acknowledge or to delete alarms and warnings.

The acknowledgement of alarms and warnings always will be inserted into the system's log file.



**Close:** Close the currently active worksheet.

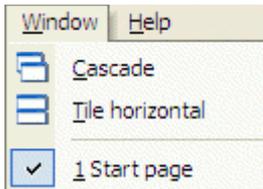
**Worksheets..:** Opens the worksheet's management dialog.



**Toolbars:** Toggle the visibility of selected toolbars.

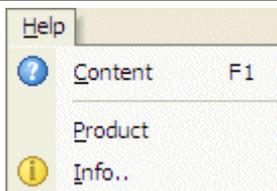
**Tool windows:** Toggle the visibility of selected tool windows.

**Full screen:** Start the player's full screen mode. Full screen mode and normal mode can be toggled with keyboard keys CTRL + SHIFT + J.



**Cascade:** Show windows in overlapped style.

**Tile horizontal:** Show windows among each other.



**Content:** Start help file, Shortcut F1.

**Product:** Shows product and license information.

**Info:** Shows version and copyright information.

### 3.2 Toolbar



 **Open:** Open worksheets management dialog.

**Zoom:** Scale current worksheet.

 **Messages:** Toggle visibility of message window.

 **Info:** Show version and copyright information.

 **Content:** Open help file.

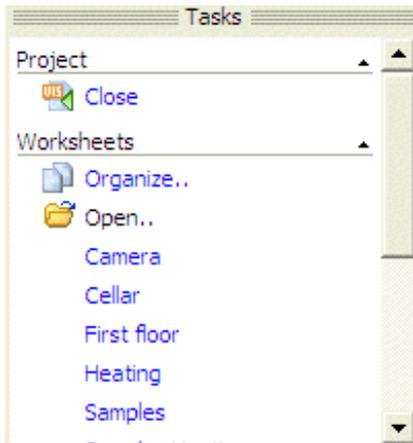
 **Tasks:** Toggle visibility of tasks tool window.

 **Worksheet:** Toggle visibility of single worksheet tool window.

 **Worksheets:** Toggle visibility of worksheets tool window.

 **Status:** Toggle visibility of status tool window.

### 3.3 Tool windows

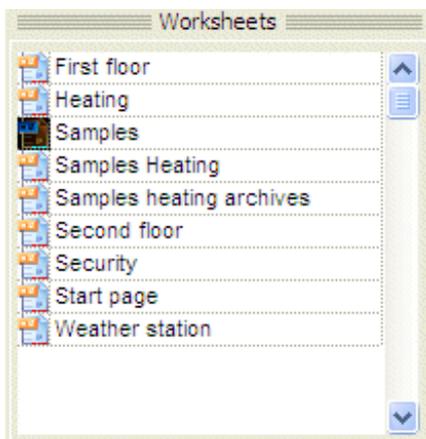
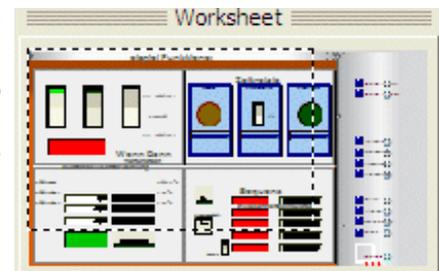


#### Tasks:

Easy access to common tasks.

#### Worksheet:

Reduced view of the complete worksheet. If according to the zoom factor only parts of the worksheet are visible in the editor's window, you may drag the visible rectangle instead of scrolling.



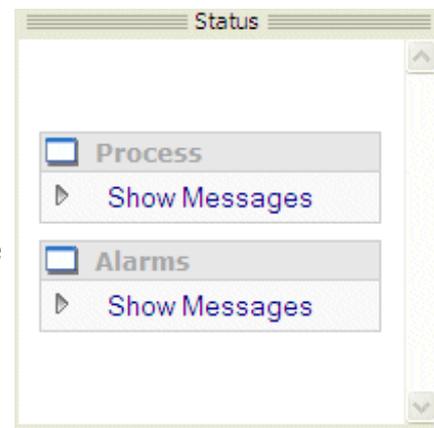
#### Worksheets:

List of worksheets of the visualization project loaded. With a double click on a worksheet's name the worksheet will be loaded.

