SIEMENS

SIMATIC HMI

WinCC V7.3
WinCC/DataMonitor

System Manual

Print of the Online Help

Legal information

Warning notice system

This manual contains notices you have to observe in order to ensure your personal safety, as well as to prevent damage to property. The notices referring to your personal safety are highlighted in the manual by a safety alert symbol, notices referring only to property damage have no safety alert symbol. These notices shown below are graded according to the degree of danger.

> ⚠ **DANGER**
>
> indicates that death or severe personal injury **will** result if proper precautions are not taken.

> ⚠ **WARNING**
>
> indicates that death or severe personal injury **may** result if proper precautions are not taken.

> ⚠ **CAUTION**
>
> indicates that minor personal injury can result if proper precautions are not taken.

> **NOTICE**
>
> indicates that property damage can result if proper precautions are not taken.

If more than one degree of danger is present, the warning notice representing the highest degree of danger will be used. A notice warning of injury to persons with a safety alert symbol may also include a warning relating to property damage.

Qualified Personnel

The product/system described in this documentation may be operated only by **personnel qualified** for the specific task in accordance with the relevant documentation, in particular its warning notices and safety instructions. Qualified personnel are those who, based on their training and experience, are capable of identifying risks and avoiding potential hazards when working with these products/systems.

Proper use of Siemens products

Note the following:

> ⚠ **WARNING**
>
> Siemens products may only be used for the applications described in the catalog and in the relevant technical documentation. If products and components from other manufacturers are used, these must be recommended or approved by Siemens. Proper transport, storage, installation, assembly, commissioning, operation and maintenance are required to ensure that the products operate safely and without any problems. The permissible ambient conditions must be complied with. The information in the relevant documentation must be observed.

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We have reviewed the contents of this publication to ensure consistency with the hardware and software described. Since variance cannot be precluded entirely, we cannot guarantee full consistency. However, the information in this publication is reviewed regularly and any necessary corrections are included in subsequent editions.

Table of contents

WinCC/DataMonitor Installation Notes

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1.1   Installation Requirements

Introduction

Certain hardware and software configuration requirements must be fulfilled for installation.

Note

A DataMonitor server cannot be operated on a WinCC client without a project of its own.

Only use a DataMonitor server on a computer which is not operated in WinCC ServiceMode.

Hardware requirements

To work with WinCC/DataMonitor efficiently, select a system that meets the recommended specifications for an optimum configuration.

DataMonitor server

		Minimum	Recommended
DataMonitor server on WinCC server for more than 10 clients	CPU	Intel Pentium 4; 2.2 GHz	Dual-Core; > 2.2 GHz
	Working memory	2 GB	> 2 GB
DataMonitor server on WinCC server with WinCC project in Runtime	CPU	Intel Pentium III; 1 GHz	Server: Intel Pentium 4, 2 GHz
	Working memory	2 GB	> 2 GB
DataMonitor server on WinCC server	CPU	Intel Pentium III; 1 GHz	Server: Intel Pentium 4, 2 GHz
	Working memory	1 GB	> 1 GB
DataMonitor server on WinCC single-user system or WinCC client with its own project	CPU	Intel Pentium III; 1 GHz	Server: Intel Pentium 4, 2 GHz
	Working memory	512 MB	1 GB

DataMonitor client

	Minimum	Recommended
CPU	Intel Pentium II; 300 MHz	Intel Pentium III; 1 GHz
Working memory	256 MB	512 MB

Software requirements

For the installation, certain requirements concerning operating system and software configuration must be met.

DataMonitor server on WinCC server

Operating system	Software
Windows Server 2008 Standard SP2 32-bit	Internet Explorer as of V9.0 (32-bit)
Windows Server 2008 R2 Standard SP1 64-bit	WinCC Basic System V7.3 or WinCC Fileserver V7.3
Windows Server 2012 R2 Standard 64-bit	

If you want to publish Intranet information, the following is required:

- A network-capable computer with a LAN connection

- A system that converts computer names into IP addresses (IP = Internet Protocol). This step allows users to use "alias names" instead of IP addresses when connecting to your server.

If you want to publish information in the Internet, the following is required:

- An Internet connection and an IP address from your Internet service provider (ISP). You can only publish information in the Internet, if you have a connection to the Internet provided by the ISP.

- A network adapter that is suitable for connecting to the Internet.

- A DNS registration for your IP address. This step allows users to use "alias names" instead of IP addresses when connecting to your server.

DataMonitor server on WinCC single-user system or WinCC client with its own project

Operating system	Software
Windows 8.1 32-Bit (max. 3 clients)	Internet Explorer as of V9.0 (32-bit)
Windows 8.1 64-Bit (max. 3 clients)	WinCC Basic System V7.3 or WinCC Fileserver V7.3
Windows 7 Ultimate SP1 32-bit (max. 3 clients)	For the components "Excel Workbook Wizard" and "Excel Workbook":
Windows 7 Ultimate SP1 64-bit (max. 3 clients)	• Microsoft Office 2007 SP2
Windows Server 2008 SP2 Standard 32-bit	• Microsoft Office 2010
Windows Server 2008 R2 Standard SP1 64-bit	• Office 2013 in the 32-bit version
Windows Server 2012 R2 Standard 64-bit	

You also need access to the Intranet/Internet or a TCP/IP connection to the Web client.

DataMonitor client

Operating system	Software
Windows 8.1 32-Bit (max. 3 clients)	Internet Explorer as of V9.0 (32-bit)
Windows 8.1 64-Bit (max. 3 clients)	WinCC Basic System V7.3 or WinCC Fileserver V7.3
Windows 7 SP1 32-bit	
Windows 7 SP1 64-bit	For the components "Excel Workbook Wizard" and "Excel Workbook":
Windows Server 2008 SP2 Standard 32-bit	
Windows Server 2008 R2 Standard SP1 64-bit	● Microsoft Office 2007 SP2
Windows Server 2012 R2 Standard 64-bit	● Microsoft Office 2010
Via MS Terminal Services, also other operating systems such as WinCE, Win95	● Office 2013 in the 32-bit version

You also need access to the Intranet / Internet or a TCP/IP connection to the Web server.

1.2 User rights for installing the DataMonitor client

Introduction

You can install the DataMonitor client as follows:

● Installation from the product DVD
In this case, certain Windows user rights are necessary, depending on the operating system.

● Installation via the Intranet/Internet
In this case, certain Windows user rights are necessary, depending on the operating system.

● Installation using the group policy-based software distribution in networks
This can be done without any user interaction and using the Windows user permissions of the current user.

Windows user permissions required for installation and initial logon of the client

Depending on the operating system, specific minimum user rights are required to install the DataMonitor client via Intranet/Internet.

After installation, the client must log in with the following user identification for initial registration on the DataMonitor server:

● Under a user identification with Windows user rights higher or equal to those defined by the user identification that was given for the installation.

The connections must be established successfully. The subsequent logins can then be performed under a different Windows user authorization with possibly limited rights.

Operating system	Required minimum user permission
Windows Server 2008/ Server 2012	"Administrators"
Windows 7	"Administrators"
Windows 8.1	"Administrators"

Installing the DataMonitor client with limited Windows user rights

Using Microsoft Windows Installer technology (MSI), DataMonitor clients from Version V6.0 SP1 can also be installed with limited Windows user permissions, i.e. permissions other than "Power user" or "Administrator".

This procedure can be set during the installation using the group policy based software distribution in networks.

Even the add-ins and plug-ins for the DataMonitor client can be installed in this way. The minimum user permissions described above are also required to install plug-ins created with WinCC Plug-In Builder.

Using MSI technology, it is also possible to install the DataMonitor client for a configured group of users or computers.

Installation for a configured group of users or computers

The following is possible with the Microsoft Systems Management Server or a group policy on a Domain Controller:

- The installation for a group of users or computers configured by the administrator

  - To do this, the "WinCCDataMonitorClient.msi" MSI file is published on the domain controller and then released for a user group. The installation is then performed according to the configuration of the group policy based software distribution either during login of the defined users or when the computer is started.

  - When using a Microsoft Systems Management Server, the installation is configured by the administrator, triggered and executed when the relevant computer boots. Additional information on Microsoft Systems Management Server is available in the Internet on the Microsoft Homepage.

Group policy based software distribution

The software installation is normally executed with the access rights of the current Windows user. When using MSI technology, the installation is performed by an operating system service with a higher level of rights. This enables installations to be performed for which the Windows user has no permission. Applications which require installations with a higher permission are referred to as "privileged installations" in MSI technology. Installation of these applications is possible when a Windows user is assigned the "Always install with elevated privileges" permission.

In order to use the group policy-based software distribution, a group policy is created on the domain controller and assigned to the distributing software or published using Active Directory.

- Assignment: The software distribution can be assigned to a user or a computer. In this case, the software to be distributed is automatically installed when the user logs in or the computer is started.

- Publication: The software distribution can be published for single users. In this case, when the user logs onto the client computer, the software to be distributed appears in a dialog and can be selected for installation.

1.3 Installing the Internet Information Service (IIS)

Settings

Before installing the DataMonitor server, you must first install the Internet Information Service (IIS). You specify the settings for the DataMonitor server during installation.

Activate the following settings:

- Web management tools:
    - IIS management service
    - IIS management console
    - IIS management scripts and tools
    - Compatibility with IIS Metabasis and IIS 6 configuration
    - Compatibility with WMI for IIS 6
- WWW services > General HTTP features:
    - Standard document
    - Static content
- WWW services > Application development features:
    - .NET extendibility
    - ASP
    - ASP.NET
    - ISAPI extensions
    - ISAPI filters
- WWW services > Security:
    - Requirement filtering
    - Standard authentication
    - Windows authentication

Note

If the logging functions are active with IIS, the log files must be monitored and deleted, if necessary. The event views should be configured so that the log files do not become too large.

Requirements

- To do this, you must have administrator rights.

Procedure

1. Insert the Windows CD-ROM into the drive.

2. In the Windows start menu, select the entry "Settings > Control Panel" and click on the "Software" symbol.

3. Open the "Add or Remove Programs" dialog and click "Add or Remove Windows Components".

4. Activate the settings specified above.
   You can also use the command line "Start > Run > cmd" to install the IIS components located on the installation CD:
   pkgmgr.exe /iu:IIS-WebServerRole;IIS-WebServer;IIS-CommonHttpFeatures;IIS-StaticContent;IIS-DefaultDocument;IIS-HttpErrors;IIS-ASPNET;IIS-ASP;IIS-ISAPIExtensions;IIS-ISAPIFilter;IIS-BasicAuthentication;IIS-WindowsAuthentication;IIS-ManagementConsole;IIS-ManagementService;IIS-IIS6ManagementCompatibility;IIS-Metabase;IIS-WMICompatibility

5. Close the dialog box with the "OK" button. The required data is transferred and the IIS is configured accordingly.

1.4 Installing the DataMonitor server and client

Introduction

This chapter describes the installation of the DataMonitor server and DataMonitor client.

Installation on the DataMonitor client depends on the DataMonitor tool used.

DataMonitor server scope of installation

A DataMonitor server is installed and set up as the web server to enable WinCC/DataMonitor to be used.

This installation allows you to access the WinCC runtime archive using "Trends & Alarms".

Only "Webcenter" and "Trends & Alarms" are installed on computer with a WinCC file server, used for example as a long-term archive server, as the other components require WinCC Runtime. "Webcenter" and "Trends & Alarms" install all the required components.

Installation sequence for the Web Server for Windows 7

If you are installing a web server on a computer that is running Windows 7 or Windows 8.1, comply with the following installation sequence:

1. Install the Internet Information Service (IIS).

2. Install the SQL Server.

If this sequence is not complied with, error messages may be reported when DataMonitor reports are opened.

In this happens, correct the problem as follows:

1. Start the "Web Configurator" in the Windows Start menu by selecting "SIMATIC > WinCC > Web Configurator".
   Configure the Web server.

2. Start the Security Control in the Windows start menu by selecting "Programs > Siemens Automation > Security Control".
   Configure the security settings.

DataMonitor client installation conditions

You need not install the DataMonitor client if you only want to use "Webcenter" and "Trends and Alarms".

You can install the Excel add-ins "ExcelWorkbook Wizard" and "Excel Workbook" individually under "Reports/Download area" on the DataMonitor start page for the "Reports". For "Excel Workbook" you need "Microsoft Excel 2007 SP2", "Microsoft Excel 2010" or "Office Excel 2013".

Depending on the operating system, specific user rights may be required for installing the DataMonitor client. For additional information on this, see "User rights for installing the DataMonitor client".

Note

Downloading the client setup

To save the client setup on the client computer, select the "Save" option when downloading the client software from the DataMonitor server. It is recommended to save the Setup file because, in the event of a restart of the client computer being necessary, the Setup need not be downloaded again.

If the DataMonitor client has already been installed from DVD and you want to install an updated version of the client via the Intranet/Internet, you must save the client setup on the target computer.

Excel Workbook Wizard requires Microsoft .Net Framework

In order to us Excel Workbook Wizard make sure that the .Net Framework is installed on the DataMonitor client.

Client installation on a DataMonitor server

Proceed as follows if you also wish to install the DataMonitor client or WebNavigator client on a DataMonitor server:

1. Use the Services Manager in Windows to set the start type of the "CCArchiveConnMon" service to manual.
2. Restart the computer.
3. Install the client.
   Ensure that no WebNavigator clients or DataMonitor clients access the server during installation.
4. Switch the start type of the "CCArchiveConnMon" service back to automatic.

Requirement

- The DataMonitor server requires Internet Information Services (IIS).
- The DataMonitor server requires the WinCC configuration data.
- You need Windows "Administrator" rights to install the DataMonitor server.

Procedure

1. Insert the WinCC DVD into the DVD drive.
2. If the automatic execution of an autorun file is activated, after a few seconds the setup program starts automatically.
   The setup can also be started manually in case the installation is performed from a network drive or the autorun function has been disabled.
   The setup program is started.
3. To install, click the text "Install Software".

4. In the following dialog, select the component "DataMonitor Server V7.3" or "DataMonitor Client V7.3."

5. Follow the instructions of the setup program.

1.5 Licensing

DataMonitor client

No license is required for the DataMonitor client.

DataMonitor server

Licenses must be installed on the DataMonitor server for the DataMonitor clients. The license check is different for the following function groups.

- "Excel Workbooks"
  A "WinCC DataMonitor" license is required on the server computer for each DataMonitor client.

- "Webcenter", "Trends & Alarms", "Reports"
  For "Webcenter", the license count depends on the number of connections rather than the number of clients.

The following table shows the number of possible clients based on the function group and license.

License	Excel Workbooks	Webcenter, Trends & Alarms, Reports
1 Client	1	3
3 Clients	3	6
10 Clients	10	20
25 Clients	25	50
50 Clients	50	100

Example

With a "3 Clients" license, the following users can log on simultaneously:

- 3 users of the "Excel Workbooks" function group

- 6 users of the "Webcenter", "Trends & Alarms", "Reports" function group

Operation without valid license

If no license is available, DataMonitor displays a page requiring acknowledgement indicating the missing license at start-up.

- Click the "OK" button to acknowledge the notice. The start page of the DataMonitor is displayed.

- Check the existing licenses. If necessary, install the required licenses.

  #### Note

  The connection to the DataMonitor server will be maintained if the user closes the DataMonitor start page without logging off with the "Log off" button. The license will remain in use and only be released after approximately 20 minutes.

WinCC/DataMonitor Release Notes

<div style="text-align: right; font-size: 3em;">2</div>

2.1 Notes about DataMonitor

Notes about DataMonitor

These release notes contain important information.

The statements in these release notes take precedence over information provided in the manuals and in the online help.

Please read these release notes carefully as they contain useful information.

Using a secure connection over HTTPS

To improve the security of your communication, configure the DataMonitor server in such a way that only HTTPS connections are supported.

You need a digital certificate for the DataMonitor server for this purpose. Also use SSL certificates on the DataMonitor clients.

Detailed information is available in the Microsoft Support under "How To Set Up an HTTPS Service in IIS" (http://support.microsoft.com/kb/324069/EN-US (http://support.microsoft.com/kb/324069)).

System load through large amounts of data

Note that SQL queries returning large amounts of data can affect system functionality.

Select filter criteria which limit the amount of data in a useful manner.

Opening Excel workbooks on a computer not connected to the Internet

If you want to use the DataMonitor client on a computer not connected to the Internet, you must deactivate certificate checking. To do this, follow these steps:

- Open Internet Explorer.
- Select the "Internet Options" command from the "Tools" menu.
- Click "Advanced".
- In the "Security" section, deactivate the setting "Check for publisher's certificate revocation".

Excel workbook functions and print jobs after deactivating and activating WinCC Runtime

If you deactivate WinCC Runtime and then reactivate it, you also need to restart the Web application.

Excel workbook: volume of requested data for archived values

Although you can limit the requested data volume with the "Data resolution" property, all data of the defined time period is initially used internally. This may have the result that the internal system limit is reached. Use compression archives to limit the data volume.

Excel workbook: Tag selection for event-driven print jobs and Excel Workbooks

As of WinCC V7.2, you can limit display the available variables for the selection of tags using a filter. For example, the filter setting "N*" shows all tags that start with "N".

Web Client: Display of ActiveX controls in Internet Explorer

ActiveX controls are disabled in Internet Explorer by default. For this reason, the WinCC controls are not displayed correctly in Internet Explorer on a Web client.

To display the WinCC controls correctly, add the Web server as a trusted website and enable the ActiveX controls only for the "Trusted sites" zone.

To continue protecting Internet Explorer from foreign ActiveX controls, check that the restricted security settings still apply to the other zones after making the changes.

For more information, refer to the following documentation:

● WinCC/DataMonitor: "WinCC/DataMonitor Documentation > Configuring the DataMonitor System > Working with the DataMonitor Client > Configuring Security Settings in Internet Explorer"

DataMonitor server: Remote access to WinCC file server

Remove access from one DataMonitor server to a WinCC file server is possible only if the firewall is disabled on the WinCC file server.

Excel workbook: Local times on DataMonitor client and DataMonitor server

Please note when requesting archive data that the local times on the server and client may differ if they have not been sufficiently synchronized, for example because automatic synchronization is not possible.

The DataMonitor client attempts to establish the current time of the DataMonitor server when archive data is requested. If it succeeds, the query will be based on the server time. For the display of data in the Excel table, the time stamp represents the server time but in the local time zone of the client.

If the query of the server time is unsuccessful, the DataMonitor client will base the time period of the query on its local time. An entry will also be made in the Windows event display on the DataMonitor client. For the display of data in the Excel table, the time stamp represents the client time.

Excel workbook: Client on terminal server

In the case of operation on a terminal server, an Excel Workbook client will run in a session of the terminal services. A maximum of only 10 Excel workbook clients can be operated; otherwise, MS Excel will overload the computer.

Trends & Alarms: Display of archive data after copying a project

To copy a WinCC project between computers and then display the archive data of the project on the target computer in "Trends & Alarms", you will first need to copy the project using the WinCC Project Duplicator.

If you use Windows Explorer rather than the Project Duplicator to copy the project, the runtime data will not be adapted to the target computer. The computer name of the source computer and not that of the target computer is displayed in the archive selection in "Trends and Alarms". The computer name of the target computer is displayed in the selection field only after the archive has been reset in Alarm Logging and Tag Logging.

See also

http://support.microsoft.com/kb/324069 (http://support.microsoft.com/kb/324069)

2.2 Service and Support

2.2.1 Warnings

Safety notes

This manual contains information that must be observed to ensure your personal safety and to prevent property damage. Notices referring to your personal safety are highlighted in the manual by a safety alert symbol; notices referring to property damage only have no safety alert symbol. Depending on the hazard level, warnings are displayed in a descending order as follows:

> ⚠ **DANGER**
>
> means that there can be severe physical injury or even death if the corresponding safety measures are not followed.

> ⚠ **WARNING**
>
> means that there can be severe physical injury or even death if the corresponding safety measures are not followed.

> ⚠ **CAUTION**
>
> indicates that minor personal injury may result if proper precautions are not taken.