#### Messages:

**Process:** In case there are new messages from the technical process, the symbol  starts blinking. Click on **View messages** to open the messages list.

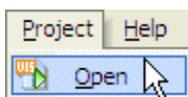
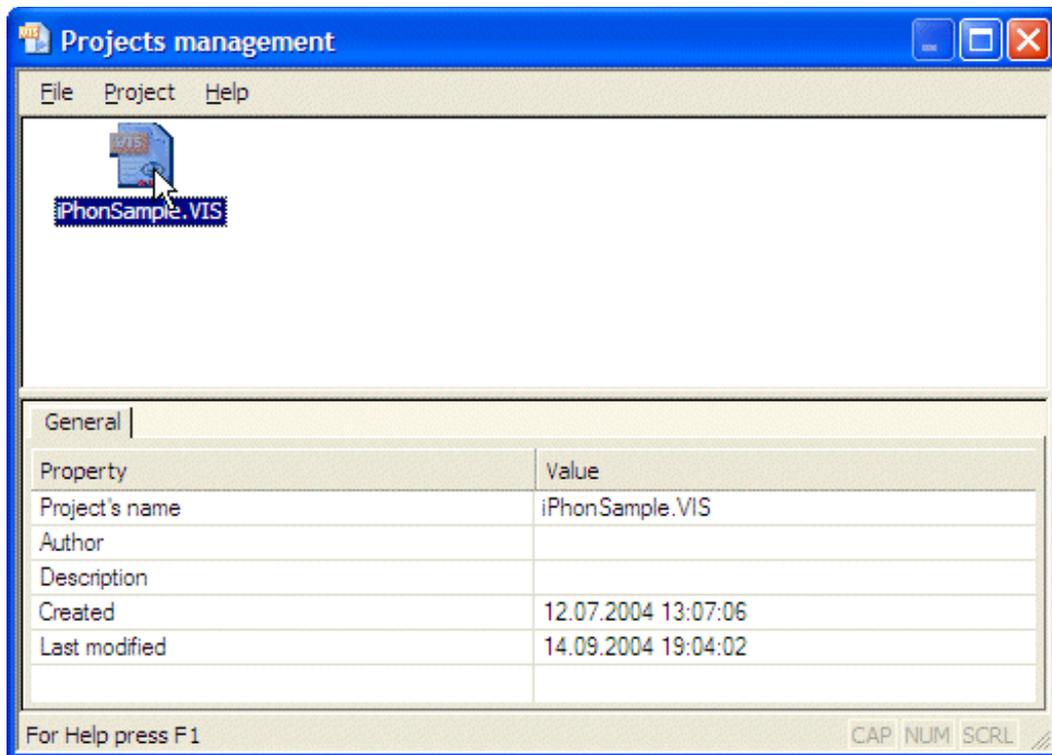
**Alarms:** In case there are new alarms or warnings, the symbol  starts blinking. Click on **View messages** to open the alarms list.



## 4 Functions

### 4.1 Load visualization project

Select menu option **File – Projects** or click on symbol  **Organize..** in the tasks tool window to open the projects management dialog.

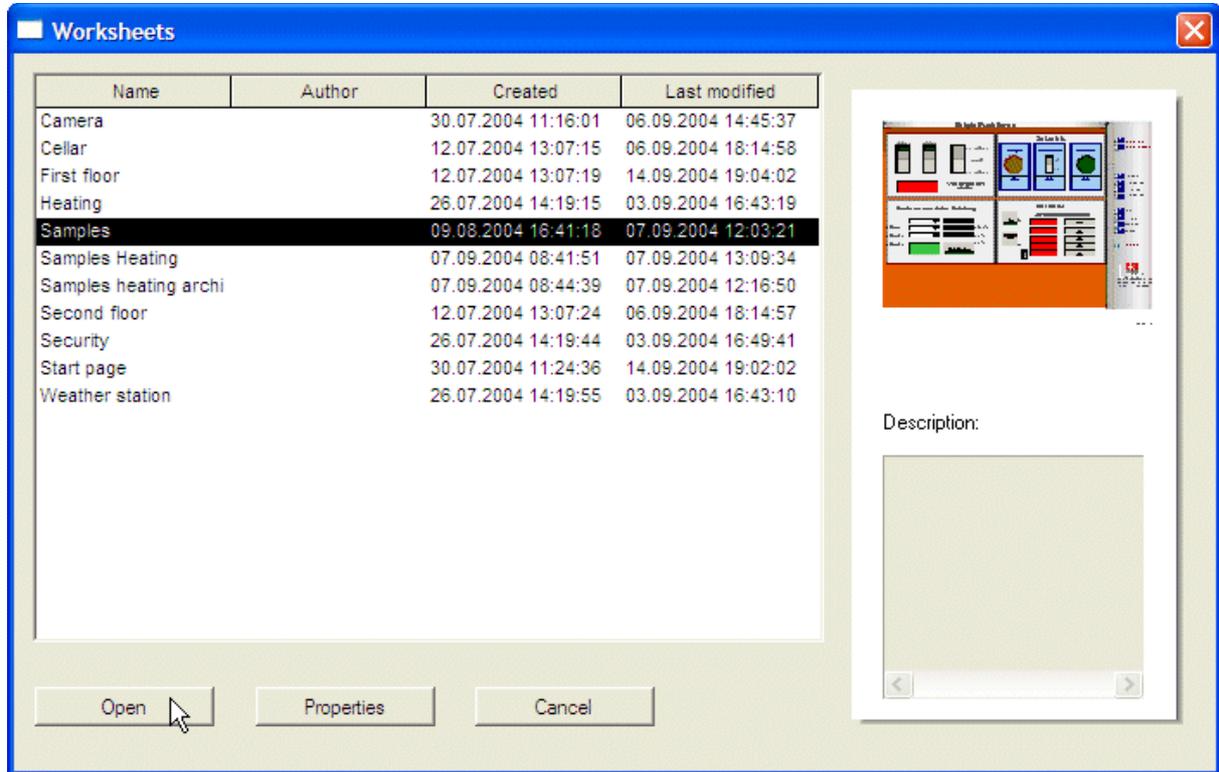


Select menu option **Project – Open** to open the selected project in the player application. Alternatively double click on the project's symbol.

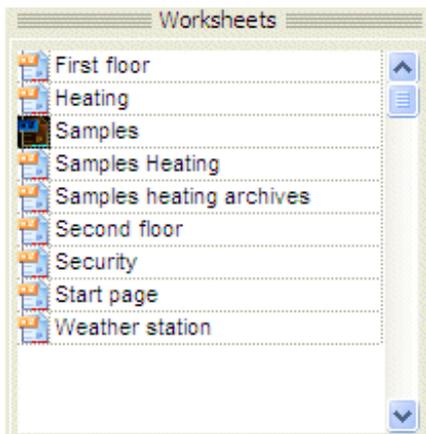
**Note:** The process interface (i.e. the EIB editor) can be configured to connect automatically to the technical process (i.e. EIB), otherwise the process must be connected manually.

## 4.2 Load worksheet

A worksheet can be loaded with the worksheets management dialog, which can be started from the tasks window or by menu with menu option **Worksheet – Worksheets..**



Select the worksheet and press button **Open**.

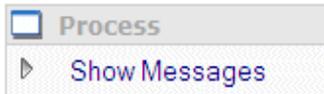


Alternatively, a worksheet can be opened with a click on the worksheet's name in the worksheets tool window.

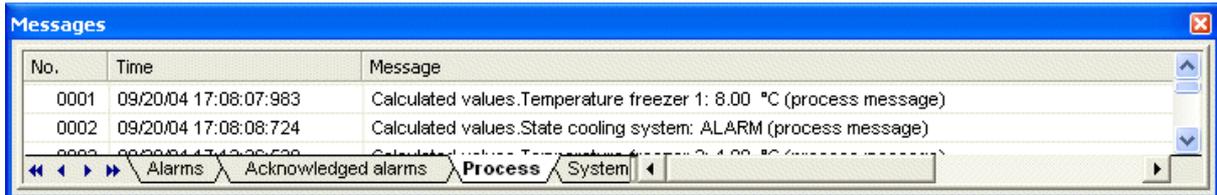
### 4.3 Messages

The visibility of the messages window can be toggled by menu or toolbar function. Also it will be displayed with a click on a **View messages** – field in the status tool window.