> **NOTICE**
>
> indicates that damage to property may result if proper precautions are not taken.

Note

is an important information about the product, the way to handle the product or the respective part of the documentation and we wish to especially bring this to your notice.

If multiple levels of hazards can occur, the warning is always displayed with the highest possible level. If a warning with a warning triangle is to be indicate physical injury, the same warning may also contain information about damage to property.

Qualified Personnel

The corresponding machine/ system may only be set up and operated with the help of this documentation. A device/system must only be commissioned and operated by qualified personnel. Qualified persons in the sense of safety instructions in this documentation stand for persons who are authorized to operate, earth and mark machines, system and electrical circuits according to safety standards.

Proper use

Please observe the following:

> ⚠️ **WARNING**
>
> **Proper use**
>
> The machine may only be used for the application instances that have been described in the catalog and the technical description and only in combination with third-party devices and components recommended and/or approved by Siemens. Smooth and safe operations demand proper transport, proper storage, installation and assembling as well as careful operations and maintenance.

Brands

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Security information

Siemens provides products and solutions with industrial security functions that support the secure operation of plants, solutions, machines, equipment and/or networks. They are important components in a holistic industrial security concept. With this in mind, Siemens' products and solutions undergo continuous development. Siemens recommends strongly that you regularly check for product updates.

For the secure operation of Siemens products and solutions, it is necessary to take suitable preventive action (e.g. cell protection concept) and integrate each component into a holistic, state-of-the-art industrial security concept. Third-party products that may be in use should also be considered. For more information about industrial security, visit

- http://www.siemens.com/industrialsecurity (http://www.siemens.com/industrialsecurity)

To stay informed about product updates as they occur, sign up for a product-specific newsletter. For more information, visit

- http://support.automation.siemens.com (http://support.automation.siemens.com)

Disclaimer of liability

We have checked the contents of the description to ensure that it matches with the hardware and the software it describes. Nevertheless, we cannot assume responsibility for any deviations that may arise. The details outlined in this description are checked regularly and the required corrections are done in the subsequent editions. Suggestions for improvement are welcomed.

The statements in the online documentation are more binding than the statements in the manuals and PDF files.

Please follow the Release Notes and Installation Notes. The information in these Release Notes and Installation Notes has priority over that in the manuals and online help with regard to legal validity.

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Siemens AG

Automation and Drives

SIMATIC Human Machine Interfaces

P.O. Box 4848

D-90026 Nuremberg, Germany

See also

http://support.automation.siemens.com (http://support.automation.siemens.com)

http://www.siemens.com/industrialsecurity (http://www.siemens.com/industrialsecurity)

2.2.2   Customer Support

Customer Support and Technical Support

You can reach the SIMATIC hotlines at the times specified in the following table. The SIMATIC hotline employees speak German and English. The Authorization hotline offers French, Italian or Spanish customer support in addition to German and English.

Technical support

Nuremberg   (GMT +1:00)

Service HoursMonday - Friday, 8:00 to 17:00 (CET/CEST)

Phone	+49 (0)911 895 7222
Fax	+49 (0)911 895 7223
E-mail	http://www.siemens.com/automation/support-request (http://www.siemens.com/automation/support-request)

An overview of the Technical Support is available at the following URL:

● http://support.automation.siemens.com/WW/view/en/16605032 (http://support.automation.siemens.com/WW/view/en/16605032)

Automation Value Card (AVC)

The Automation Value Card (AVC) provides extended Technical Support and is available 24 hours every day of the week. Information on the AVC can be found at the following URL:

- http://support.automation.siemens.com/WW/view/en/28448132 (http://support.automation.siemens.com/WW/view/en/28448132)

SIMATIC Customer Online Support

Service and Support

An overview of the support offering for our products is available at the following URL:

- http://www.siemens.com/automation/service&support (http://www.siemens.com/automation/service&support)

In Product Support, for example, you will find downloads of firmware updates, service packs and useful utilities.

Online Help is available so that you can successfully use the Support offering. Open the Online Help by selecting the corresponding button on the Internet site or at the following URL:

- http://support.automation.siemens.com/WW/support/html_00/help/Online_Hilfe.htm (http://support.automation.siemens.com/WW/support/html_76/help/Online_Hilfe.htm)

WinCC FAQs

WinCC Online Support with information on FAQs (Frequently Asked Questions) may also be found at the following URL:

- http://support.automation.siemens.com/WW/view/de/10805548/133000 (http://support.automation.siemens.com/WW/view/en/10805583/133000)

Technical Forum

The Technical Forum supports exchange with other SIMATIC users. It is available at the following URL:

- http://www.siemens.com/automation/csi/forum (http://www.siemens.de/automation/csi_en/forum)

Technical documentation for SIMATIC products

You can find a guide to the technical documentation provided for individual SIMATIC products and systems at the following URL:

- http://www.siemens.com/simatic-tech-doku-portal (http://www.siemens.com/simatic-tech-doku-portal)

Contact person database

To contact your local agent, search our contact database at the following URL:

- http://www.automation.siemens.com/partner/index.asp (http://www.automation.siemens.com/partner/index.asp?lang=en)

Product Information

SIMATIC WinCC

Go to the following URL for additional information about WinCC products:

- http://www.siemens.com/wincc (http://www.siemens.com/wincc)

SIMATIC Products

Go to the following URL for additional information about SIMATIC products:

- http://www.siemens.com/simatic (http://www.siemens.com/simatic)

See also

Internet: Support Request (http://www.siemens.com/automation/support-request)

Internet: Technical support (http://support.automation.siemens.com/WW/view/en/16605032)

Internet: Automation Validation Card (AVC) (http://support.automation.siemens.com/WW/view/en/28448132)

Internet: Service and Support (http://www.siemens.com/automation/service&support)

Internet: WinCC FAQs (http://support.automation.siemens.com/WW/view/en/10805583/133000)

Internet: Support Technical Forum (http://www.siemens.de/automation/csi_en/forum)

Internet: Support Search (http://www.siemens.de/automation/csi_en/km)

Internet: Support Online Help (http://support.automation.siemens.com/WW/support/html_76/help/Online_Hilfe.htm)

Internet: Technical documentation for SIMATIC products (http://www.siemens.com/simatic-tech-doku-portal)

Internet: Contact person database (http://www.automation.siemens.com/partner/index.asp?lang=en)

Internet: Information about WinCC (http://www.siemens.com/wincc)

Internet: SIMATIC Products (http://www.siemens.com/simatic)

2.2.3   Support Request

Dear customer

In order to provide you with fast and effective support, please complete the "Support Request" form online on the Internet. Describe the problem in as much detail as possible. We would appreciate if you would provide us with all project data, so that we can reproduce the error situation or shorten the turn-around time.

Before filling out the support request, check whether your configured quantity structure is within the range of tested quantity structures (see topic "Performance Data").

Support Request form

The Support Request form is available at the following URL:

● http://www.siemens.com/automation/support-request (http://www.siemens.com/automation/support-request)

When filling out the report, you will be guided through several steps, which will ask about all required information.

A detailed description of the Support Request can be found at the following URL:

● http://support.automation.siemens.com/WW/view/en/16605654 (http://support.automation.siemens.com/WW/view/en/16605654)

Procedure

1. Open the "Support Request" form using the link on the Internet. Step 1 "Select product" is displayed:

2. Enter the project name in the "Product/Order number" box. Upper/lower case is not relevant. Search for parts of the product name or enter the full product name in the correct order. You can e. g. search for the following terms:
   - "WinCC Runtime"
   - "WinCC DataMonitor"
   - "wincc webnavigator"
   - "Connectivity"
   The found products are offered in the "Product selection" field.

3. Select the desired product and click on "Next" to switch to step 2 "Select use case".

4. Select a use case or describe your specific use case in the "Other use case" field.

5. Press "Next" to switch to step 3 "Our solutions".
   Suggested solutions and FAQs for the selected key words are listed.
   Once you have found a suggested solution for your problem, you can close the form in the browser.
   If you did not find any applicable suggested solutions, press "Next" to switch to step 4 "Describe problem".

6. Describe your problem as exactly as possible in the "Details" field.
   Pay particular attention to the following questions and comments. Please also check the WinCC installation and configuration with regard to the following references.
   If you have any idea what has caused the error, please let us know. No detail should be omitted, even if you consider it unimportant.
   - Was the configuration data created with older WinCC versions?
   - How can the error be reproduced?
   - Are other programs running simultaneously with WinCC?
   - Have you deactivated the screen saver, virus checker and power management function?
   - Search the computer for log files (WinCC\Diagnose*.log, drwatson.log, drwtsn32.log).
   The log files are needed for error analysis. Thus, be sure to send the log files as well.

7. Use the "Search" button to upload your affected project and the log files (e. g. as a Zip file) to the Support Request.
   Press "Next" to switch to step 5 "Provide contact information".

8. Enter your contact information.
   Read the privacy notice and choose whether your personal data should be permanently saved.
   Press "Next" to switch to step 6 "Summary & Send".

9. Press the "Print" button if you would like to print the support request.
   You close the support request by clicking the "Send" button.
   Your data will be transmitted to Customer Support and processed there.

Thank you for your cooperation. We hope that we can be of assistance in solving your problems.

Your WinCC Team

See also

Internet: Error Report (http://www.siemens.com/automation/support-request)

Internet: Overview of Support Request (http://support.automation.siemens.com/WW/view/en/16605654)

WinCC/DataMonitor Getting Started

<div style="text-align: right; font-size: 2em;">3</div>

3.1 DataMonitor

Overview

You can display and evaluate current process states and historical data with WinCC/DataMonitor via the Intranet/Internet.

WinCC/DataMonitor consists of a server component and a client component. The DataMonitor server makes functions available to the DataMonitor client for analysis and display of data. Access rights control access to the functions.

- "WinCCViewerRT":
  Program for monitoring of WinCC projects. The DataMonitor client is a so-called "View Only Client".

- "Excel Workbook":
  Display of process values and archive values in an Excel table for evaluation and display via the web or as a print template for reports

- "Reports":
  Creating reports from WinCC print jobs or from published Excel workbooks. This also allows for statistics and analyses of certain process data or historical data. The reports are created in PDF format and forwarded as e-mail if necessary.

- "Webcenter":
  Central information portal for access to WinCC data via user-specific views. Clearly structured Webcenter pages with individual user rights for reading, writing and creating Webcenter pages.

- "Trends & Alarms":
  For display and analysis of archived process values and alarms. The data is displayed in tables and diagrams on predefined Webcenter pages.

Quantity Structure

WinCC/DataMonitor allows the simultaneous operation of up to 50 clients per server. When using the terminal services, up to 25 DataMonitor clients are released per terminal services server.

3.2 Preparations

Introduction

For the Getting Started, you will implement a WinCC single user system, on which the DataMonitor server will be installed. To access the data and display them with the DataMonitor client, the client is started on the DataMonitor server.

Requirement

Please follow the Installation Notes of WinCC and WinCC/DataMonitor.

- Internet Information Service is installed.
- WinCC is installed and has been started.
- The DataMonitor server is installed.
- The DataMonitor client is installed.
- A WinCC/DataMonitor license is installed.
- Internet Explorer is installed.

Configuration steps

You have to complete the following configuration steps to set up the DataMonitor system.

1. Configure the DataMonitor system.
   - Define Windows user and access rights in Windows.
   - Define WinCC user and access rights in "WinCC User Administrator" for WinCCViewerRT and "Excel Workbook".
   - Set up the web page and firewall.
   - Publish WinCC pictures.
2. Start the WinCC Runtime.
3. Set up the DataMonitor client.
   - Configure the security settings of the Internet Explorer.
4. Use the DataMonitor client.
   - Start the Internet Explorer and enter the address of the DataMonitor server.
   - Log on to the DataMonitor server and access the DataMonitor functions.
5. Monitor the WinCC project with the WinCCViewerRT.
   - Set up WinCCViewerRT.
   - Display pictures.

3.3 Configuring the DataMonitor system

3.3.1 Defining users in Windows

3.3.1.1 User groups in Windows

Overview

The following user groups are created automatically in Windows when the DataMonitor server is installed.

SIMATIC Report Administrators

Membership of the user group "SIMATIC Report Administrators" is required for extended rights, especially for configuration purposes. At least one user must be created and assigned to the "SIMATIC Report Administrators" user group.

- You can also do the following as "SIMATIC Report Administrators" in the "Webcenter":
  - Configuring connections
  - Creating templates for Webcenter pages
  - Creating and configuring public and private Webcenter pages
- You can also do the following as "SIMATIC Report Administrators" in "Reports":
  - Configuring reports based on WinCC print jobs or Excel workbooks.

SIMATIC Report Users

Membership of the user group "SIMATIC Report Users" or of your own user group is required for the "Webcenter", "Trends & Alarms" and "Reports".

- You can also do the following as "SIMATIC Report Users" in the "Webcenter":
  - Setting up and configuring Webcenter pages. The Webcenter pages are stored in different directories.
  - Opening public pages
- You can also do the following as "SIMATIC Report Users" in "Reports":
  - Opening reports based on WinCC print jobs or Excel workbooks.

3.3.1.2 Defining Users and Access Rights in Windows

Introduction

When using DataMonitor, users need different authentications. All users must be members of the "SIMATIC HMI" user group. For access to the WinCC database via DataMonitor, you need a Windows user with password who is a member of the "SIMATIC HMI VIEWER" user group.

This means you must create users with the matching user rights.

Requirement

- WinCC is installed.
- The DataMonitor server is installed.

Procedure using Windows 7 as an example

1. Open the "Control Panel" from the Windows Start menu.

2. Double-click "System and Security" and then "Administrative Tools".

3. Double-click "Computer Management" in the "Administrative Tools" dialog.

4. Navigate to the "System Tools > Local Users and Groups / Groups" directory. In the shortcut menu select the entry "New user".

5. Enter a name such as "DM_Demo" in the dialog "New user" in the "User name" box.
   Enter a description such as "User for DataMonitor" in the "Complete name" box.
   Type the desired password into the "Password" box and then repeat it in the "Repeat password" box.
   Create the user with "Create".
   Close the "New user" dialog.

6. In the right part of the table window, click on the newly created user. Select the "Properties" command in the shortcut menu.
   Switch to the "Member Of" tab.
   Click "Add".

7. In the "Select Groups" dialog, click the "Advanced > Find now" button.

8. Select the entries "SIMATIC Report Administrators", "SIMATIC HMI" and "SIMATIC HMI VIEWER" from the list at the bottom of the dialog.
   Click "OK" twice to close the dialog.

9. In the properties of the user, the groups "SIMATIC Report Administrators", "SIMATIC HMI" and "SIMATIC HMI VIEWER" have been added to the list of memberships.
   Click "OK".

10. Close the "Computer Management" dialog with "File > Exit".

11. Close the "Administrative Tools" window.

Result

The user "DM_Demo" with membership of the user groups "SIMATIC Report Administrators", "SIMATIC HMI" and "SIMATIC HMI VIEWER" has been set up. The user can now create directories in the Webcenter and make connections to WinCC databases.

Note

If a user wants to access remote computers via the DataMonitor server, the Windows user must be set up on the DataMonitor server as well as the remote servers with the same password.

3.3.2   Administering users for DataMonitor

Introduction

For the use of certain functions on the DataMonitor client, users need authentication as DataMonitor user as well as authentication as WinCC user. Use one WinCC user for "WinCCViewerRT" and "Excel Workbook".

If you are working as DataMonitor user and WinCC user at the DataMonitor client you have to log on twice. You have two alternatives to only log on once:

- The DataMonitor user and the WinCC user have identical names and passwords.
  The user must be configured in Windows and in WinCC and added to the "SIMATIC HMI" and "SIMATIC HMI VIEWER" user groups.

- SIMATIC logon allows the central administration of users.
  In order to use SIMATIC logon in connection with DataMonitor, DataMonitor users must also be added to the user group "SIMATIC HMI VIEWER".

Procedure

1. Select the entry "User Administrator" in the navigation window of WinCC Explorer. Select the "Open" command from the shortcut menu. The editor "User Administrator" is opened.

2. In the navigation window, select a user or create a new user.

3. Select a user group and then open the shortcut menu. Select the entry "New User". The name of the user can be changed directly with the <F2> function key or the shortcut menu command "Rename". The user must be selected beforehand for this purpose.

4. Enter a name and a password with at least six characters for "Login".
   Click "OK".

5. Select the newly created user in the table window. The properties of the user are displayed.

6. Activate the option "WebNavigator". Select a start picture from the dropdown list next to "Web start picture".

7. Check the selected language and change this setting if desired via the dropdown list next to "Web language". You can only select a new language from the dropdown list if one of the two options "WebNavigator" or "PureWebClient" is activated. The languages created in the Text Library are available for selection.

8. The user needs at least the authorization "Web Access - monitoring only".
   In the row in the table window, activate the corresponding authorization in the "Enable" column.

9. Close the User Administrator.

3.3.3 Configuring the DataMonitor web page

Introduction

You create the DataMonitor web page with the WinCC Web Configurator.

Requirement

- The DataMonitor server is installed.
- The Windows "Internet Information Service" component is installed.

Procedure

1. Select "Web Navigator" in the navigation window of WinCC Explorer. Click the "Web Configurator" command in the shortcut menu.
   Alternatively, in the Windows Start menu select "Start > All Programs > Siemens Automation > SIMATIC> WinCC > Webnavigator Server > WebConfigurator".

2. The Web Configurator detects whether a configuration already exists.

   – No configuration found: Activate "Create a new standard website (Standalone)". Click "Next".

   – Configuration found: Click "Next" and check the configuration.

3. Select "Name of the web page" and enter the name.

4. Enter the number of the port used for access in the "Port" box.

5. At "IP address", specify whether the computer is to be available on the intranet or Internet or on both networks.
   Use only the addresses that are available in the selection list.
   Select "All not assigned" to enable intranet and Internet access to the computer.

6. Select "DataMonitor.asp" as the default web page.

7. Specify the time interval after which the DataMonitor client starts to reestablish a connection automatically in case of a connection error. A time setting of "0 s" disables the "Automatic reconnection" function.

8. Specify whether the web page is started once the configuration is completed.

9. Click "Finish" if you have not activated a firewall.
   Click "Next" if you have installed a firewall. See the following pages to find out how to set up a firewall.

Result

You have created the Web folder and activated the web page. When you have activated the firewall, use the Web Configurator to configure its settings.

3.3.4   Configuring the firewall

Introduction

The chapter describes how to activate "HTTP" and "HTTPS" services for port "80" in Windows 7 or Windows 2008.

Consult your network administrator if you want to set up the Windows Firewall with advanced security or for a different port.

Requirement

- You have created a default web page with Web Configurator.

- The Firewall is activated.

- The user who is logged has Windows administrator rights.

- You have to set up the HTTPS service in IIS if you are using it for WebNavigator. For more information, refer to "Setting up an HTTPS service in IIS (http://support.microsoft.com/kb/324069)".

Procedure for the default port

1. Click the "Windows Firewall" button in the " WinCC Web Configurator".

The "Windows Firewall" dialog opens.

2. Windows 7: Click "Allow a program or feature through Windows Firewall".
   Windows 2008: Click "Allow a program to communicate through Windows Firewall".

3. Activate "Secure WWW services (HTTPS)" or "WWW services (HTTP)".

4. Close all Windows dialogs with "OK".

5. Click "Finish" in the Web Configurator.
   The server configuration is completed.

3.3.5 How to publish WinCC process pictures using Web View Publisher

Introduction

Use Web View Publisher to publish the process pictures that you created in Graphics Designer. The WinCC Web Publishing Wizard supports you during publishing.

Procedure

1. Select "Web Navigator" in the navigation window of WinCC Explorer.
   Select the "Web View Publisher" command in the shortcut menu.
   The WinCC Web Publishing Wizard is now launched.

2. Click "Next".

3. Activate the "Server prefix" option if you want to publish the pictures on a dedicated web server.
   Select the prefix of the WinCC Server that contains the WinCC project from the selection list. The list displays the prefixes of the servers whose packages are loaded on the WinCC Client.
   Deleting a prefix from the selection changes the paths displayed in the fields below.