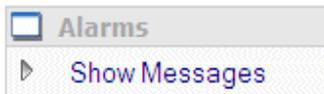
#### Process messages:



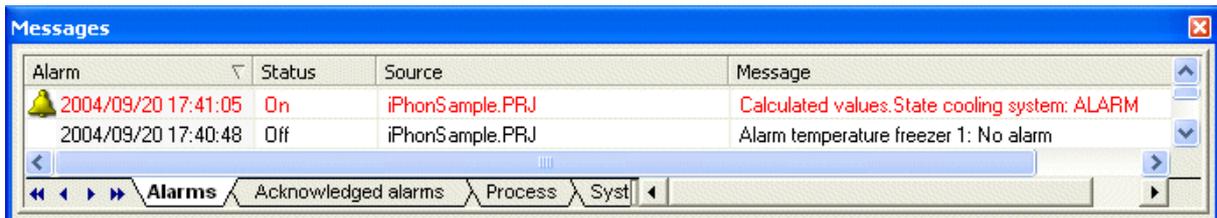
View process messages in the message list.



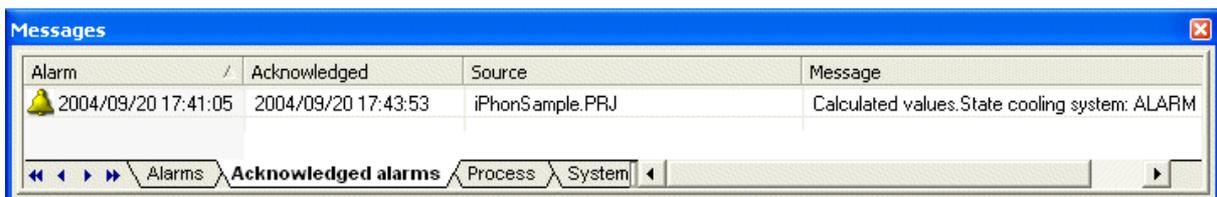
#### Alarms and warnings:



View alarms and warnings in the message list.

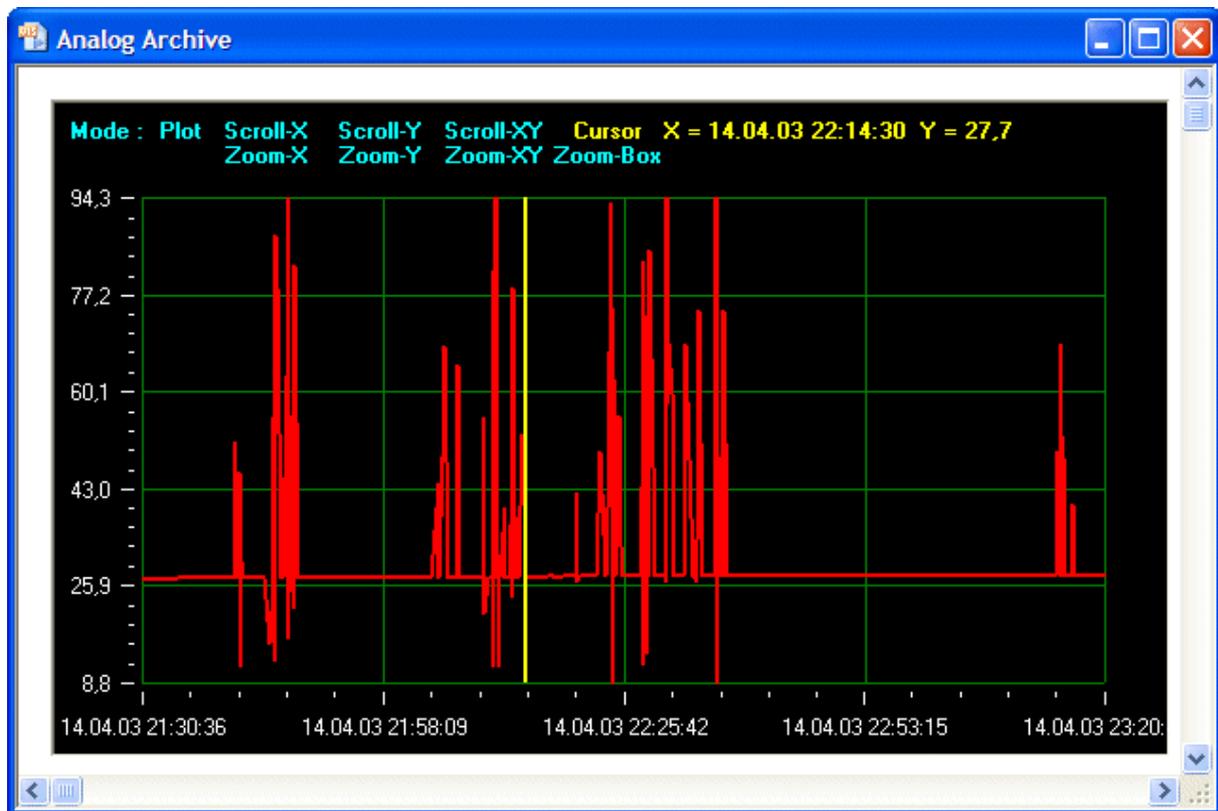


#### Acknowledged alarms and warnings:



## 4.4 Plot control functions

The application of parameter displays in the player is intuitive. However, the plot control provides some features, which require more explanation.



**Plot** If button **Plot** is active, the plot will automatically scroll the time axis at the bottom, such that new values are always visible.

**Scroll-X** When mode **Scroll-X** is active, you may click on a arbitrary point in the plot and move the mouse with mouse button still pressed: The plot's display will scroll to the left or to the right, according to the mouse movement.  
Alternatively, you may use keys **←** **→** to achieve the same effect.

**Scroll-Y** When mode **Scroll-Y** is active, you may click on a arbitrary point in the plot and move the mouse with mouse button still pressed: The plot's display will scroll up or down, according to the mouse movement.  
Alternatively, you may use keys **↑** **↓** to achieve the same effect.

**Scroll-XY** Mode **Scroll-XY** is a combination of modes **Scroll-X** and **Scroll-Y**.

**Zoom-X** When mode **Zoom-X** is active, you may click on a arbitrary point in the plot and move the mouse with mouse button still pressed. The display will be scaled horizontally. Moving left will decrease the distance between individual values, showing more values. Moving right will increase the distance between individual values, showing less values.

### **Zoom-Y**

When mode **Zoom-Y** is active, you may click on an arbitrary point in the plot and move the mouse with mouse button still pressed. The display will be scaled vertically. Moving up will decrease the vertical scaling, moving down will increase the vertical scaling.

### **Zoom-XY**

Mode **Zoom-XY** is a combination of modes **Zoom-X** and **Zoom-Y**.

### **Cursor**

Mode **Cursor**: In this mode a vertical bar will be displayed if you click on an arbitrary point in the plot control. Along with the vertical bar, the numeric values at the bar's position are displayed.

Keyboard keys   can be used to move the vertical bar in the left or right direction. With keys PAGEUP and PAGEDOWN, you can jump to the leftmost or rightmost interval in the plot's visible area. Keys POS1 and END can be used to jump to the first respectively last value in the archive.

### **Zoom-Box**

When mode **Zoom-Box** is active, you may use the mouse to define a rectangle, which will be enlarged. Click on an arbitrary point (which will be one corner of the rectangle) and release the point at the opposite corner of the rectangle. The plot will show an enlarged view of the rectangle centered in the middle of the plot control.

### **Multiple lines**

The plot control may show lines for different process variables. The active line for the plot's mouse modes can be switched with the **TAB** key. The active line is always displayed emphasized.

### **Line color**

The color of each line is defined in the visualization editor.