4. Under "Path to your WinCC project", select the WinCC project folder containing the pictures you want to publish.
   The folder has the following format for publication on a dedicated web server:
   "\\<servername>\<serverprefix>_ _<projectname>".
   If you want to publish from a remote station, select the source project containing the pictures. The source project is displayed by its enable name on the other WinCC Server.
   The folder has the following format:
   "\\<computer name>\<enable name>".

5. Select the target folder for the published pictures under "Publishing folder of the WinCC web".
   Accept the proposed folder within the WinCC project folder.
   Do not change the path specification unless you want to transfer pictures to a different project, for example. In this case, the prefix selection list will be expanded accordingly.
   Verify the specified target project to which the published pictures are saved during remote publishing.
   The path definition will be updated when you select the source project.
   Should the target project be located on another WinCC server, select the corresponding project.

6. Select the "Display hidden objects" option to show hidden objects that are published automatically in the results list.

7. Click "Next". Move the pictures that you wish to publish to the "Selected files" list.

8. Click "Next". Move the C project functions which you use in the published pictures to the "Selected files" list. You cannot publish individual VB scripts.

Click "Next".

9. Move the referenced graphics that you wish to publish to the "Selected files" list. The referenced files are in the "GraCS" folder or in subfolders of "GraCS".

Click "Next".

10. Click "Exit" to start publishing the pictures.

Result

You have successfully published the pictures and functions. The results list displays the status of all published objects. You can click an object to view additional object information.

You can trace publishing using the "<projectfolder>\WebNavigator\WizardLog.txt" file.

Checking the scripts using "PdlPad"

The "WizardLog.txt" log file contains information about errors in the scripts used. You can also find errors using the "PdlPad" debugger.

1. Open "PdlPad" by double-clicking on the affected object in the results list of Web View Publisher. The script of the published picture is displayed.

2. Click ![icon] in order to check the script.

3. You can temporarily correct and save the scripts. These corrections are only saved to the published pictures, not in the process picture of the WinCC project.

"PdlPad" can also be opened in the Windows Start menu via "SIMATIC > WinCC > WebNavigator-Server".

3.4 Working with the DataMonitor client

3.4.1 Configuring security settings in Internet Explorer

Introduction

For full functionality on the DataMonitor client, adapt the security settings in the Internet Explorer.

Requirement

- Internet Explorer is installed.

Procedure

1. Click "Tools > "Internet Options" in the Internet Explorer.
   This will open the "Internet Options" dialog.

2. Select the "Security" tab.

3. Select the "Trusted Sites" icon and click the "Sites" button.
   The "Trusted Sites" dialog opens.

4. Enter the address of the DataMonitor server in the "Add this website to the zone" field.
   Possible formats and wildcards include "*://157.54.100 - 200", "ftp://157.54.23.41", or "http://
   *.microsoft.com".

5. Deactivate the "Require server verification (https:) for all sites in this zone" check box.
   Click "Add".
   Confirm the entry by clicking "OK".

6. Select the "Trusted Sites" icon.

7. Click "Default Level".
   Click "Adapt Level" in the next dialog.
   The "Security settings" dialog box is opened.

   - Activate the "Activate" option under "Initialize and script ActiveX controls not marked as safe".

   - Confirm the entry by clicking "OK".

8. Close the "Internet Options" dialog by clicking "OK".

Result

The necessary settings in the Internet Explorer of the DataMonitor client are configured.

User authentication: Activated setting "Automatic logon with current user name and password" in Internet Explorer

If the setting "Automatic logon with current user name and password" is activated in Internet Explorer in "Tools > Internet Options > "Security" tab > "Adapt Level" button > entry "User Authentication" > Logon", this can lead to unexpected behavior under the following requirements.

Requirement

- The "Automatic logon with current user name and password" The setting is activated in Internet Explorer.

- The user logs onto the DataMonitor client as a WinCC user who is not configured in the user groups on the DataMonitor server.

- The user is logged onto the computer with a Windows logon that is set up as a user name on the DataMonitor server.

Behavior

1. The DataMonitor server does not recognize the WinCC user name the user has used to log onto the DataMonitor client and therefore rejects it. The user cannot see this behavior.

2. Internet Explorer automatically starts a new logon using the current Windows logon as user name.

3. The DataMonitor server recognizes the Windows logon as DataMonitor user name and accepts the logon for this user.

4. The user is logged on but not with the DataMonitor user name the user has entered. The current DataMonitor user is not displayed.

Recommendation

Disable the "Automatic logon with current user name and password" setting.

Use the setting only when there is a clear distinction between Windows logon and DataMonitor user name.

3.4.2 DataMonitor start page on the DataMonitor client

Overview

You start the DataMonitor client on a standalone computer or on a DataMonitor server. The start page of the DataMonitor summarizes the functions of the DataMonitor:

- "Reports":
  Creation and output of analysis results and process data in print jobs and published Excel workbooks.

- "Webcenter":
  Creation of Webcenter pages for the display of archived data.

- "Trends & Alarms":
  Display of alarms and process values from archives in tables and diagrams.

- "Administration"
  Configuration of connections and management of users, archives and pictures.

Requirement

- The user is created in WinCC.

- The user must be a member of the Windows user group "SIMATIC Report Administrators" or "SIMATIC Report Users" .

- The WinCC project on the DataMonitor server is in runtime.

Procedure

1. Start the Internet Explorer on the DataMonitor client.

2. Enter the name of the DataMonitor server in the format "http://<servername>" in the URL. Confirm the entry with "Enter".
   The log-in dialog is opened.

3. Enter the name of a Windows user and the associated password. Confirm with "OK".

Result

The start page with the DataMonitor functions will be displayed. The use of the functions depends on the access right of the user.

General Operations of the DataMonitor Client

- Select the desired interface language from the selection field in the header.

- Hide the header on the pages of "Webcenter" and "Trend & Alarms", if necessary.
  Click ⬚.
  To show the header line again, click on the symbol ⬚.

- In order to log off from the DataMonitor server, click on the "Log off" link.
  Exit Internet Explorer to free-up the used license immediately.

See also

Working with reports (Page 206)

Working with trends and alarms (Page 172)

Working with the Webcenter (Page 142)

3.5 Working with WinCCViewerRT

3.5.1 Configuring WinCCViewerRT

Introduction

WinCCViewerRT is a program for visualizing WinCC projects. You can configure WinCCViewerRT for operation with the DataMonitor server and Graphics Runtime.

Requirement

- On the server
    - The DataMonitor server is installed.
    - A WinCC/DataMonitor license is installed.
    - The WinCC project is in Runtime.
    - The WinCC pictures are configured and published for web access.
    - The WinCC user must be assigned authorization no. 1002 - "Web Access - monitoring only".
- On the client
    - The DataMonitor client is installed.

Procedure

1. Select the "Start > Programs > Siemens Automation > Option and Tools > HMI Tools > WinCCViewerRT" command in the Windows Start menu.
   The configuration dialog opens if you reconfigure WinCCViewerRT.
   WinCCViewerRT opens if WinCCViewerRT has already been set up. Use the <Ctrl+Alt+P> key combination to open the configuration dialog of WinCCViewerRT.

2. Enter the login data in the "General" tab:

   – Server address: "http://<Servername>" or "http://<IP-Adresse>"

   – User name and password, if you want to specify a default user for the login dialog.

   – The user settings you configured in the User Administrator will be activated if you enable the "Apply project settings" option.

3. Specify the Runtime language in the "Parameters" tab.
   If necessary, disable any key combinations with which the user switches to other programs.
   If required, you can modify the preset <Ctrl+Alt+P> key combination that is used to open the WinCCViewerRT configuration dialog.
   Define a key combination with which a user can log off and a new user can log on. The key combination can only be used if no default user has been set in the "General" tab.

4. Specify the WinCC Runtime properties in the "Graphics Runtime" tab:
   - Start picture
   - Configuration file for user-defined menus and toolbars
   - Window attributes
   - Impermissible user actions

5. Specify additional user actions in the "Runtime" tab:
   - Activating the screen keyboard
   - <Ctrl+Alt+Del> key combination to allow switching to the Task Manager or operating system via the screen keyboard.
   - Auto-logoff settings

6. Close the dialog with the "OK" button.

Result

WinCCViewerRT is configured. The connection to the DataMonitor server is set up after you close the dialog. The settings are saved to the "WinCCViewerRT.xml" configuration file. The configuration file settings are used at the next start of WinCCViewerRT. WinCCViewerRT applies the user interface language from WinCC.

The configuration file is available in the folder "Documents and Settings\User\Application Data \Siemens\SIMATIC.WinCC\WebNavigator\Client". You can rename the file, for example, to "User1.xml". You can also start WinCCViewerRT by means of the command line with the user-specific configuration file, e.g. "WinCCViewerRT.exe User1.xml". This procedure allows for different configurations, depending on the logged-on user.

The WinCCViewerRT configuration dialog opens at the start if you rename or delete "WinCCViewerRT.xml". Reconfigure WinCCViewerRT or select a different configuration file.

Note

WinCCViewerRT can only be closed by means of script function if you disable a key shortcut or hide the "Close" button. Function in the C-Script: DeactivateRTProject; function in the VBScript: HMIRuntime.Stop.

3.5.2 Displaying pictures

Requirement

- A WinCC/DataMonitor license is installed on the DataMonitor server.
- The WinCC project on the DataMonitor server is in runtime.
- The WinCC pictures are configured and published for web access.
- The WinCC user must be assigned authorization no. 1002 - "Web Access - monitoring only".
- WinCCViewerRT is configured on the DataMonitor client.

Procedure

1. Start WinCCViewerRT in the Windows Start menu with "Start > Programs > Siemens Automation > Options and Tools > HMI Tools".

2. Log on to the DataMonitor server:
   – A login dialog is not displayed if the user name and password are set in the WinCCViewerRT configuration dialog. You are logged on automatically with the stored login data.
   – The login dialog is displayed if a user name and password is not set in the WinCCViewerRT configuration dialog. Enter the user name and password of the WinCC user. Click "OK".

3. To change the user, use the specified key combination for login/logoff of "WinCCViewerRT". The previous user is logged off. Enter the user name and password of the new WinCC user in the login dialog. Click "OK".
   The key combination can only be used if no default user has been set.

Result

WinCCViewerRT automatically connects to the activated WinCC project. The pictures of WinCC project are displayed.

The "View Only Cursor" indicates that process-related operations are not possible.

Certain operations, such as opening the properties dialog of a WinCC OnlineTrendControl, are still possible.

You can also use your own cursor icon as a "View Only Cursor", if required. For more information, refer to "Configuring Runtime settings (Page 125)".

The <F5> key triggers a reselection of WinCCViewerRT.

3.6 Use of DataMonitor

3.6.1 Create connection and set up language

Introduction

For access of the DataMonitor client to runtime data and archived data, configure connections to the WinCC databases in the "Webcenter". For each data source, set up a connection, e.g., to the WinCC server. You need the configured connections for Webcenter pages and "Trends & Alarms".

Requirement

- The user is a member of the Windows user group "SIMATIC Report Administrators".
- For access to the WinCC database via DataMonitor, a Windows user with password is created who is a member of the "SIMATIC HMI VIEWER" user group.

Procedure

1. Click "Webcenter > Administration" on the start page.
2. Click the "Connection Administration" tab.

3. Select the option "New Connection". After the new installation, no selection is possible in the "Connection" box, as no connections have been configured yet.

4. Select the language that corresponds with the linguistic region of the server or archive to be linked in "Linguistic Region". The setting ensures that special national characters are displayed correctly.

5. Enter a name in the "Connection Name" box, such as "WinCC1_Runtime". The name should include a reference to the selected connection type. Do not use any blank spaces or special characters.

6. Enter the computer name on which the archive backup data are stored.
   As an alternative, select the name of the computer using the "Find" button.

7. Enter the Windows user with password for the connection with the WinCC database.

8. Select the connection type to the WinCC data:
   – "Swapped-out WinCC archive". Additional steps are necessary to access data on swapped archives. More information is available under "Connecting or separating swapped archives (Page 150)".
   – "WinCC Runtime". Only the open single segment of the Runtime database is used.
   – "CAS". The WinCC data of the central archive server are used.
   – "WinCC Runtime + all segments". The open single segment and all other connected segments of the Runtime database are used.

9. Select the database for the connection type:
   – "Swapped-out WinCC archive": Click "Display database" or select the archive from the list.
   – "WinCC Runtime" and "CAS": Select the Runtime database of the activated WinCC project. As an alternative, select the name of the database using the "Find" button.
   – "WinCC Runtime + all segments": "CC_ExternalBrowsing" is automatically entered as database.

10. Activate "Automatic adaptation of RT database" so that the database name is adjusted in the connection administration during a segment change.

11. Click the "Create" button.

Result

The connection to the data source is created and can be selected in the "Connection" box of the connection administration.

3.6.2 Displaying process values and messages via "Trends and Alarms"

3.6.2.1 Displaying process values in a table

Introduction

Use "Trends & Alarms" to display archived process values in a table.

Requirement

- The connection to the WinCC data is established.
- The start page of the DataMonitor is open.

Procedure

1. Click "Trends & Alarms" on the start page.

2. Click the "Process Value Table" tab.
   The Web part "Process Value Table" is displayed.

3. Click 📝. The configuration dialog of the Web part opens.

4. Change the title in the "Title" field. Enter a note in the "Tooltip" field.

5. Select one of the configured connections in the "Connection" field.
   The archive tags available via this connection will be displayed.
   Limit the display of the tags, if necessary:

   – Select individual archives with "Archive selection".

   – Set the filter criteria with "Tag filter".

6. Click "Add" for the required archive tag.

7. Set the time range in the area "Time period".
   With relative times, enter a negative value into the respective field.
   For more information on entering time, click ❓ .
   Click "Preview" to check the set time range in the column "Preview Time Range".

8. Specify the number of decimal points in the area "Representation of decimal points".

9. In the "Table size" area, define the size of the display window.
   If the value "0" is entered in both fields, the size is determined automatically. The size
   depends on the space requirement of the Web part.

10. The available Webcenter pages are displayed in the area "Link to Webcenter pages". Click
    🔳 to assign the web part to one or several Webcenter pages.

11. Click "OK" to confirm your entries.

Result

The values of the archive tags and the quality code are output in the process value table.

If the manual entry of archive values is allowed during runtime, the modified or newly created values are identified as such. There is an "m" in a separate column to show a manual entry of the archive value.

Operation:

(icons)	In absolute time required to scroll forward or backward in the selected time range.
Arrow buttons	To scroll forward or backward in multi-page tables.
(icon)	Export alarms in CSV format.
(icon)	Changing the settings of the Web part.

3.6.2.2 Displaying process values in a diagram

Introduction

Use "Trends & Alarms" to display archived process values in trends.

Requirement

- The connection to the WinCC data is established.
- The start page of the DataMonitor is open.

Procedure

1. Click "Trends & Alarms" on the start page.

2. Click the "Trend (Process Values)" tab. The Web part "Trend (process values)" is displayed.

3. Click 📝. The configuration dialog of the Web part opens.

4. Change the title in the "Title" field. Enter a note in the "Tooltip" field.

5. Select one of the configured connections in the "Connection" field. The archive tags available via this connection will be displayed.
   Limit the display of the tags, if necessary:

   – Select individual archives with "Archive selection".

   – Set the filter criteria with "Tag filter".

6. Click "Add" for the required archive tags, e.g. "TREND_0", "TREND_1", "TREND_2.
   The archive tags are listed in the area "Current selection".

7. In the section "Current selection", you specify for the individual archive tag:

   – Color of time axis and value axis

   – Trend presentation type

8. In the section "Value axis editor", you can activate the automatic scaling for the different value axes or you can assign a minimum and maximum value to each axis.

9. Set the time range in the area "Time period".
   With relative times, enter a negative value into the respective field.
   For more information on entering time, click ❓ .
   Click "Preview" to check the set time range in the column "Preview Time Range".

10. In the section "Diagram settings", you define the size of the display window.
    If the value "0" is entered in both fields, the size is determined automatically. The size depends on the space requirement of the Web part.

11. Activate the option "Show legend" to display the legend.

12. The available Webcenter pages are displayed in the area "Link to Webcenter pages". Click ✖ to assign the Web part to one or several Webcenter pages.

13. Click "OK" to confirm your entries.

Result

The selected process values are displayed as trends in a diagram.

The legend shows the assignment of the colors to the archive tags.

Operation:

↺ ↻	In absolute time required to scroll forward or backward in the selected time range.
🔍	Enlarge the presentation and diagram range left or right of the center line.
🏠	Restore the original view.
➡	Exporting values of the displayed diagrams in CSV format
📝	Changing the settings of the Web part.

3.6.2.3 Displaying messages in the alarm table

Introduction

Use "Trends & Alarms" to display alarms in an alarm table.

Requirement

- The connection to the WinCC data is established.
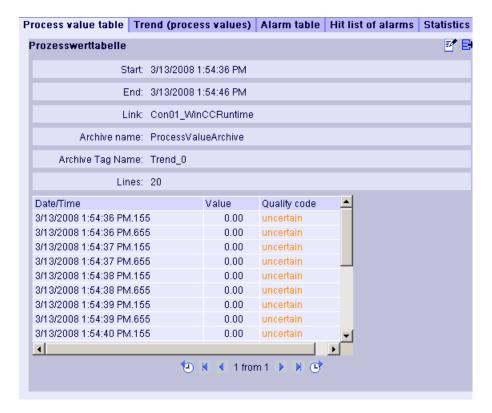
- The start page of the DataMonitor is open.

Procedure

1. Click "Trends & Alarms" on the start page.

2. Click on the "Alarm Table" tab.
   The web part "Alarm Table" is displayed.

3. Click 📝. The configuration dialog of the Web part opens.

4. Change the title in the "Title" field. Enter a note in the "Tooltip" field.

5. Select one of the configured connections in the "Connection" field.

6. Set the time range in the area "Time period".
   With relative times, enter a negative value into the respective field.
   For more information on entering time, click ❓ .
   Click "Preview" to check the set time range in the column "Preview Time Range".

7. In the section "Language of the alarm texts", select the language, in which the alarms are displayed.

8. Select the respective WinCC server with "Selection of WinCC server", if necessary. The setting is necessary if you select a connection to swapped archives that include archives of several WinCC servers.

9. In the section "Filter selection", you may limit the expected search results with SQL syntax.
   Set the filter conditions for individual columns to do so.
   Enter the filter condition for all columns in the "Extended Filter" field.
   For more information on filter conditions, click ❓ .

10. For representation of the data set the following:

    – Sort order: For more information on sorting, click ❓ .

    – Visible columns: To display all columns, click "Select All".

    – Number of decimal places.

11. In the "Table size" area, define the size of the display window.
    If the value "0" is entered in both fields, the size is determined automatically. The size depends on the space requirement of the Web part.

12. The available Webcenter pages are displayed in the area "Link to Webcenter pages".
    Click ❌ to assign the Web part to one or several Webcenter pages.

13. Click "OK" to confirm your entries.

Result

The messages are output in a table.

Process value table	Trend (process values)	Alarm table	Hit list of alarms	Statistics functions fo

Alarmtabelle

Start:	4/3/2008 8:51:35 AM
End:	4/3/2008 9:01:35 AM
Link:	Con01_WinCC_Runtime
WinCC server:	SIEMENSAG
Language of alarm texts:	English
Filtering and sorting:	Data are not filtered.
Lines:	14

Number	Status	Date/Time	Milliseconds	Type
1	+	4/3/2008 8:59:31 AM	468	Time
2	+	4/3/2008 8:59:32 AM	125	Time
3	+	4/3/2008 8:59:32 AM	921	Time
3	-	4/3/2008 8:59:33 AM	640	Time
2	-	4/3/2008 8:59:34 AM	265	Time
1	-	4/3/2008 8:59:35 AM	46	Time
2	*	4/3/2008 8:59:35 AM	499	Time
2	+	4/3/2008 8:59:35 AM	500	Time
2	*	4/3/2008 8:59:35 AM	656	Time
3	*	4/3/2008 8:59:36 AM	202	Time
3	+	4/3/2008 8:59:36 AM	203	Time
2	-	4/3/2008 8:59:36 AM	718	Time
1	*	4/3/2008 8:59:37 AM	467	Time
1	+	4/3/2008 8:59:37 AM	468	Time

1 from 1

Operation:

↺ ↻	In absolute time required to scroll forward or backward in the selected time range.
Arrow buttons	To scroll forward or backward in multi-page tables.
▶	Export alarms in CSV format.
📝	Changing the settings of the Web part.

3.6.3 Displaying process values in an Excel workbook

3.6.3.1 Excel workbook

Overview

With the Excel add-In "Excel Workbook" you can display the following data of the WinCC project in an Excel workbook on the DataMonitor client:

- Alarms

- Values of process tags and archive tags

- Additional information, such as time stamp or quality code of tags

Data of swapped archives is not displayed.

The data is evaluated by Excel and presented as graphic, e. g. as average value calculation or diagram representation. The created Excel workbooks are made available as templates for "Reports" and as report tools.

Requirement

- Use the Download area in "Reports" to install the Excel add-ins "ExcelWorkbook Wizard" and "Excel Workbook" on the DataMonitor client.

Configuring with XML file or online

Simultaneous online access to process data of different WinCC servers is possible using the "Excel Workbook". This requires that you either take the data from an XML file or from a local WinCC project during the configuration with the Excel add-in "Excel Workbook Wizard" . A separation between process and evaluation is possible with the XML file.

- A WinCC project is open on the DataMonitor server.
  The XML file is generated with the "Export Configuration Data" function.
  Then transfer the XML file to a computer with Microsoft Excel.
  Configure the process data display in the workbook.
  Afterwards, transfer the workbook to a DataMonitor client that displays the process data online.

- To accept the data of the WinCC project online, configure directly on the WinCC server or on a WinCC client with an online connection to the respective WinCC server.

- Import the data into an Excel workbook using the "Excel Workbook Wizard".
  Then configure the display of alarms and tag values.

Note

If you rename a table in an Excel workbook, the configuration data of the table is lost.

You can configure up to 32,767 process and archive tags in an Excel workbook. During online display with "Excel Workbook" you may experience considerable delays in updating when there is a large number of tags.

3.6.3.2 Configuring the Excel workbook

Applying data from WinCC project

Introduction

You need the WinCC configuration data for the configuration of Excel workbooks. This means you apply the data from a local WinCC project during configuration in the "Excel Workbook Wizard" .

Requirement

- Server computer
  - Office 2007, Office 2010, or Office 2013 is installed.
  - The Excel add-in "Excel Workbook" is installed.
  - The DataMonitor server is installed.
  - The WinCC project is in Runtime.
  - A user is created in WinCC.
- Configuration PC
  - Office 2007, Office 2010, or Office 2013 is installed.
  - The Excel add-in "Excel Workbook Wizard" is installed.
- MS Office
  - Only Excel files with extensions "XLS, "XLSX, "XLSB", and "XLSM" may be used.

Procedure

1. Open an empty Excel workbook.
   Select the command "Excel Workbook Wizard" in the "DataMonitor" menu.
2. Activate the option "Establish connection with WinCC server". The "WinCC Server" box is shown.
3. Enter the desired name of the server and click "Connect". The log in dialog is displayed.
4. Enter the name and password of a WinCC user.
5. Click "Next". The "Add / delete tags" dialog opens.

Result

The Excel workbook is set up to configure the display of process data. Then publish the workbook. The workbook is made available on the DataMonitor client as report tool or as template for "Reports".

Note

Language for the Office package and the Windows Regional Settings

Make sure that the language is the same for the Office package, the "Microsoft Office Language Settings", and the Windows Regional Options.

Example:

● If you are using Office 2007 with the language "English (U.K.)", for instance, select the regional setting "English (U.K.)".

● If you have set "Chinese (PRC)" as a region and language option in Windows, you must also select "Chinese (PRC)" as the primary processing language in the "Microsoft Office Language Settings 2007".

More information can be obtained through Microsoft Support: http://support.microsoft.com/kb/320369/en (http://support.microsoft.com/kb/320369/en)

See also

Applying data from a configuration file

Introduction

You can create reports without connection to the WinCC server.

Configuration steps:

● Create a configuration file on the server.

● Configure data access with the configuration file.

● You can also configure the data access of a dedicated Web server / WinCC client.

Requirement

- Server computer
  - The DataMonitor server is installed.
  - The online tags of the WinCC project are part of one tag group or one structure type.
  - The WinCC project is in Runtime.
  - A user is created in WinCC.
- Configuration PC
  - Office 2007, Office 2010, or Office 2013 is installed.
  - The Excel add-in "Excel Workbook Wizard" is installed.
- MS Office
  - Only Excel files with extensions "XLS, "XLSX, "XLSB", and "XLSM" may be used.

Creating a configuration file on the server

1. Select the entry "WebNavigator" in the navigation window of WinCC Explorer.
   Open the menu command "Export Configuration Data" in the shortcut menu.

2. Specify the data to be exported in the "Export configuration data" dialog.
   If you do not want to create the online tags in one tag group or one structure type, use the "Without structure (fast export)" option for the export.

3. Specify the path and the name of the XML file.

4. Click "Export". An XML file is generated.

5. If no Excel installation exists on the server, transfer the XML file to another computer, on which Excel and the "Excel Workbook Wizard" are installed.

Configuring data access with configuration file

1. Open an empty Excel workbook on the computer with Excel.
   Select the command "Excel Workbook Wizard" in the "DataMonitor" menu.

2. Activate the option "Load configuration data from file". Click "Next".

3. Navigate to the desired XML file.

4. Click "Next". The "Add / delete tags" dialog opens.

Result

The Excel workbook is set up to configure the display of process data. Then publish the workbook. The workbook is made available on the DataMonitor client as report tool or as template for "Reports".

Configuring data access of a dedicated Web server / WinCC client via XML file

If you want to display the project data from a dedicated Web server / WinCC client in the Excel workbook, you need to observe the following when configuring the Excel workbook via an XML file:

● The XML file now includes the data of subordinate servers whose packages are located on the DataMonitor server. The export of the loaded packages to the dedicated DataMonitor server / WinCC client can take several minutes, depending on the size of the package.

● This XML file must be available on the Excel configuration computer. Enter the server prefix when importing the configuration data in the "Excel Workbook Wizard".

● If you configure the data display in the Excel workbook on the WinCC client in the WinCC project, you do not have to specify a server prefix. The server prefix is automatically used when data is inserted from the package.

Note

Language for the Office package and the Windows Regional Settings

Make sure that the language is the same for the Office package, the "Microsoft Office Language Settings", and the Windows Regional Options.

Example:

● If you are using Office 2007 with the language "English (U.K.)", for instance, select the regional setting "English (U.K.)".

● If you have set "Chinese (PRC)" as a region and language option in Windows, you must also select "Chinese (PRC)" as the primary processing language in the "Microsoft Office Language Settings 2007".

More information can be obtained through Microsoft Support: http://support.microsoft.com/kb/320369/en (http://support.microsoft.com/kb/320369/en)

See also

Configuring the display of tag values

Introduction

This chapter describes how to configure the display of tag values.

Requirement

● The "Excel Workbook Wizard" is started and an Excel workbook is configured.

● The dialog "Add/delete tags" is open.

Procedure

1. Check the add sequence of tag groups in the "Adding tags" area.

2. Click on [icon]. The tag selection dialog opens.

3. Select the required tag and move the tag into a field in the Excel table with drag-and-drop.

4. Close the selection dialog. The tag is displayed in the tag list.

5. Select the tag in the tag list and select the "Server settings" entry in the shortcut menu.

6. Enter the name and password of a WinCC user in the "Server setting" dialog.
   To avoid an additional login during online display of process data, enable "Activate automatic login".
   Confirm your entries with "OK".

7. Select the tag in the tag list and select the "Properties" entry in the shortcut menu. The dialog "Tag properties" will be opened.

8. Set the properties for display in the table, for example, the update cycle or the display of time stamp and quality code.

9. Specify settings for the headings.

10. You can save the settings to the properties. You can then load the settings and use them again after exiting Excel and opening it again. Click "Save" to save the settings in an "xml" file.

11. Confirm your entries with "OK". If necessary, repeat the procedure for additional online tags. The settings for the properties will be used again. Multiple selection of tags is also possible in the tag list.

12. Click "Next" to display archive tags and alarms. Additional information is available under "Configuring display of archive tags (Page 72)" and "Configuring display of alarms (Page 76)".

Result

The display of tag values is configured in the Excel workbook. Once you have saved the properties, you can use the settings whenever you need to.

Each table field receives a short text and a comment in the Excel workbook.

The short text "OV" in tag values stands for online tags. In the comments, the source of the displayed values is shown in the format "WDWO_<number>_<tagname>".

Note

Running the Excel Workbook Wizard again

You need to run the Excel Workbook Wizard again:
- after deleting or moving cells with configuration data.
- after deleting or inserting new rows or columns in the Excel workbook.

The configuration data is checked and automatically adapted as a result. Confirm the data displayed with "Next". Save the workbook and close Excel.

Tags with local computer updating are not supported

In multiple station projects, you can activate the "Computer-local update" option in the tag management for internal tags. Any change of the tags only has an effect on the local computer in this case. This function is not supported by Excel Workbooks.

See also

Publishing the Excel workbook (Page 81)

Configuring the display of archive tags

Introduction

This chapter describes how to configure the display of archive tags.

Requirement

- The "Excel Workbook Wizard" is started and an Excel workbook is configured.
- The "Add/delete archive tags" dialog is open.

Procedure

1. Click [icon] in the dialog "Add/delete archive tags".

2. The tag selection dialog opens.
   Select the desired archive tag.
   Drag the tag to a cell in the Excel table with drag-and-drop.

3. Close the selection dialog. The tag is displayed in the tag list.

4. Select the archive tag in the tag list, and select the "Properties" entry in the shortcut menu. The "Archive tag properties" dialog opens.

Archive tag - Properties

WithoutSwinging\Test

Dispaly in Excel sheet

Start cell:

Sheet1!N:33

Insert archive data

◉ Vertical sequence

○ Horizontal sequence

Data resolution

○ Display all data

◉ User-defined resolution

☑ Resolution   1000   ms ▼

☐ Quantity of data

ms
s
min
h
d

Additional data

☐ Display time stamp: ☐ Display quality code:

Sheet1!N:33

☐ Show sign for manual entered values

Add headings(s):

☐ Time stamp
☐ Quality code   Add
☐ Server prefix
☐ Manual entered values

Time window

Standard Time | Legacy Time

	Years	Months	Days	Hours	Minutes	Seconds
Relative	◉	◉	◉	◉	◉	◉
Absolute	○	○	○	○	○	○
To:	0	0	0	0	-1	0
From:	0	0	0	0	0	0

Preview   11/14/2013 14:41:22   11/14/2013 14:42:22

Selected Template file

          Load   Save

          OK   Cancel

5. Specify the settings for the insertion sequence and headings.

6. Specify how much data you want to display. For a user-defined resolution, specify an integer number and the time unit or specify the quantity of data.

Note

If you use a user-defined data resolution with a combination of "Resolution" and "Quantity of data", it is possible that the amount of extracted data is not correctly determined. This results under certain circumstances in a mismatch between the displayed values and the configured quantity of data.

If you use the option "Quantity of data" in "User-defined resolution", enter an even value in the input box. Even values ensure a trend-true display.

---

7. In the "Time window" box, specify the time window from which you want to display archive tags:

● The time settings on the "Standard time" tag are based on the standard times:

   – The settings for the relative time period refer to a period starting from the current time. You can enter positive and negative values for the past time period in the lines "From" and "To". For example, it is 12:00 (noon). You want to display the values for the last ten minutes. Activate all time options in the "Relative" line. Enter the value "-10" in the "Minutes" column of the "From" line.

   – For settings of the absolute time period, enter the corresponding time parameters in the "From" and "To" lines and in the corresponding columns.

   Click on the "Preview" button to check the time range set.

● You can define a time window yourself or set a fixed interval, for example, "last week", on the "Legacy time" tab. If you want to define a time window yourself, you have the following possible settings:

   – Relative time window: Specify the starting point and the duration. You can specify a duration ranging from a minute to days.

   – Absolute time window: Specify the start and end of the time window.

1. If you select the option "Display manually entered values", an additional column is displayed. You then see the letter "m" if an archived value was manually entered during runtime.

2. You can save the settings to the properties. You can then load the settings and use them again after exiting Excel and opening it again. Click "Save" to save the settings in an "xml" file.

3. Confirm your entries with "OK".
   If necessary, repeat the procedure for additional archive tags. The settings for the properties will be used again. Multiple selection of tags is also possible in the tag list.

4. Click "Next" to display alarms. For more information, refer to "Configuring display of alarms (Page 76)".

Result

The display of archive tag values is configured in the Excel workbook. Once you have saved the properties, you can use the settings whenever you need to.

Each table field receives a short text and a comment in the Excel workbook.

The short text "AV" in tag values stands for archive tags. In the comments, the source of the displayed values is shown in the format "WDWA_<number>_<tagname>".

Note

Running the Excel Workbook Wizard again

You need to run the Excel Workbook Wizard again:

● after deleting or moving cells with configuration data

● after deleting or inserting new rows or columns in the Excel workbook

The configuration data is checked and automatically adapted as a result. Confirm the data displayed with "Next". Save the workbook and close Excel.

See also

Publishing the Excel workbook (Page 81)
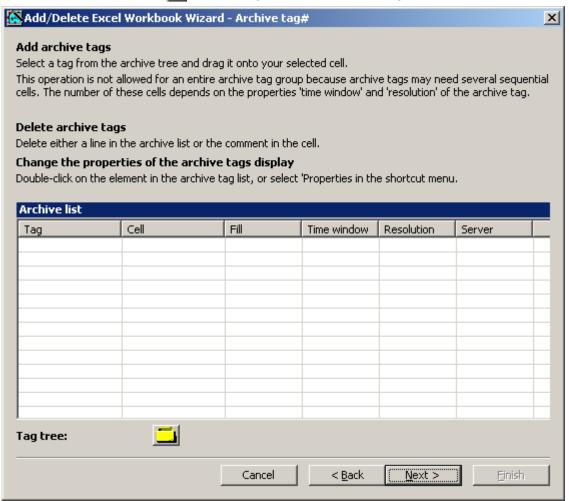
Configuring the display of alarms

Introduction

This chapter describes how to configure the display of alarms.

Requirement

● The "Excel Workbook Wizard" is started and an Excel workbook is configured.
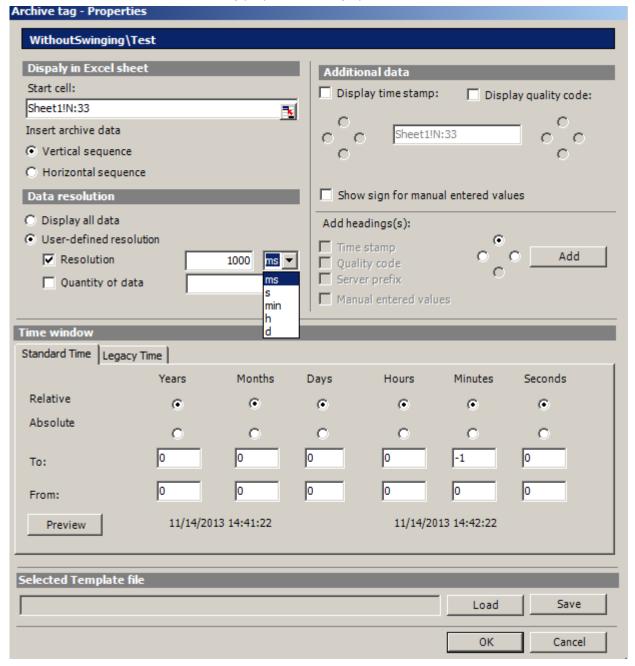
● The "Add/delete alarms" dialog is open.

Procedure

1. Configure the alarms in the dialog "Add/delete alarms".

2. Select the required cell in the Excel table.

3. Click ▭. The "Alarm - properties" dialog opens.

Alarm - Properties

Standard Configuration | Attributes

New alarm 1

Display in Excel sheet

Description:

New alarm 1

Starting cell:

Sheet1!N:12

Server prefix

LOCALHOST ▾

☐ Server prefix

Filter string

Time window

	Years	Months	Days	Hours	Minutes	Seconds
Relative	⦿	⦿	⦿	⦿	⦿	⦿
Absolute	○	○	○	○	○	○
To:	0	0	0	0	-1	0
From:	0	0	0	0	0	0

Preview   11/14/2013 14:45:02   11/14/2013 14:46:02

☑ Maximum number of alarms: 3

Insert attributes:

⦿ Vertical sequence

○ Horizontal sequence

Add headings(s):

Add

Selected Template file

Load   Save

OK   Cancel

4. On the "Standard configuration" tab, define the display options for alarms in the Excel table.

5. Enter a filter condition in the "Filter string" box or use the selection dialog to define a filter, for example, to display only specific alarms. If the filter contains a date or time, the "Time window" box is disabled.

6. In the "Time window" box, specify the time window from which you want to display alarms:

   – The settings for the relative time period refer to a period starting from the current time. You can enter positive and negative values for the past time period in the lines "From" and "To". For example, it is 12:00 (noon). You want to display the alarms for the last ten minutes. Activate all time options in the "Relative" line. Enter the value "-10" in the "Minutes" column of the "From" line.

   – For settings of the absolute time period, enter the corresponding time parameters in the "From" and "To" lines and in the corresponding columns.

   Click on the "Preview" button to check the time range set.

7. Use the "Maximum number of alarms" option to limit the number of most recent alarms displayed. You can display maximum 1,000 messages.

8. On the "Attributes" tab, select the required attributes of the alarms that you want to display. Further details can be found in "Alarm attributes (Page 203)".

Alarm - Properties

Standard Configuration | Attributes

List of all attributes

☐ Name of message class	☐ Message text 9	☐ Info text
☐ Name of message type	☐ Message text 10	☐ Message class ID
☐ Foreground color	☐ Process value 1	☐ Message type ID
☐ Background color	☐ Process value 2	☐ Controller number
☐ Flash color	☐ Process value 3	☐ CPU number
☐ Message text 1	☐ Process value 4	☐ Duration
☐ Message text 2	☐ Process value 5	☐ Message counter
☐ Message text 3	☐ Process value 6	☐ Acknowledgment status
☐ Message text 4	☐ Process value 7	☐ Piortity
☐ Message text 5	☐ Process value 8	☐ Application
☐ Message text 6	☐ Process value 9	☐ Computer
☐ Message text 7	☐ Process value 10	☐ User
☐ Message text 8	☐ State	☐ Comments

☐ Select all attributes

Insert attributes:

⦿ Vertical sequence
○ Horizontal sequence

Add headings(s):

[Add]

Selected Template file

[   ] [Load] [Save]

[OK] [Cancel]

9. Specify the settings for the attribute insertion sequence and headings.

10. You can save the settings to the properties. You can then load the settings and use them again after exiting Excel and opening it again. Click "Save" to save the settings in an "xml" file.

11. Confirm your entries with "OK".
    If necessary, repeat the procedure for additional alarms. The settings for the properties will be used again. Multiple selection of alarms is also possible in the "Alarm list".

12.Click "Next". The "Description" dialog box opens.

13.You can enter a comment if needed. This comment is displayed when selecting files provided for download by the DataMonitor server.

Result

The display of alarms is configured in the Excel workbook. Once you have saved the properties, you can use the settings whenever you need to.

Each table field receives a short text and a comment in the Excel workbook.

The short text for alarms is "AL". In the comments, the source of the displayed alarm is shown in the format "WDWL_<number>_<box name>".

Note

Running the Excel Workbook Wizard again

You need to run the Excel Workbook Wizard again:
- after deleting or moving cells with configuration data
- after deleting or inserting new rows or columns in the Excel workbook

The configuration data is checked and automatically adapted as a result. Confirm the data displayed with "Next". Save the workbook and close Excel.