## 4.5 Full screen mode

In full screen mode, the entire screen will be used to show the content of worksheets. Neither titlebar or statusline of the visualization player window nor the WINDOWS taskbar will be displayed in this mode. Nevertheless it is still possible to use the WINDOWS task manager to switch to other applications or close the visualization by pressing ALT+F4.

Switch from normal mode to full screen mode: In the menu **View** select the entry **Fullscreen mode** (CTRL+SHIFT+J) to switch the player from normal to full screen mode.

Switch from full screen mode to normal mode: Click on the background of the current worksheet and then enter CTRL+SHIFT+J.



### 4.5.1 Full screen toolbar

In full screen mode, a double click on the background fades in a transparent full screen toolbar, which can be used to perform important user actions without leaving the full screen mode:



1. Shows/hides the onscreen keyboard.
2. Shows/hides the message list.
3. Acknowledges alarms or warnings.
4. Deletes acknowledged alarms or warnings.
5. User login.
6. User logout.
7. Fades out the full screen toolbar.

The transparency of the toolbar will be reduced if the mouse moves over the toolbar. The toolbar can be moved by clicking the gripper on the left side of the toolbar. Thus the toolbar can be placed everywhere on the screen. A click on the rightmost button closes the toolbar.

## 4.5.2 The Onscreen Keyboard

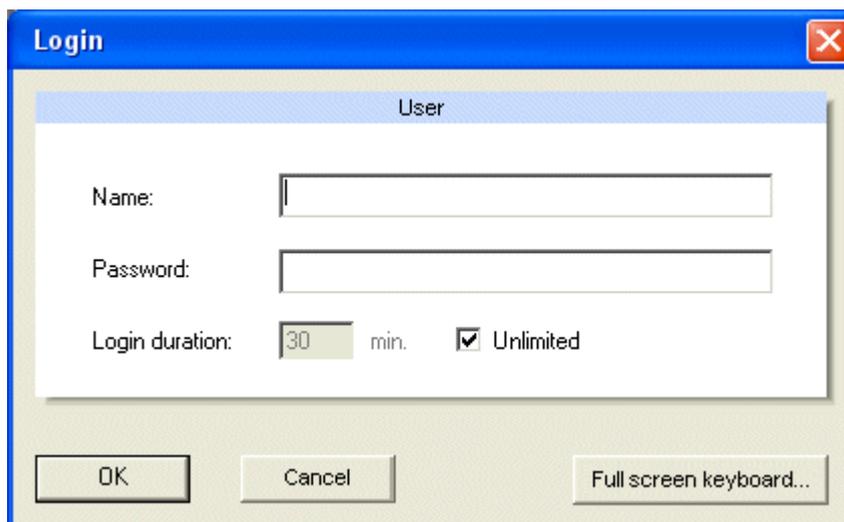
A click on the first button of the full screen toolbar shows the onscreen keyboard. The onscreen keyboard sends its keystrokes to the currently active element of the visualization, e.g. a parameter display. That way the user is able to enter values in parameter displays or passwords in login dialogs on a keyboardless **touchscreen**.

A click to the background of the worksheet activates the visualization player's main window and subsequent keystrokes will be sent to the main window. Thus the user is able to leave the fullscreen mode (CTRL+SHIFT+J) or even close the visualization player (ALT+F4).



The keys of the onscreen keyboard can be enlarged by resizing the keyboard window. A click to the first button of the full screen toolbar hides the onscreen keyboard, if it is visible.

## 4.6 Temporary Login

The image shows a "Login" dialog box with a blue title bar and a close button. The dialog has a light gray background and contains the following fields and controls:

- A "User" label above a text input field.
- A "Name:" label followed by a text input field.
- A "Password:" label followed by a text input field.
- A "Login duration:" label followed by a spin box set to "30" and the text "min.", and a checked checkbox labeled "Unlimited".
- At the bottom, there are three buttons: "OK", "Cancel", and "Full screen keyboard...".

When the password protection is enabled, it is possible to temporarily log in. The login dialog provides a field to enter the desired login duration (in minutes). After the login duration has expired, the currently active user will be logged off and the default user will be logged in. All worksheets, which the default user has no access rights for, will be closed.