See also

Publishing the Excel workbook (Page 81)

Publishing the Excel workbook

Introduction

You make the configured Excel workbooks available on the DataMonitor client. The workbooks are published as report tool for the Intranet/Internet or used as template for "Reports".

Requirement

- The DataMonitor server is installed on the computer.
- The display of tag values, archive values and alarms is configured.
- The "Description" dialog is open in the "Excel Workbook Wizard".

Procedure

1. You make the workbooks available in the "Description" dialog.

2. If you click "Publish", the Excel workbook is made available on the DataMonitor client under "Report tools" in "Reports".
   If you click "Template", the Excel workbook is made available on the DataMonitor client as template in "Reports" under "Excel Workbooks".

3. Exit the Excel Workbook-Wizard.

4. Save the workbook and close Excel.

Alternative Procedure

You upload the Excel workbooks on the DataMonitor client. Additional information is available under "Making Excel workbooks available as template (Page 206)" and "Making Excel workbooks available as report tool (Page 207)".

Result

The Excel workbooks are made available on the DataMonitor client:

- The workbook is available on the "Report tools" tab. You can use the workbook to display process data in runtime. For more information, refer to "Displaying process data in an Excel workbook (Page 201)".

- You can create time-controlled and event-controlled reports using the workbook as template. For more information, refer to "Creating reports with an Excel workbook (Page 210)".

See also

Configuring the display of tag values (Page 68)

Configuring the display of archive tags (Page 72)

Configuring the display of alarms (Page 76)

3.6.3.3   Displaying process data in an Excel workbook

Introduction

You can display process values or archive values and alarms in an available Excel workbook. You can edit and save the workbook.

Requirement

- The Excel workbooks were made available as report tool.
- MS Excel for online display in the Excel workbook
- The DataMonitor server is installed.
- The WinCC project is in Runtime.
- The start page of the DataMonitor is open.
- A user is created in WinCC.

Procedure

1. Click "Reports" on the start page.

2. Click "Report tools".
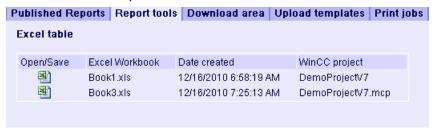   You see the Excel workbooks that you have published in the Excel Workbook Wizard or made available as report tool.

Published Reports	Report tools	Download area	Upload templates	Print jobs

   Excel table

Open/Save	Excel Workbook	Date created	WinCC project
📄	Book1.xls	12/16/2010 6:58:19 AM	DemoProjectV7
📄	Book3.xls	12/16/2010 7:25:13 AM	DemoProjectV7.mcp

3. Select a workbook.

4. Double-click the icon of the Excel workbook.

5. In the dialog that follows, click "Open". The workbook is opened.

6. Select the entry "Excel Workbook" in the "DataMonitor" menu.

7. The name of the server whose process data are configured in the workbook is displayed in the "WinCC server" field.
   The "WinCC Server" field can include the following information:

   – Access via domain: The server name and the domain are listed for access outside the network domain.

   – The DataMonitor start page is the default web page: The "WinCC Server" field contains only the server name.

   – The DataMonitor start page is in the virtual folder: The server name and the name of the virtual folder are displayed, e.g. "/webnavigator".

8. If the tags in the Excel sheet are from several servers, activate "all servers". The tag values of all servers are updated in the online display.

Note

To establish connections to all servers, activate "all servers" with "Connect" before you establish the connections.

---

9. Activate the connection to the WinCC project via the button "Connect". After a successful connection, the log-in dialog will be opened.
   Type in the user name and associated password.
   In case of several servers, the log-in dialogs of the respective servers open one after the other.
   If a connection was not established, a corresponding alarm is displayed. Clicking on the dialog will display additional information about the error that has occurred.

Note

Do not close the "Excel Workbook" dialog as long as the log-in dialog for connection establishment to the server is still open.

---

10. The connection status will be displayed in the dialog.
    Click the "Read tags", "Read archive tags" and "Read alarms" buttons to update the respective values or displays.

11. Activate the check box "Read cyclically" to update the tag values in cycles.

12. Close the "Excel Workbook" dialog after finishing your calculations in Excel.

13. Save the results in the workbook with the "Save as" menu command.

14. Close Excel.

Result

The process data are displayed in the Excel workbook and can be processed further.

If errors occur during display of the Excel workbook or no connection to the WinCC server is established, the log entries are displayed in a workbook. The entries contain the date, the tags or alarms affected, the server, and the error message.

3.6.4   Outputting data using "Reports"

3.6.4.1   Reports

Introduction

Use "Reports" to create time-controlled and event-controlled reports independent of the SCADA system. Use the WinCC print jobs and published Excel workbooks to output analysis results and process data. The reports are output as PDF or XLS file and can be attached to an e-mail.

Requirement

- You need a PDF reader for output as PDF file. The PDF reader can be obtained from www.adobe.com for example.

- For Output as XLS-file (Excel workbook):

  – MS Excel 2007 or a later version is installed.
    To use the automatic creation of Excel reports on the DataMonitor server, MS Excel must be installed on the server.

  – The Excel workbook is created and published as template on the DataMonitor server.

- Use the Download area in "Reports" to install the Excel add-ins "ExcelWorkbook Wizard" and "Excel Workbook".

Using reports

You determine on the DataMonitor server when you want to create reports:

- Manually, for example, by a plant operator.

- Event-controlled, for example, when a tag value changes.

- Time-controlled, such as daily, for example.

The created reports are centrally saved in the directories on the DataMonitor server. Users can access the different folders with appropriate authorization from the DataMonitor client.

Note

The creation time is always displayed on a DataMonitor client in the local time zone of the server.

3.6.4.2   Making an Excel workbook available as template

Introduction

You can make Excel workbooks available as templates to create ""Reports"". For this you have the following options:

- You publish the Excel workbooks on the WinCC server with "Excel Workbook Wizard" using the "Template" button.

- You upload an Excel workbook not yet published to the DataMonitor client.

This page includes a description of how you make a template available on a DataMonitor client.

Requirement

- The Excel workbook is created.

- The start page of the DataMonitor is open.

Procedure

1. Click "Reports" on the start page.

2. Click the "Uploading templates" tab.

3. Select a directory, in which the template will be stored in the "Target directory" field. Only the directories, for which the user that is logged in has "Create" access rights, can be selected.

4. Click "Find" for the "Selected template". Navigate to the desired Excel workbook.

5. Click the "Upload" button.

Result

You can create time-controlled and event-controlled reports using the workbook as template.

See also

Displaying a report with an Excel Workbook (Page 90)

3.6.4.3 Making an Excel workbook available as a report tool

Introduction

You can make Excel workbooks centrally available as report tools in "Reports". For this you have the following options:

- You publish the Excel workbooks on the WinCC server with "Excel Workbook Wizard" using the "Publish" button.

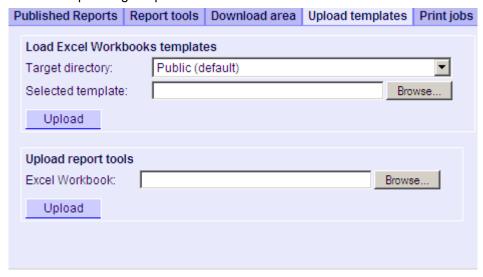- You upload an Excel workbook not yet published to the DataMonitor client.

Here you find a description of how you make an Excel workbook not yet published available on the DataMonitor client.

Requirement

- The Excel workbook is created.
- The start page of the DataMonitor is open.

Procedure

1. Click "Reports" on the start page.
2. Click the "Uploading templates" tab.

3. Click "Find" for "Uploading templates for Excel workbooks". Navigate to the desired Excel workbook.
4. Click the "Upload" button.

Result

The workbook is available on the "Report tools" tab. You can use the workbook to display process data in runtime.

See also

Displaying process data in an Excel workbook (Page 83)

3.6.4.4 Making Settings for Reports

Introduction

Different settings are required for using the "Reports" function in DataMonitor.

Requirement

- PDF Reader is installed.

- The WinCC project is activated on the DataMonitor server.

- The option "Report Runtime" is activated in the WinCC project in the properties of the computer.

- The start page of the DataMonitor is open.

Procedure

1. Click "Reports" on the start page.

2. Click on the "Settings" tab. The "Settings" page is displayed.

3. Check the entries in the section "General project settings".
   You can now select the printer of the Web server. Printing is only possible in files.

4. To enable the output to a PDF file, activate the option "Activate API print".

5. Enter the data for sending mail in the "Mail" area:

   – Server: Outgoing mail server (SMTP)

   – User name: Name for the sender

   – Password

   – Sender: E-mail account used to sending the e-mail

6. Click the disk icon in the section "General project settings" to save your settings.

7. In the "Settings of the circular buffer" area, you can define the number of created reports that are stored in the selected destination directory. The box has a pre-assigned value of 20. If the maximum number of reports of the same type has been reached, the "First in First out" principle applies. For example, if 21 reports of "Alarm Table" type have been created, the report that was created first is removed.

8. Click the disk icon in this section to save your settings.

Result

The settings for "Reports" have been made.

Product support - example

FAQ "51334611" on the Internet under "Product support" gives a detailed example:

● http://support.automation.siemens.com/WW/view/en/51334611

3.6.4.5 Displaying a report with an Excel Workbook

Introduction

Use "Reports" to create reports from Excel workbooks or print jobs in PDF format. The following is a description for creating reports from Excel workbooks.

Requirement

● The WinCC project is activated on the DataMonitor server.

● The option "Report Runtime" is activated in the WinCC project in the properties of the computer.

● You have already published or made available as templates the Excel workbooks you want to use.

● The start page of the DataMonitor is open.

Procedure

1. Click "Reports" on the start page.

2. Click on the "Excel Workbooks" tab. The "Excel Workbooks" page is displayed.

The icons in front of "List of time-controlled Excel workbooks" and "List of event-controlled Excel workbooks" are deactivated. The icons indicate that no reports are currently configured.

3. Select one of the available Excel workbooks under "Available Excel workbooks".

4. Select the target directory in which you want to store the reports. Only the directories, for which the user that is logged in has "Create" access rights, can be selected.

5. If you want to send the report as an e-mail, enter the e-mail addresses in the "E-mail recipient" field. You can enter several recipients as you would with any standard e-mail program.

6. Use [icon] to create the report immediately.

7. If you do not want to create the report immediately, configure a time-controlled or event-controlled creation of the report in the following steps.

8. To configure a time-controlled report, enter the following in the "Time-controlled Excel workbooks" area:

   – Date: Enter the date in the respective field or enter the date using the calendar. To open the calendar, click the "Calendar" icon.

   – Time: Define the time when you want the report to be created.

   – Repetition: Define the repetition rate, for example, "Once" or "Weekly".

9. Click "Add" in the "Time-controlled Excel workbooks" area. The report is displayed in the "List of time-controlled Excel workbooks".

10. To configure an event-controlled report, enter the following in the "Event-controlled Excel workbooks" area:

   – Selected WinCC tag: Click 📁. Select the required tag in the selection dialog.

   – Defining event control: Set the triggering event, for example, when the tag value changes.
   If you have selected "lower limit", "upper limit" or "both limits" for event control, enter the respective limits.

11. Click "Add" in the "Event-controlled Excel workbooks" area. The report is displayed in the "List of event-controlled Excel workbooks".

Result

A time-controlled or event-controlled report is configured as "Excel Workbook".

The configured reports are displayed in the lists of the "Excel Workbooks" . You can edit or delete the reports in the lists.

Once the report has been created, it is available in runtime on the "Published Reports" tab in the selected directory.

Note

Information on event-controlled "Excel Workbooks"

An event-controlled report is only created if the time period in which the tag changes is greater than one minute.

Keep in mind that the frequent creation of one or more event-controlled reports over a long period of time takes up a lot of memory and uses up valuable resources. This case often occurs, for example, with frequent signal changes of a tag that trigger an event-controlled report.
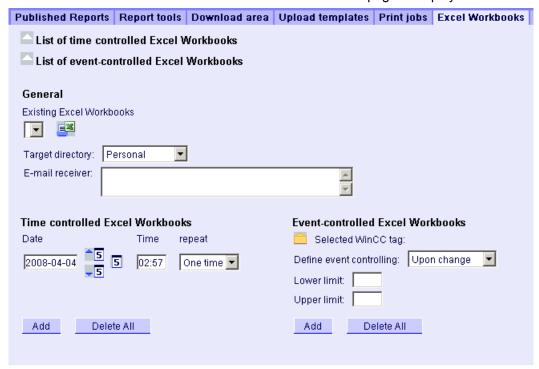

3.6.4.6   Creating a report with a print job

Introduction

Use "Reports" to create reports from Excel workbooks or print jobs in PDF format. The following is a description for creating reports using print jobs in PDF format.

Requirement

- PDF Reader is installed.

- The WinCC project is activated on the DataMonitor server.

- The option "Report Runtime" is activated in the WinCC project in the properties of the computer.

- The start page of the DataMonitor is open.

Procedure

1. Click "Reports" on the start page.

2. Click on the "Print jobs" tab. The "Print jobs configuration" page is displayed.

The icons in front of "List of time-controlled print jobs" and "List of event-controlled print jobs" are deactivated. The icons indicate that no print jobs are currently configured.

3. Select the desired print job under "Available print jobs".

4. Select the target directory in which you want to store the reports. Only the directories, for which the user that is logged in has "Create" access rights, can be selected.

5. If you want to send the report as an e-mail, enter the e-mail addresses in the "E-mail recipient" field. You can enter several recipients as you would with any standard e-mail program.

6. Use ![icon] to create the report immediately.

7. If you do not want to create the report immediately, configure a time-controlled or event-controlled creation of the report in the following steps.

8. To configure a time-controlled report, enter the following in the "Time-controlled print jobs" area:

   – Date: Enter the date in the respective field or enter the date using the calendar. To open the calendar, click the "Calendar" icon.

   – Time: Define the time when you want the report to be created.

   – Repetition: Define the repetition rate, for example, "Once" or "Weekly".

9. Click "Add" in the "Time-controlled print jobs" area. The report is displayed in the "List of time-controlled print jobs".

10. To configure an event-controlled report, enter the following in the "Event-controlled print jobs" area:

    – Selected WinCC tag: Click 🗂. Select the required tag in the selection dialog.

    – Defining event control: Set the triggering event, for example, when the tag value changes.
    If you have selected "lower limit", "upper limit" or "both limits" for event control, enter the respective limits.

11. Click "Add" in the "Time-controlled print jobs" area. The report is displayed in the "List of event-controlled print jobs".

Result

A time-controlled or event-controlled report is configured as print job in PDF format.

The configured reports are displayed in the lists of the print jobs. You can edit or delete the reports in the lists.

The report is created in the language that was set during WinCC configuration. The WinCC Runtime language does not have an effect on the representation of dynamic elements, such as tables.

Once the report has been created, the PDF files are available in runtime on the "Published Reports" tab in the selected directory.

Note

Opening Asian PDF files with Acrobat Reader

To open the Asian PDF files created with "Reports", you need the country-specific version or the respective font package of the Adobe Acrobat Reader.

The four Asian languages are fixed to one font each. This means the font settings in the report layout will not have an effect on the Asian languages.

Information on event-controlled print jobs

An event-controlled print job is only created if the time period in which the tag changes is greater than one minute.

Keep in mind that the frequent creation of one or more event-controlled print jobs over a long period of time takes up a lot of memory and uses up valuable resources. This case often occurs, for example, with frequent signal changes of a tag that trigger an event-controlled print job.

3.6.5 Creating Webcenter pages in "Webcenter"

3.6.5.1 Web center

Overview

The Webcenter is the central information portal for access to WinCC data via Intranet/Internet. Users can use the Webcenter pages and web parts to compile and save their views of WinCC data. The Webcenter pages are stored in directories.

The Webcenter pages are stored in modular fashion. The modules are defined by layout templates. Users can either use the supplied layout templates or the ones they create themselves.

The web parts are the individual blocks that prepare and display data. You can combine up to 15 web parts in one screen view. For more information, refer to "Overview of web parts (Page 95)".

Within the WebCenter pages, the configuration of the respective web part is stored and can be called up again at any time. The multiple use of the same web part with different configuration is also possible. The WebCenter pages that have been created in this way can be opened with the same configuration by different users depending on the assigned rights.

You can export the configuration of web parts as XML file.

To transfer the configuration data to another computer, copy the folder:

"\Siemens\WinCC\WebNavigator\DataMonitorServer\WebCenter\App_Data\WebCenter"

Basic procedure

1. Creating directories for Webcenter pages
2. Assigning Access Rights
3. Establishing connection to the WinCC data
4. Publishing pictures for the Webcenter
5. Creating layout template for Webcenter pages
6. Creating Webcenter page
7. Inserting web parts to the Webcenter page
8. Configuring web parts within Webcenter pages

3.6.5.2 Overview of Web Parts

Overview

You compile Webcenter pages from the web parts in the "Webcenter".

The following web parts are available:

- Process value table
  The available process values are displayed for the defined time period.

- Process Values in the Table (Timestep)
  The complete archive name and the tag name are displayed as tooltip in the column header.
  The process values are combined beginning with the starting time in the defined time interval.
  Depending on the set aggregate type, the interval for the interval event is displayed.
  For example, a process value was archived every 30 seconds. You have selected an interval of 60 seconds and the aggregate type "Average value". It determines the average value of two archive values each, which is then displayed in the table with the first time stamp of the averaging interval.
  If you select an aggregate type without interpolation, and if no value is present in the interval, no interval result will be displayed. If you select an aggregate type with linear interpolation, an interval result is displayed for each interval.

- Statistics functions for process values
  All available process values are used for the defined time period, for example, to calculate and display the average value.

- Trend Process Values
  The process values are displayed with trends.

- Trend (Timestep)
  Clear presentation of precompressed values in trends with aggregate functions, such as sum or average.

- Bar Chart (Aggregates)

- Pie Chart (Aggregates)

- Alarm table
  Presentation of accrued alarms.

- Alarm hit list
  Presentation of statistical information on alarms.

- Link to WebCenter pages

- Links (external)
  Links to internal Webcenter pages and external Internet pages, such as stock market news.

- Displaying information
   Such as news, for example.

- Static process pictures
  WinCC pictures are integrated into the Webcenter without installation download. A JPG screenshot of the process picture is created on the DataMonitor server at regular intervals.

- Display Graphic
  JPG screenshots, such as company logo.

- The Last Reports
  Display the reports created last, for example, the last ten print jobs in PDF format created with "Reports".

See also

Displaying process values in a table (Page 172)

Displaying process values in a diagram (Page 173)

Displaying the hit list of messages (Page 179)

Displaying messages in the alarm table (Page 175)

Displaying statistics function for process values (Page 181)

3.6.5.3 Creating layout template for Webcenter pages

Introduction

You need a layout template to create a Webcenter page. Predefined layouts were installed during the installation. Additionally, you can create your own Layout Templates.

Requirement

- The logged in user is a member of the Windows user group "SIMATIC Report Administrators".
- The start page of the DataMonitor is open.

Procedure

1. Click "Webcenter > Configuration" on the start page.
2. Click on the "Creating layout" tab.

CREATE NEW LAYOUT TEMPLATE.

| Create page | Import page | Delete pages | Create layout | Delete layout |

Step 1

Columns:	2
Lines:	3
Name of the layout file:	mylayout_23

Continue

3. Define the number of columns and the number of lines.
4. Enter the name in the "Name of the layout file" box, for example, "mylayout_23". Click "Next".

5. Combine the table fields, if necessary. To do so, click the desired arrow symbol, such as "Arrow up", in the desired field, for example line 3 / column 1. The modified view will be displayed.

6. To restore the original table layout, click "Reset configuration". Click "Next".

7. Arrange the web parts in the table fields. If necessary, activate the corresponding symbol in a table field to place the web parts vertically or horizontally.

8. Click "Save".

Result

The layout template "mylayout_23" is created. You can use the layout template as a template for creating a Webcenter page.

3.6.5.4 Creating Webcenter page

Introduction

You create Webcenter pages in which you add web parts. The Webcenter pages are stored in directories. In this example, the WebCenter page is saved in the "myPart" directory.

You can only change or create Webcenter pages in directories for which the Windows user group has the "Edit" or "Create" access rights.

Requirement

- The directory "myPart" is set up.

- The logged in user is a member of the Windows user group "SIMATIC Report Administrators" or "SIMATIC Report Users".

- The Windows user groups have the access rights "Edit" or "Create" for the directory.

- The start page of the DataMonitor is open.

Procedure

1. Click "Webcenter > Configuration" on the start page.

2. Click on the "Creating page" tab.

3. Click on the desired layout template. The file name is displayed in the "Layout file" box.

4. Enter a name in the "Webcenter page" box, for example, "My_Webcenter".

5. Select the directory in which the Webcenter page is stored. The selected directory is displayed in the box "Save WebCenter page as".

6. Click "Save".

Result

The Webcenter page "My_Webcenter" is created and saved.

3.6.5.5 Inserting web parts to the Webcenter page

Introduction

You compile the contents of the Webcenter pages from the web parts.

Requirement

- The directory "myPart" is set up.
- The Webcenter page "My_Webcenter" is stored in the directory.
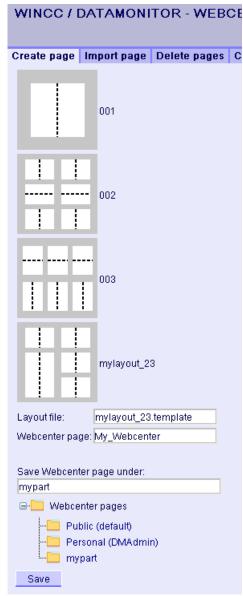- The logged in user is a member of the Windows user group "SIMATIC Report Administrators" or "SIMATIC Report Users".
- The Windows user groups have the access rights "Edit" or "Create" for the directory.
- The start page of the DataMonitor is open.

Procedure

1. Click "Webcenter > Pages" on the start page.
2. Click on the "myPart" tab.

3. Click on the entry "My_Webcenter".

4. To add web parts, click ⊞ at the top right edge of the page. The available web parts are listed.
   If you have exported web parts that have already been configured, they are listed under "Imported web parts". If necessary, insert these web parts into your Webcenter page.

5. Activate the entry "Trend (Timestep)".

6. Select the entry "WPZ_01_01" and click "Add".

7. Activate the entry "Hit list of alarms".
   If you insert several web parts into a table field, the web parts are arranged horizontally or vertically. You specify the arrangement when you create the layout template.

8. Select the entry "WPZ_02_01" and click "Add".

9. Click "Exit".

Result

Web parts to display data are inserted into the Webcenter page "My_Webcenter". The current compilation of the Webcenter page is displayed.

WinCC/DataMonitor Documentation 4

4.1 Basic principles

4.1.1 DataMonitor

Overview

You can display and evaluate current process states and historical data with WinCC/DataMonitor via the Intranet/Internet.

WinCC/DataMonitor consists of a server component and a client component. The DataMonitor server makes functions available to the DataMonitor client for analysis and display of data. Access rights control access to the functions.

- "WinCCViewerRT":
  Program for monitoring of WinCC projects. The DataMonitor client is a so-called "View Only Client".

- "Excel Workbook":
  Display of process values and archive values in an Excel table for evaluation and display via the web or as a print template for reports

- "Reports":
  Creating reports from WinCC print jobs or from published Excel workbooks. This also allows for statistics and analyses of certain process data or historical data. The reports are created in PDF format and forwarded as e-mail if necessary.

- "Webcenter":
  Central information portal for access to WinCC data via user-specific views. Clearly structured Webcenter pages with individual user rights for reading, writing and creating Webcenter pages.

- "Trends & Alarms":
  For display and analysis of archived process values and alarms. The data is displayed in tables and diagrams on predefined Webcenter pages.

Quantity Structure

WinCC/DataMonitor allows the simultaneous operation of up to 50 clients per server. When using the terminal services, up to 25 DataMonitor clients are released per terminal services server.

4.1.2 WinCCViewerRT

Overview

The Web Viewer "WinCCViewerRT" is solely a display program for WinCC projects that is installed with the DataMonitor client. The DataMonitor Client is therefore a "View Only Client".

You run the "WinCCViewerRT.exe" application instead of Internet Explorer on the DataMonitor Client.

The Web Viewer accesses the DataMonitor server using its own communication. This way you prevent access by users to the Internet and protect the system from viruses and trojans.

The viewer only displays the pictures that you configured for web access and published on the DataMonitor server.

The WinCC user must be assigned authorization no. 1002 - "Web Access - monitoring only". The "View Only Cursor" indicates that process-related operations are not possible. Certain operations, such as opening the properties dialog of an OnlineTrendControl, are still possible.

If the WinCC user does not have authorization no. 1002, the DataMonitor client runs in demo mode after logon.

4.1.3 Web center

Overview

The Webcenter is the central information portal for access to WinCC data via Intranet/Internet. Users can use the Webcenter pages and web parts to compile and save their views of WinCC data. The Webcenter pages are stored in directories.

The Webcenter pages are stored in modular fashion. The modules are defined by layout templates. Users can either use the supplied layout templates or the ones they create themselves.

The web parts are the individual blocks that prepare and display data. You can combine up to 15 web parts in one screen view. For more information, refer to "Overview of web parts (Page 107)".

Within the WebCenter pages, the configuration of the respective web part is stored and can be called up again at any time. The multiple use of the same web part with different configuration is also possible. The WebCenter pages that have been created in this way can be opened with the same configuration by different users depending on the assigned rights.

You can export the configuration of web parts as XML file.

To transfer the configuration data to another computer, copy the folder:

"\Siemens\WinCC\WebNavigator\DataMonitorServer\WebCenter\App_Data\WebCenter"

Basic procedure

1. Creating directories for Webcenter pages

2. Assigning Access Rights

3. Establishing connection to the WinCC data

4. Publishing pictures for the Webcenter

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6. Creating Webcenter page

7. Inserting web parts to the Webcenter page

8. Configuring web parts within Webcenter pages

4.1.4   Overview of Web Parts

Overview

You compile Webcenter pages from the web parts in the "Webcenter".

The following web parts are available:

- Process value table
  The available process values are displayed for the defined time period.

- Process Values in the Table (Timestep)
  The complete archive name and the tag name are displayed as tooltip in the column header.
  The process values are combined beginning with the starting time in the defined time interval.
  Depending on the set aggregate type, the interval for the interval event is displayed.
  For example, a process value was archived every 30 seconds. You have selected an interval of 60 seconds and the aggregate type "Average value". It determines the average value of two archive values each, which is then displayed in the table with the first time stamp of the averaging interval.
  If you select an aggregate type without interpolation, and if no value is present in the interval, no interval result will be displayed. If you select an aggregate type with linear interpolation, an interval result is displayed for each interval.

- Statistics functions for process values
  All available process values are used for the defined time period, for example, to calculate and display the average value.

- Trend Process Values
  The process values are displayed with trends.

- Trend (Timestep)
  Clear presentation of precompressed values in trends with aggregate functions, such as sum or average.

- Bar Chart (Aggregates)

- Pie Chart (Aggregates)

- Alarm table
  Presentation of accrued alarms.

- Alarm hit list
  Presentation of statistical information on alarms.

- Link to WebCenter pages

- Links (external)
  Links to internal Webcenter pages and external Internet pages, such as stock market news.

- Displaying information
   Such as news, for example.

- Static process pictures
  WinCC pictures are integrated into the Webcenter without installation download. A JPG screenshot of the process picture is created on the DataMonitor server at regular intervals.

- Display Graphic
  JPG screenshots, such as company logo.

- The Last Reports
  Display the reports created last, for example, the last ten print jobs in PDF format created with "Reports".

See also

Displaying process values in a table (Page 172)

Displaying process values in a diagram (Page 173)

Displaying the hit list of messages (Page 179)

Displaying messages in the alarm table (Page 175)

Displaying statistics function for process values (Page 181)

4.1.5   Trends and Alarms

Overview

"Trends & Alarms" is used for display and analysis of archived process values and alarms.

Predefined web pages have the following content:

- Displaying process values in a table (Page 172)

- Displaying a maximum of three process values in a diagram. Displaying process values in a diagram (Page 173)

- Displaying statistics function for process values (Page 181)

- Displaying alarm hit list (Page 179)

- Displaying alarms in the alarm table (Page 175)

The functions of "Trends & Alarms" are configured with web parts. Use the same web parts for this purpose that you used for the Webcenter pages.

Within Trends & Alarms each user can only make one configuration for each web part. The configuration is saved for the user. Other users cannot access the configuration of this web part directly.

4.1.6 Excel workbook

Overview

With the Excel add-In "Excel Workbook" you can display the following data of the WinCC project in an Excel workbook on the DataMonitor client:

- Alarms

- Values of process tags and archive tags

- Additional information, such as time stamp or quality code of tags

Data of swapped archives is not displayed.

The data is evaluated by Excel and presented as graphic, e. g. as average value calculation or diagram representation. The created Excel workbooks are made available as templates for "Reports" and as report tools.

Requirement

- Use the Download area in "Reports" to install the Excel add-ins "ExcelWorkbook Wizard" and "Excel Workbook" on the DataMonitor client.

Configuring with XML file or online

Simultaneous online access to process data of different WinCC servers is possible using the "Excel Workbook". This requires that you either take the data from an XML file or from a local

WinCC project during the configuration with the Excel add-in "Excel Workbook Wizard" . A separation between process and evaluation is possible with the XML file.

- A WinCC project is open on the DataMonitor server.
  The XML file is generated with the "Export Configuration Data" function.
  Then transfer the XML file to a computer with Microsoft Excel.
  Configure the process data display in the workbook.
  Afterwards, transfer the workbook to a DataMonitor client that displays the process data online.

- To accept the data of the WinCC project online, configure directly on the WinCC server or on a WinCC client with an online connection to the respective WinCC server.

- Import the data into an Excel workbook using the "Excel Workbook Wizard".
  Then configure the display of alarms and tag values.

Note

If you rename a table in an Excel workbook, the configuration data of the table is lost.

You can configure up to 32,767 process and archive tags in an Excel workbook. During online display with "Excel Workbook" you may experience considerable delays in updating when there is a large number of tags.

4.1.7   Reports

Introduction

Use "Reports" to create time-controlled and event-controlled reports independent of the SCADA system. Use the WinCC print jobs and published Excel workbooks to output analysis results and process data. The reports are output as PDF or XLS file and can be attached to an e-mail.

Requirement

- You need a PDF reader for output as PDF file. The PDF reader can be obtained from www.adobe.com for example.

- For Output as XLS-file (Excel workbook):

  – MS Excel 2007 or a later version is installed.
    To use the automatic creation of Excel reports on the DataMonitor server, MS Excel must be installed on the server.

  – The Excel workbook is created and published as template on the DataMonitor server.

- Use the Download area in "Reports" to install the Excel add-ins "ExcelWorkbook Wizard" and "Excel Workbook".

Using reports

You determine on the DataMonitor server when you want to create reports:

- Manually, for example, by a plant operator.
- Event-controlled, for example, when a tag value changes.
- Time-controlled, such as daily, for example.

The created reports are centrally saved in the directories on the DataMonitor server. Users can access the different folders with appropriate authorization from the DataMonitor client.

Note

The creation time is always displayed on a DataMonitor client in the local time zone of the server.

See also

Configuring the display of tag values (Page 68)

Making an Excel workbook available as template (Page 206)

Configuring the Excel workbook (Page 65)

4.2 Configuring the DataMonitor system

4.2.1 Overview of the configuration steps

Introduction

For use of WinCC/DataMonitor the data and process pictures are made available on the DataMonitor server. The DataMonitor client accesses the available data to display data and process pictures.

Requirement

- Server and client are interconnected.
- On the server
  - Internet Information Service is installed.
  - The DataMonitor server is installed.
  - A WinCC/DataMonitor license is installed.
  - WinCC is installed.
- On the client
  - Internet Explorer is installed.

Configuration steps

You have to complete the following configuration steps to set up the DataMonitor system.

1. Configuration of the WinCC project.
   - Publish WinCC pictures.
   - Define users and access rights in "WinCC User Administrator", if you use WinCCViewerRT and/or "Excel Workbook" .
   - Configure the settings for Runtime.
2. Configure the DataMonitor server.
   - Set up the web page and firewall.
   - Define users and access rights in Windows, if you use "Trend & Alarms", "Reports" and "Webcenter".
3. Start WinCC Runtime on the server.

4. Use the DataMonitor functions on the DataMonitor client.

   – Check the security settings of the Internet Explorer.

   – Start the Internet Explorer and enter the address of the DataMonitor server.

   – Log on to the DataMonitor server and access the DataMonitor functions.

5. Monitor the WinCC project on the DataMonitor client.

   – Configuring WinCCViewerRT

   – Displaying pictures

See also

Defining users in Windows (Page 127)

Configuring the DataMonitor web page (Page 129)

Configuring security settings in Internet Explorer (Page 133)

Configuring runtime settings (Page 125)

Creating static process pictures for the Webcenter (Page 157)

4.2.2 Configure the WinCC project

4.2.2.1 Publishing WinCC process pictures

Publishing WinCC Process Pictures

Introduction

If you wish to display WinCC process pictures on the WebNavigator Client or DataMonitor Client, you have to publish the pictures. For publishing, you use the Web View Publisher, which automatically makes the necessary adaptations to the project data.

Overview

The Web View Publisher enables the following types of publishing:

- Publishing on the local computer.
  The current WinCC project folder is the source folder.
  The target folder is a subfolder, for example, "Projectname/WebNavigator/Pictures".

- Publishing on a dedicated web server with a server prefix.
  The source folder is the WinCC project folder on another WinCC computer that is defined by the server prefix.
  The target folder is located in subfolder ".../WebNavigator/Pictures" of the WinCC project on the WinCC Client. The pictures of your own project are saved with the name "<picturename>.PD_", while the pictures of other projects are saved with the name "<serverprefix>_ _<picturename>.PD_".

- Remote publishing.
  The source and target folders can be located on the same or different web servers.
  You can start the Web View Publisher on the web server with the source and target folder or on a third web server.

- Remote publishing on a dedicated web server or WinCC Client from a different remote station.
  The project folder of the WinCC project must be released in Windows on the dedicated web server/WinCC Client. You can start the Web View Publisher remotely by opening the WinCC project of the web server/WinCC Client on the remote computer. On the remote station, you publish the WinCC pictures from other WinCC Servers to the dedicated web server.

The Web View Publisher performs the following adjustments:

- Compression of the data for optimizing performance on the Internet.

- Removal of project-specific data that is not required for the operation.

- Conversion of picture windows into an ActiveX component.

- Conversion of scripts so that they can be run on the Client.

Publication of pictures with faulty scripts

If warnings or errors are generated during publishing, the process pictures affected are marked in the output field of the Web Publishing Wizard. The pictures with errors in the scripts are nonetheless published. However, errors can still occur in Runtime and are reported by the WebNavigator Client.

The "PdlPad" tool can be started directly in the Web View Publisher in order to check and, if necessary, correct the scripts used in the published pictures.

Publishing Without Project Functions

Publishing without project functions can be an additional source of error. When publishing with the Web View Publisher, the selected project functions are always published. When published without project functions, the pictures no longer contain any project functions. The project functions of the last publishing process are always available in the published pictures and, therefore, on the client.

The selection of project functions in the Publisher is independent of the pictures published in the same process. If , for example, you modify selected project functions but not their interfaces, you need to publish all necessary project functions. In this case, you do not have to publish the picture.

Changing the process picture in Graphics Designer

Process pictures that you edit in runtime in Graphics Designer on the WebNavigator Server must be published once again. This is required for the process picture to be displayed on the WebNavigator Client.

When using a dedicated web server, open the WinCC project on that server from a remote station in order to transfer the changes to the WebNavigator Client. On completion, open and save the modified picture in Graphics Designer. Publish the picture in the next step using Web View Publisher on the dedicated web server.

If you have modified a large number of pictures, you can simplify this process. For this purpose, call the "Convert pictures" function in the shortcut menu of Graphics Designer. On completion, you once again have to publish the pictures.

Requirements for publishing pictures

General requirements

- The picture names may not contain double underscores, e.g. "__furnace_overview.pdl". The string before the double underscore will be interpreted as server prefix.

- The package names and/or symbolic computer names may not contain any double underscores.

- Moreover, the name cannot begin with a single underscore if you are using Basic Process Control. When using Picture Tree Manager, the name string of higher-level pictures will have a "@PTN_" prefix. With the leading underscore, the picture name will then have a double underscore.

- If two header files of the same name exist in the project path and in the installation path of WinCC, Web View Publisher will use the header file from the installation path.

Requirements for publishing on a dedicated web server

- The Web Navigator Server is installed on the WinCC Client.

- The C and VB scripts of all WinCC servers to which the WinCC Client has access have been copied to the WinCC Client.

- The WinCC server packages that the WinCC Client can access are loaded on the WinCC Client.

- If you wish to publish projects on other computers, these computers must be linked by means of network drive before you start Web View Publisher. This procedure enables the display of your projects in the selection dialog of the Publisher. You cannot enter the path directly.

Requirements for remote publishing

- Access to the target and source folders is enabled for Web View Publisher.
  WinCC configures these Windows enables by default. Verify that these enables are not restricted, for example, valid for specific users only.

- If you wish to publish projects on other computers, these computers must be linked by means of network drive before you start Web View Publisher. This procedure enables the display of your projects in the selection dialog of the Publisher. You cannot enter the path directly.

How to publish WinCC process pictures using Web View Publisher

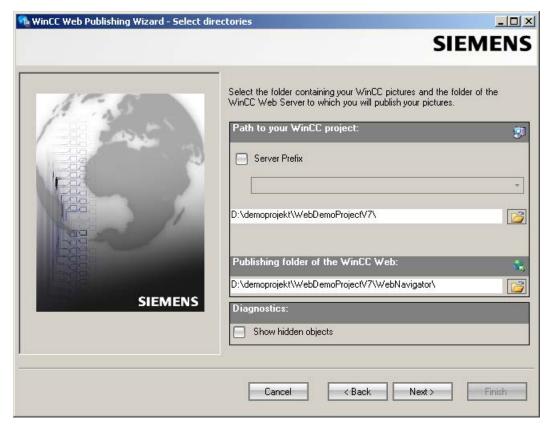### Introduction

Use Web View Publisher to publish the process pictures that you created in Graphics Designer. The WinCC Web Publishing Wizard supports you during publishing.

Procedure

1. Select "Web Navigator" in the navigation window of WinCC Explorer.
   Select the "Web View Publisher" command in the shortcut menu.
   The WinCC Web Publishing Wizard is now launched.

2. Click "Next".

3. Activate the "Server prefix" option if you want to publish the pictures on a dedicated web server.
   Select the prefix of the WinCC Server that contains the WinCC project from the selection list. The list displays the prefixes of the servers whose packages are loaded on the WinCC Client.
   Deleting a prefix from the selection changes the paths displayed in the fields below.

4. Under "Path to your WinCC project", select the WinCC project folder containing the pictures you want to publish.
   The folder has the following format for publication on a dedicated web server:
   "\\<servername>\<serverprefix>_ _<projectname>".
   If you want to publish from a remote station, select the source project containing the pictures. The source project is displayed by its enable name on the other WinCC Server.
   The folder has the following format:
   "\\<computer name>\<enable name>".

5. Select the target folder for the published pictures under "Publishing folder of the WinCC web".
   Accept the proposed folder within the WinCC project folder.
   Do not change the path specification unless you want to transfer pictures to a different project, for example. In this case, the prefix selection list will be expanded accordingly.
   Verify the specified target project to which the published pictures are saved during remote publishing.
   The path definition will be updated when you select the source project.
   Should the target project be located on another WinCC server, select the corresponding project.

6. Select the "Display hidden objects" option to show hidden objects that are published automatically in the results list.

7. Click "Next". Move the pictures that you wish to publish to the "Selected files" list.

8. Click "Next". Move the C project functions which you use in the published pictures to the "Selected files" list. You cannot publish individual VB scripts.

Click "Next".

9. Move the referenced graphics that you wish to publish to the "Selected files" list. The referenced files are in the "GraCS" folder or in subfolders of "GraCS".

Click "Next".

10. Click "Exit" to start publishing the pictures.

Result

You have successfully published the pictures and functions. The results list displays the status of all published objects. You can click an object to view additional object information.

You can trace publishing using the "<projectfolder>\WebNavigator\WizardLog.txt" file.

Checking the scripts using "PdlPad"

The "WizardLog.txt" log file contains information about errors in the scripts used. You can also find errors using the "PdlPad" debugger.

1. Open "PdlPad" by double-clicking on the affected object in the results list of Web View Publisher. The script of the published picture is displayed.

2. Click ![icon] in order to check the script.

3. You can temporarily correct and save the scripts. These corrections are only saved to the published pictures, not in the process picture of the WinCC project.

"PdlPad" can also be opened in the Windows Start menu via "SIMATIC > WinCC > WebNavigator-Server".

4.2.2.2   Administering users for DataMonitor

Introduction

For the use of certain functions on the DataMonitor client, users need authentication as DataMonitor user as well as authentication as WinCC user. Use one WinCC user for "WinCCViewerRT" and "Excel Workbook".

If you are working as DataMonitor user and WinCC user at the DataMonitor client you have to log on twice. You have two alternatives to only log on once:

- The DataMonitor user and the WinCC user have identical names and passwords.
  The user must be configured in Windows and in WinCC and added to the "SIMATIC HMI" and "SIMATIC HMI VIEWER" user groups.

- SIMATIC logon allows the central administration of users.
  In order to use SIMATIC logon in connection with DataMonitor, DataMonitor users must also be added to the user group "SIMATIC HMI VIEWER".

Procedure

1. Select the entry "User Administrator" in the navigation window of WinCC Explorer. Select the "Open" command from the shortcut menu. The editor "User Administrator" is opened.

2. In the navigation window, select a user or create a new user.

3. Select a user group and then open the shortcut menu. Select the entry "New User". The name of the user can be changed directly with the <F2> function key or the shortcut menu command "Rename". The user must be selected beforehand for this purpose.

4. Enter a name and a password with at least six characters for "Login".
   Click "OK".

5. Select the newly created user in the table window. The properties of the user are displayed.

6. Activate the option "WebNavigator". Select a start picture from the dropdown list next to "Web start picture".

7. Check the selected language and change this setting if desired via the dropdown list next to "Web language". You can only select a new language from the dropdown list if one of the two options "WebNavigator" or "PureWebClient" is activated. The languages created in the Text Library are available for selection.

8. The user needs at least the authorization "Web Access - monitoring only".
    In the row in the table window, activate the corresponding authorization in the "Enable" column.

9. Close the User Administrator.

4.2.2.3   Configuring runtime settings

Introduction

Define the settings for behavior in runtime when you use the DataMonitor.

Procedure

1. Select "WebNavigator" in the navigation window of WinCC Explorer. Select the "Web settings" command from the shortcut menu.

2. Change to the "Runtime" tab in the "WinCC web settings" dialog.
    Select the required settings. Close the dialog with "OK".

Use "WinCC Classic" design

Activate the option to improve the performance of the DataMonitor client. The original style of WinCC V6 is now used.

"Monitoring only" cursor

A default cursor shows that the user of the DataMonitor client is not permitted to operate Runtime. The user has been assigned system authorization no. 1002 - "Web access - monitoring only" in the WinCC User Administrator.

If you want to use your own cursor, enter its path and file name. You can also use the "..." button to navigate to the file of the selected cursor.

Server load

You do not need the settings in the area "Server load" for DataMonitor.

Activate WinCC system messages

The system messages "No. 1012400" or "No. 1012401" are output and archived at the login/ logoff of a DataMonitor client.

Enable event log messages

A successful session login or logoff is recorded in the Windows event viewer.

Disable local groups of SIMATIC Logon

The DataMonitor server can only be accessed by groups in the same domain.

Hardware accelerated graphics representation

The Direct2D representation is activated for the entire project on the WebNavigator clients.

4.2.3 Configuring the DataMonitor system

4.2.3.1 Defining users in Windows

User groups in Windows

Overview

The following user groups are created automatically in Windows when the DataMonitor server is installed.

SIMATIC Report Administrators

Membership of the user group "SIMATIC Report Administrators" is required for extended rights, especially for configuration purposes. At least one user must be created and assigned to the "SIMATIC Report Administrators" user group.

- You can also do the following as "SIMATIC Report Administrators" in the "Webcenter":
  - Configuring connections
  - Creating templates for Webcenter pages
  - Creating and configuring public and private Webcenter pages
- You can also do the following as "SIMATIC Report Administrators" in "Reports":
  - Configuring reports based on WinCC print jobs or Excel workbooks.

SIMATIC Report Users

Membership of the user group "SIMATIC Report Users" or of your own user group is required for the "Webcenter", "Trends & Alarms" and "Reports".

● You can also do the following as "SIMATIC Report Users" in the "Webcenter":

– Setting up and configuring Webcenter pages. The Webcenter pages are stored in different directories.

– Opening public pages

● You can also do the following as "SIMATIC Report Users" in "Reports":

– Opening reports based on WinCC print jobs or Excel workbooks.

Defining Users and Access Rights in Windows

Introduction

When using DataMonitor, users need different authentications. All users must be members of the "SIMATIC HMI" user group. For access to the WinCC database via DataMonitor, you need a Windows user with password who is a member of the "SIMATIC HMI VIEWER" user group.

This means you must create users with the matching user rights.

Requirement

● WinCC is installed.

● The DataMonitor server is installed.

Procedure using Windows 7 as an example

1. Open the "Control Panel" from the Windows Start menu.

2. Double-click "System and Security" and then "Administrative Tools".

3. Double-click "Computer Management" in the "Administrative Tools" dialog.

4. Navigate to the "System Tools > Local Users and Groups / Groups" directory. In the shortcut menu select the entry "New user".

5. Enter a name such as "DM_Demo" in the dialog "New user" in the "User name" box.
   Enter a description such as "User for DataMonitor" in the "Complete name" box.
   Type the desired password into the "Password" box and then repeat it in the "Repeat password" box.
   Create the user with "Create".
   Close the "New user" dialog.

6. In the right part of the table window, click on the newly created user. Select the "Properties" command in the shortcut menu.
   Switch to the "Member Of" tab.
   Click "Add".

7. In the "Select Groups" dialog, click the "Advanced > Find now" button.

8. Select the entries "SIMATIC Report Administrators", "SIMATIC HMI" and "SIMATIC HMI VIEWER" from the list at the bottom of the dialog.
Click "OK" twice to close the dialog.

9. In the properties of the user, the groups "SIMATIC Report Administrators", "SIMATIC HMI" and "SIMATIC HMI VIEWER" have been added to the list of memberships.
Click "OK".

10. Close the "Computer Management" dialog with "File > Exit".

11. Close the "Administrative Tools" window.

Result

The user "DM_Demo" with membership of the user groups "SIMATIC Report Administrators", "SIMATIC HMI" and "SIMATIC HMI VIEWER" has been set up. The user can now create directories in the Webcenter and make connections to WinCC databases.

Note

If a user wants to access remote computers via the DataMonitor server, the Windows user must be set up on the DataMonitor server as well as the remote servers with the same password.

4.2.3.2 Configuring the DataMonitor web page

Introduction

You create the DataMonitor web page with the WinCC Web Configurator.

Requirement

- The DataMonitor server is installed.
- The Windows "Internet Information Service" component is installed.

Procedure

1. Select "Web Navigator" in the navigation window of WinCC Explorer. Click the "Web Configurator" command in the shortcut menu.
   Alternatively, in the Windows Start menu select "Start > All Programs > Siemens Automation > SIMATIC> WinCC > Webnavigator Server > WebConfigurator".

2. The Web Configurator detects whether a configuration already exists.

   – No configuration found: Activate "Create a new standard website (Standalone)". Click "Next".

   – Configuration found: Click "Next" and check the configuration.

3. Select "Name of the web page" and enter the name.

4. Enter the number of the port used for access in the "Port" box.

5. At "IP address", specify whether the computer is to be available on the intranet or Internet or on both networks.
   Use only the addresses that are available in the selection list.
   Select "All not assigned" to enable intranet and Internet access to the computer.

6. Select "DataMonitor.asp" as the default web page.

7. Specify the time interval after which the DataMonitor client starts to reestablish a connection automatically in case of a connection error. A time setting of "0 s" disables the "Automatic reconnection" function.

8. Specify whether the web page is started once the configuration is completed.

9. Click "Finish" if you have not activated a firewall.
   Click "Next" if you have installed a firewall. See the following pages to find out how to set up a firewall.

Result

You have created the Web folder and activated the web page. When you have activated the firewall, use the Web Configurator to configure its settings.

4.2.3.3 Configuring the firewall

Introduction

The chapter describes how to activate "HTTP" and "HTTPS" services for port "80" in Windows 7 or Windows 2008.

Consult your network administrator if you want to set up the Windows Firewall with advanced security or for a different port.

Requirement

- You have created a default web page with Web Configurator.

- The Firewall is activated.

- The user who is logged has Windows administrator rights.

- You have to set up the HTTPS service in IIS if you are using it for WebNavigator. For more information, refer to "Setting up an HTTPS service in IIS (http://support.microsoft.com/kb/324069)".

Procedure for the default port

1. Click the "Windows Firewall" button in the " WinCC Web Configurator".

The "Windows Firewall" dialog opens.

2. Windows 7: Click "Allow a program or feature through Windows Firewall".
   Windows 2008: Click "Allow a program to communicate through Windows Firewall".

3. Activate "Secure WWW services (HTTPS)" or "WWW services (HTTP)".

4. Close all Windows dialogs with "OK".

5. Click "Finish" in the Web Configurator.
   The server configuration is completed.

4.2.4 Working with the DataMonitor client

4.2.4.1 Configuring security settings in Internet Explorer

Introduction

For full functionality on the DataMonitor client, adapt the security settings in the Internet Explorer.

Requirement

- Internet Explorer is installed.

Procedure

1. Click "Tools > "Internet Options" in the Internet Explorer.
   This will open the "Internet Options" dialog.

2. Select the "Security" tab.

3. Select the "Trusted Sites" icon and click the "Sites" button.
   The "Trusted Sites" dialog opens.

4. Enter the address of the DataMonitor server in the "Add this website to the zone" field.
   Possible formats and wildcards include "*://157.54.100 - 200", "ftp://157.54.23.41", or "http://*.microsoft.com".

5. Deactivate the "Require server verification (https:) for all sites in this zone" check box.
   Click "Add".
   Confirm the entry by clicking "OK".

6. Select the "Trusted Sites" icon.

7. Click "Default Level".
   Click "Adapt Level" in the next dialog.
   The "Security settings" dialog box is opened.

   – Activate the "Activate" option under "Initialize and script ActiveX controls not marked as safe".

   – Confirm the entry by clicking "OK".

8. Close the "Internet Options" dialog by clicking "OK".

Result

The necessary settings in the Internet Explorer of the DataMonitor client are configured.

User authentication: Activated setting "Automatic logon with current user name and password" in Internet Explorer

If the setting "Automatic logon with current user name and password" is activated in Internet Explorer in "Tools > Internet Options > "Security" tab > "Adapt Level" button > entry "User

Authentication" > Logon", this can lead to unexpected behavior under the following requirements.

Requirement

- The "Automatic logon with current user name and password" The setting is activated in Internet Explorer.

- The user logs onto the DataMonitor client as a WinCC user who is not configured in the user groups on the DataMonitor server.

- The user is logged onto the computer with a Windows logon that is set up as a user name on the DataMonitor server.

Behavior

1. The DataMonitor server does not recognize the WinCC user name the user has used to log onto the DataMonitor client and therefore rejects it. The user cannot see this behavior.

2. Internet Explorer automatically starts a new logon using the current Windows logon as user name.

3. The DataMonitor server recognizes the Windows logon as DataMonitor user name and accepts the logon for this user.

4. The user is logged on but not with the DataMonitor user name the user has entered. The current DataMonitor user is not displayed.

Recommendation

Disable the "Automatic logon with current user name and password" setting.

Use the setting only when there is a clear distinction between Windows logon and DataMonitor user name.

4.2.4.2   DataMonitor start page on the DataMonitor client

Overview

You start the DataMonitor client on a standalone computer or on a DataMonitor server. The start page of the DataMonitor summarizes the functions of the DataMonitor:

- "Reports":
  Creation and output of analysis results and process data in print jobs and published Excel workbooks.

- "Webcenter":
  Creation of Webcenter pages for the display of archived data.

- "Trends & Alarms":
  Display of alarms and process values from archives in tables and diagrams.

- "Administration"
  Configuration of connections and management of users, archives and pictures.

Requirement

- The user is created in WinCC.

- The user must be a member of the Windows user group "SIMATIC Report Administrators" or "SIMATIC Report Users" .

- The WinCC project on the DataMonitor server is in runtime.

Procedure

1. Start the Internet Explorer on the DataMonitor client.

2. Enter the name of the DataMonitor server in the format "http://<servername>" in the URL. Confirm the entry with "Enter".
   The log-in dialog is opened.

3. Enter the name of a Windows user and the associated password. Confirm with "OK".

Result

The start page with the DataMonitor functions will be displayed. The use of the functions depends on the access right of the user.

General Operations of the DataMonitor Client

- Select the desired interface language from the selection field in the header.

- Hide the header on the pages of "Webcenter" and "Trend & Alarms", if necessary. Click ⬚.
  To show the header line again, click on the symbol ⬚.

- In order to log off from the DataMonitor server, click on the "Log off" link.
  Exit Internet Explorer to free-up the used license immediately.

See also

Working with trends and alarms (Page 172)

Working with reports (Page 206)

Working with the Webcenter (Page 142)

4.3 Working with WinCCViewerRT

4.3.1 Configuring WinCCViewerRT

Introduction

WinCCViewerRT is a program for visualizing WinCC projects. You can configure WinCCViewerRT for operation with the DataMonitor server and Graphics Runtime.

Requirement

- On the server
  - The DataMonitor server is installed.
  - A WinCC/DataMonitor license is installed.
  - The WinCC project is in Runtime.
  - The WinCC pictures are configured and published for web access.
  - The WinCC user must be assigned authorization no. 1002 - "Web Access - monitoring only".
- On the client
  - The DataMonitor client is installed.

Procedure

1. Select the "Start > Programs > Siemens Automation > Option and Tools > HMI Tools > WinCCViewerRT" command in the Windows Start menu.
   The configuration dialog opens if you reconfigure WinCCViewerRT.
   WinCCViewerRT opens if WinCCViewerRT has already been set up. Use the <Ctrl+Alt+P> key combination to open the configuration dialog of WinCCViewerRT.

2. Enter the login data in the "General" tab:

   – Server address: "http://<Servername>" or "http://<IP-Adresse>"

   – User name and password, if you want to specify a default user for the login dialog.

   – The user settings you configured in the User Administrator will be activated if you enable the "Apply project settings" option.

3. Specify the Runtime language in the "Parameters" tab.
   If necessary, disable any key combinations with which the user switches to other programs.
   If required, you can modify the preset <Ctrl+Alt+P> key combination that is used to open the WinCCViewerRT configuration dialog.
   Define a key combination with which a user can log off and a new user can log on. The key combination can only be used if no default user has been set in the "General" tab.

4. Specify the WinCC Runtime properties in the "Graphics Runtime" tab:
   - Start picture
   - Configuration file for user-defined menus and toolbars
   - Window attributes
   - Impermissible user actions

5. Specify additional user actions in the "Runtime" tab:
   - Activating the screen keyboard
   - <Ctrl+Alt+Del> key combination to allow switching to the Task Manager or operating system via the screen keyboard.
   - Auto-logoff settings

6. Close the dialog with the "OK" button.

Result

WinCCViewerRT is configured. The connection to the DataMonitor server is set up after you close the dialog. The settings are saved to the "WinCCViewerRT.xml" configuration file. The configuration file settings are used at the next start of WinCCViewerRT. WinCCViewerRT applies the user interface language from WinCC.

The configuration file is available in the folder "Documents and Settings\User\Application Data \Siemens\SIMATIC.WinCC\WebNavigator\Client". You can rename the file, for example, to "User1.xml". You can also start WinCCViewerRT by means of the command line with the user-specific configuration file, e.g. "WinCCViewerRT.exe User1.xml". This procedure allows for different configurations, depending on the logged-on user.

The WinCCViewerRT configuration dialog opens at the start if you rename or delete "WinCCViewerRT.xml". Reconfigure WinCCViewerRT or select a different configuration file.

Note

WinCCViewerRT can only be closed by means of script function if you disable a key shortcut or hide the "Close" button. Function in the C-Script: DeactivateRTProject; function in the VBScript: HMIRuntime.Stop.

4.3.2   Displaying pictures

Requirement

- A WinCC/DataMonitor license is installed on the DataMonitor server.
- The WinCC project on the DataMonitor server is in runtime.
- The WinCC pictures are configured and published for web access.
- The WinCC user must be assigned authorization no. 1002 - "Web Access - monitoring only".
- WinCCViewerRT is configured on the DataMonitor client.

Procedure

1. Start WinCCViewerRT in the Windows Start menu with "Start > Programs > Siemens Automation > Options and Tools > HMI Tools".

2. Log on to the DataMonitor server:
   - A login dialog is not displayed if the user name and password are set in the WinCCViewerRT configuration dialog. You are logged on automatically with the stored login data.
   - The login dialog is displayed if a user name and password is not set in the WinCCViewerRT configuration dialog. Enter the user name and password of the WinCC user. Click "OK".

3. To change the user, use the specified key combination for login/logoff of "WinCCViewerRT". The previous user is logged off. Enter the user name and password of the new WinCC user in the login dialog. Click "OK".
   The key combination can only be used if no default user has been set.

Result

WinCCViewerRT automatically connects to the activated WinCC project. The pictures of WinCC project are displayed.

The "View Only Cursor" indicates that process-related operations are not possible.

Certain operations, such as opening the properties dialog of a WinCC OnlineTrendControl, are still possible.

You can also use your own cursor icon as a "View Only Cursor", if required. For more information, refer to "Configuring Runtime settings (Page 125)".

The <F5> key triggers a reselection of WinCCViewerRT.

4.4 Working with the Webcenter

4.4.1 Administration

4.4.1.1 User Groups and Directories

User Groups and Directories

Overview

WebCenter pages and reports are stored in directories on the DataMonitor server.

Its standard complement of directories is as follows:

- "Public"

- "Private" Every user has a "Private" directory. Only the respective user has access rights to this directory.

A user of the user group "SIMATIC Report Administrators" can create other directories and assign the other user groups different access rights to these directories.

More information on setting up directories can be found in chapter "Setting up directories (Page 144)".

Windows User Groups

The user groups "SIMATIC Report Administrators" and "SIMATIC Report Users" are created when the DataMonitor server is installed. You can create more user groups. More information on setting up user groups and users can be found in chapter "Defining users and access rights in Windows (Page 128)".
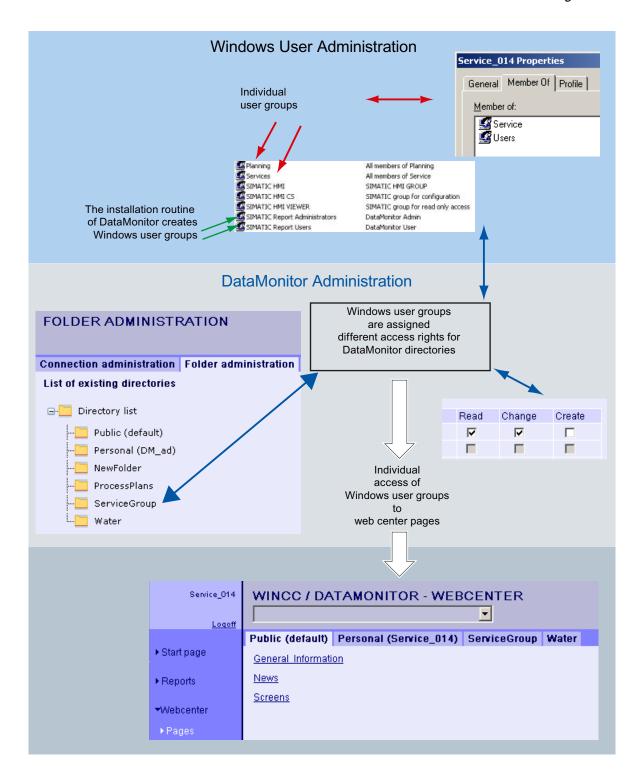
To access the DataMonitor, assign all members of a user group the same access rights to the directories of the DataMonitor server.

The following access authorization is possible:

- Read

- Change

- Create

A user, as a member of a user group, only has access to a directory if the respective user group has access rights to that directory. This permits user group-specific access. More information on assigning access authorization can be found in chapter "Assigning access rights (Page 144)".

The following picture shows the basic user administration for the WebCenter.

Windows User Administration

Individual user groups

The installation routine of DataMonitor creates Windows user groups

Planning	All members of Planning
Services	All members of Service
SIMATIC HMI	SIMATIC HMI GROUP
SIMATIC HMI CS	SIMATIC group for configuration
SIMATIC HMI VIEWER	SIMATIC group for read only access
SIMATIC Report Administrators	DataMonitor Admin
SIMATIC Report Users	DataMonitor User

Service_014 Properties

General | Member Of | Profile

Member of:

Service
Users

DataMonitor Administration

FOLDER ADMINISTRATION

Connection administration | Folder administration

List of existing directories

Directory list
- Public (default)
- Personal (DM_ad)
- NewFolder
- ProcessPlans
- ServiceGroup
- Water

Windows user groups are assigned different access rights for DataMonitor directories

	Read	Change	Create
	☑	☑	☐
	☐	☐	☐

Individual access of Windows user groups to web center pages

Service_014

Logoff

WINCC / DATAMONITOR - WEBCENTER

Public (default) | Personal (Service_014) | ServiceGroup | Water

- Start page

- Reports

- Webcenter
  - Pages

General Information

News

Screens

Creating Directories

Introduction

You store Webcenter pages in directories. The default directories are "Public" and "Private".

Requirement

- The logged in user is a member of the Windows user group "SIMATIC Report Administrators".
- The start page of the DataMonitor is open.

Procedure

1. Click "Webcenter > Administration" on the start page.
2. Click the "Directory administration" tab.

3. Enter a name, such as "mypart", in the "New directory" field.
4. Click the "Create" button.

Result

The directory "mypart" is created. The directories are created in a layer.

Assigning Access Rights

Introduction

Directories are created within the Webcenter in which you store, for example, Webcenter pages. You can assign different access rights for the individual directories to Windows user groups.

The following access authorization is possible:
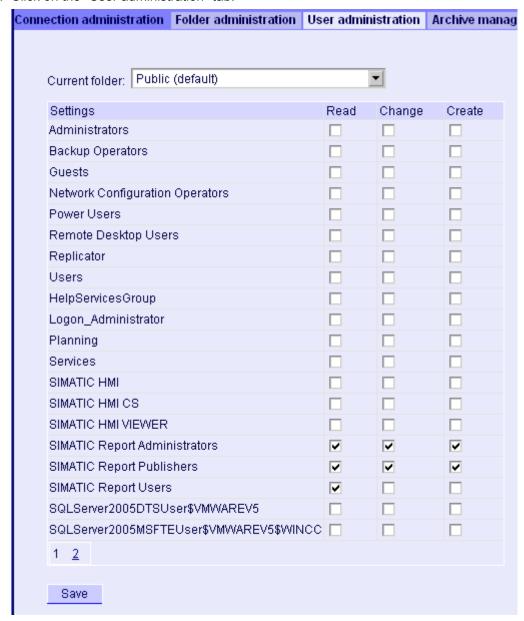
- Read

- Change

- Create

Requirement

- The logged in user is a member of the Windows user group "SIMATIC Report Administrators".

Procedure

1. Click "Webcenter > Administration" on the start page.

2. Click on the "User administration" tab.

3. Select the desired directory from the "Current directory".
   All existing Windows user groups are listed.

4. Activate the access rights in the line of the required Windows user group.

5. Click "Save".

Result

The access rights for the required directory are configured.

See also

User Groups and Directories (Page 142)
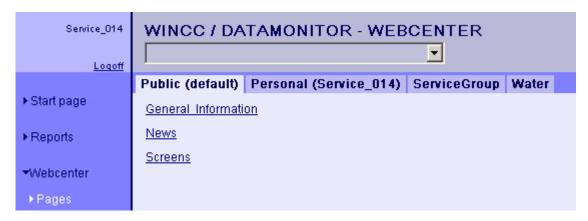
Example: User Groups and Directories

Overview

The user groups "Service" and "Planning" have been created in the following example. The directories "ServiceGroup", "Water" and "ProcessPlans" are created in the Webcenter.

The following table shows which access rights the members of the user groups "Service" and "Planning" have for the following directories:

Directory	User group "Service"	User group"Planning"
Public	• Read	• Read
Private	• Read • Change • Create	• Read • Change • Create
ServiceGroup	• Read • Change • Create	• Read
Water	• Read • Change	No access authorization
ProcessPlans	No access authorization	• Read • Change

When a member of the user group "Service" logs in and clicks "Pages" in the Webcenter, the member will see the directories as tabs to which the user group has at least read access. The "Webcenter > Pages" looks as follows for the member "Service_014" of the user group "Service":

The "Webcenter > Pages" looks as follows for the member "Plan_012" of the user group "Planning":

4.4.1.2 Create connection and set up language

Introduction

For access of the DataMonitor client to runtime data and archived data, configure connections to the WinCC databases in the "Webcenter". For each data source, set up a connection, e.g., to the WinCC server. You need the configured connections for Webcenter pages and "Trends & Alarms".

Requirement

- The user is a member of the Windows user group "SIMATIC Report Administrators".
- For access to the WinCC database via DataMonitor, a Windows user with password is created who is a member of the "SIMATIC HMI VIEWER" user group.

Procedure

1. Click "Webcenter > Administration" on the start page.

2. Click the "Connection Administration" tab.

3. Select the option "New Connection". After the new installation, no selection is possible in the "Connection" box, as no connections have been configured yet.

4. Select the language that corresponds with the linguistic region of the server or archive to be linked in "Linguistic Region". The setting ensures that special national characters are displayed correctly.

5. Enter a name in the "Connection Name" box, such as "WinCC1_Runtime". The name should include a reference to the selected connection type. Do not use any blank spaces or special characters.

6. Enter the computer name on which the archive backup data are stored.
   As an alternative, select the name of the computer using the "Find" button.

7. Enter the Windows user with password for the connection with the WinCC database.

8. Select the connection type to the WinCC data:

    – "Swapped-out WinCC archive". Additional steps are necessary to access data on swapped archives. More information is available under "Connecting or separating swapped archives (Page 150)".

    – "WinCC Runtime". Only the open single segment of the Runtime database is used.

    – "CAS". The WinCC data of the central archive server are used.

    – "WinCC Runtime + all segments". The open single segment and all other connected segments of the Runtime database are used.

9. Select the database for the connection type:

    – "Swapped-out WinCC archive": Click "Display database" or select the archive from the list.

    – "WinCC Runtime" and "CAS": Select the Runtime database of the activated WinCC project. As an alternative, select the name of the database using the "Find" button.

    – "WinCC Runtime + all segments": "CC_ExternalBrowsing" is automatically entered as database.

10. Activate "Automatic adaptation of RT database" so that the database name is adjusted in the connection administration during a segment change.

11. Click the "Create" button.

Result

The connection to the data source is created and can be selected in the "Connection" box of the connection administration.

See also

Configuring a symbolic directory (Page 150)

Connect archives using the WinCC Archive Connector (Page 154)

4.4.1.3   Connecting or disconnecting swapped archives

Configuring a symbolic directory

Introduction

To access data on swapped-out WinCC archives, these archives must be connected to an SQL server once again.

You can connect all or individual archive backup files of a directory with the SQL server.

If you want to remove a directory containing archives from the list of symbolic names, disconnect all archives contained therein. You see the status of the archives in the tab "Connecting/disconnecting archives".

Note

Connected archives on changeable media

Before changing the media in the drive you need to disconnect the archives on this medium. After changing the medium, check whether the archives are connected on the new medium.

Requirement

- Archive backup files are write-protected. Create a backup copy of the file before connecting and remove the write-protection of the copied archive backup file.

- The archive backup files are stored on a local drive.

- The directories in which the archive backup files are stored have been released.

  - The directory must be set for sharing in the Windows Explorer before you start the DataMonitor server.

  - Restart the DataMonitor server if you are releasing the directories at a later time.

- The user group "SIMATIC HMI VIEWER" has "Full access" to the directories.

- The logged in user is a member of the Windows user group "SIMATIC Report Administrators".

- Windows Server 2008: "Network service" is added in the "Print operators" group.

- Windows 7: "Network service" is added in the "Main user" group.

Procedure

1. Click "Webcenter > Administration" on the start page.

2. Click on the "Archive administration" tab.

3. In the "Symbolic Name" box, enter a unique symbolic name for each directory. The name should only contain characters permitted in the SQL syntax. You use the symbolic name for access via the DataMonitor client.

4. Select the folder which contains the archive backup files. You can only select released directories.

5. To automatically connect all existing archive backup files of the directory, activate "Automatically connect all archives in this directory".

6. To connect individual archive backup files of the directory, deactivate "Automatically connect all archives in this directory".

7. Click "Add".

Result

The symbolic directory "Test" is created.

If you have deactivated "Automatically connect all archives in this directory", specify the archive backup files in the "Connecting/disconnecting archives" tab. To disconnect archives, deactivate the respective archives in the "Connecting/disconnecting archives" tab.

Connecting or disconnecting archives

Introduction
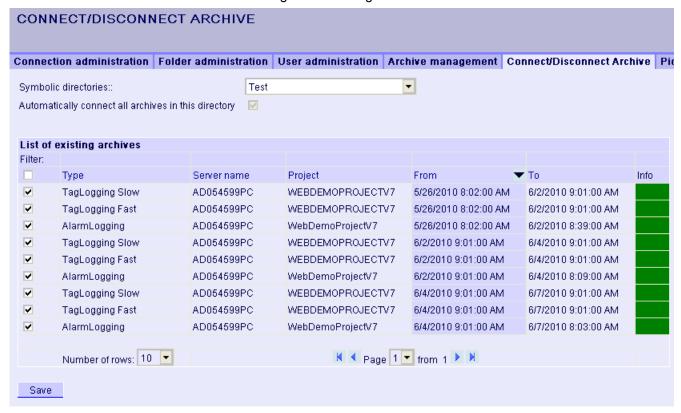
All archives of a selected archiving directory are displayed on the "Connecting/disconnecting archives" tab. You can connect or disconnect the existing archives.

Requirement

- Archive backup files are write-protected. Create a backup copy of the file before connecting and remove the write-protection of the copied archive backup file.

- The logged in user is a member of the Windows user group "SIMATIC Report Administrators".

- A symbolic directory is created, such as "Test".

Procedure

1. Click "Webcenter > Administration" on the start page.

2. Click on the "Connecting/disconnecting archives" tab.

3. Select a directory from "Symbolic directories", such as "Test". The available archives are displayed in a list. The "Info" column indicates the status:

   – Green: Connected

   – Red: Disconnected

4. To limit the display, click "Filter".

5. Enter a filter criterion in a column and click [icon]. Click [icon] with "From" and "To" to enter a required period of time. Then click [icon].

6. To connect an individual archive, activate the desired archive in the "List of available archives". Click "Save".

7. To disconnect an individual archive, deactivate the desired archive in the "List of available archives". Click "Save".

8. You sort the list entries by clicking on one of the column headers.

Alternative Procedure

To connect archive backup files, you can also use the WinCC Archive Connector. For additional information, refer to "Connecting archives using the WinCC Archive Connector (Page 154)".

Result

The required swapped-out WinCC archives are connected. If you connect signed archives, which have been changed after the swap, a message is output.

Connect archives using the WinCC Archive Connector

Introduction

You use the Archive Connector to reconnect swapped-out WinCC archives with an SQL Server.

The Archive Connector has the following functions:

- Manual Connection: Local databases are selected and connected to the local SQL Server.

- Manual disconnection: Connected databases are disconnected from the SQL Server.

- Automatic Connection: Local directories can be selected in which WinCC archives have been exported. After activation of monitoring, all archives added to the directory are automatically connected with the SQL Server.

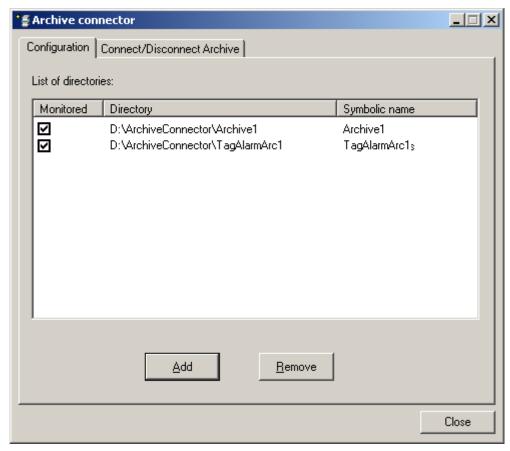
Note

Connected archives on changeable media

Before changing the media in the drive you need to disconnect the archives on this medium using the Archive Connector. After changing the medium, check in Archive Connector whether the archives are connected on the new medium.

Requirement

- The Archive Connector may only be operated using a local SQL Server and a WinCC/DataMonitor license.

- Archive backup files are write-protected. Create a backup copy of the file before connecting and remove the write-protection of the copied archive backup file.

- The archive backup files are stored on a local drive.

- The directories in which the archive backup files are stored have been released.

- The user group "SIMATIC HMI VIEWER" has "Full access" to the directories.

- The logged in user is a member of the Windows user group "SIMATIC Report Administrators".
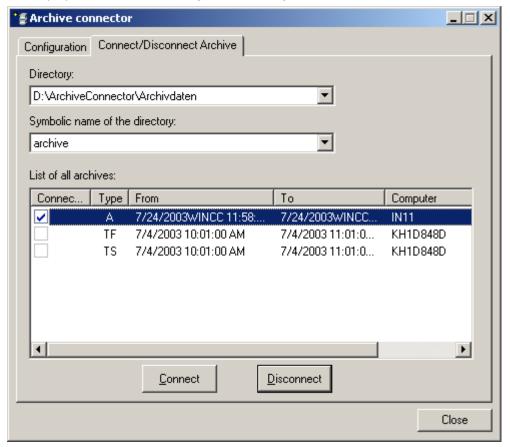
Procedure

1. From the Windows Start menu choose "Start > SIMATIC > WinCC > WebNavigator Server > ArchiveConnector".

2. Click "Add" in the "Configuration" tab. The "New directory" dialog opens.

3. Navigate to the directory in which the archive backup files are stored.

4. Enter a unique symbolic name for the directory. The name should only contain characters permitted in the SQL syntax. You use the symbolic name for access via the DataMonitor client.

5. Click "OK". The directory is displayed on the "Configuration" tab.

6. If you activate the checkbox for a directory in the "Monitored" column, then all archives that are added to the directory from the time of activation are automatically connected to the SQL server.

7. Remove a selected directory again, if necessary. The archives in the directory must already be disconnected. The status of the archives of a directory can be verified on the "Connect/ disconnect archives" tab in the "Connected" column.

8. Click on the "Connecting/disconnecting archives" tab. All archives of a selected directory are displayed on the "Connecting/disconnecting archives" tab.

9. Select a directory with archives either from the list of directories or by its symbolic name.

10. Select the required archive and click "Connect".

11. Disconnect the connection of a selected archive, if necessary.

Result

A connection is created and the required archive backup files are connected with the SQL Server.

The "Connecting/disconnecting archives" tab displays the connection status of each archive. "From" and "To" columns contain the archiving period in the local time zone.

The "Type" column contains the details for archive type:

● A - Alarm archive

● TF - Tag Logging Fast

● TS - Tag Logging Slow

If you connect signed archives, which have been changed after the swap, a message is output.

4.4.2 Creating static process pictures for the Webcenter

Introduction

In the picture administration you specify which pictures you need for the web part "Static process pictures". The process pictures cannot be operated.

The DataMonitor server creates copies of pictures in a cycle that can be set. The server makes the pictures available as static process pictures on the DataMonitor client.

The following objects are not displayed in the web part "Static process pictures":
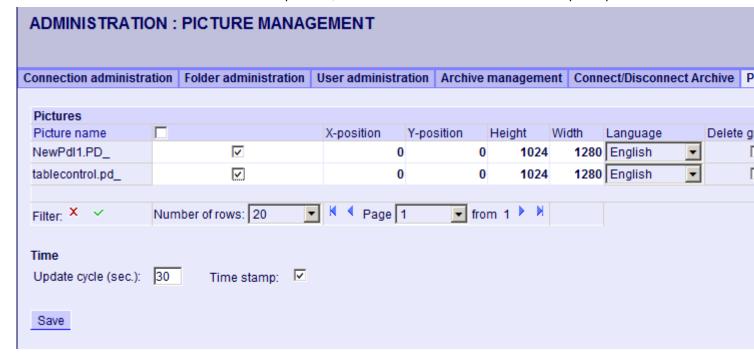
● Global Script Diagnostics Window

● WinCC Media Control

● WinCC Controls from migrated projects that have been created with versions prior to WinCC V7.0.

Requirement

● The logged in user is a member of the Windows user group "SIMATIC Report Administrators".

● The WinCC pictures are published for web access. Additional information is available under "Publishing WinCC process pictures (Page 113)".

● The start page of the DataMonitor is open.

● The "Picture administration" tab is open. All published process pictures are listed.

Procedure

1. Select the desired pictures.

    – To select all pictures, activate the checkbox in the column header.

    – To select individual pictures, activate the checkbox in front of the required picture.

2. To show only a part of the picture, specify the following:

    – X position: Start positions in x direction in pixels

    – Y position: Start positions in y direction in pixels

    – Height: Height of the picture in pixels

    – Width: Width of the picture in pixels

3. If you have configured and published pictures in different languages, select a language from the list to display the language-specific picture.

4. To output the time when the process picture was created by the DataMonitor server, activate "Stamp". The date and time are displayed in the picture.

5. In order to change the update cycle, enter the desired value in "Update time interval". Select this cycle as large as possible. A cycle that is too small results in limited performance.

6. Click "Save".

Result

The DataMonitor server creates static process pictures from the selected pictures. You can configure the static process pictures in the web part "Static process pictures".

Deleting static process pictures

To delete static process pictures, select the checkbox "Delete graphic" for the selected picture name. Click "Save" to delete the static process picture or the copy. You can no longer configure the deleted process picture in the web part "Static process pictures".

Finding picture names or limiting display

Use a filter to find a picture name or limit the display to certain picture names.

When you click ⬇ with "Filter", the filter is shown above the table. Enter a picture name in the text field or click <Enter>.

To hide the filter, click ✖ .

4.4.3   Creating layout template for Webcenter pages

Introduction

You need a layout template to create a Webcenter page. Predefined layouts were installed during the installation. Additionally, you can create your own Layout Templates.

Requirement

- The logged in user is a member of the Windows user group "SIMATIC Report Administrators".

- The start page of the DataMonitor is open.

Procedure

1. Click "Webcenter > Configuration" on the start page.
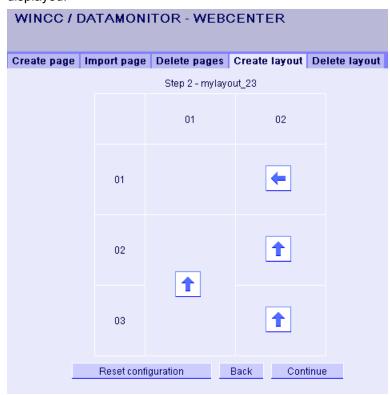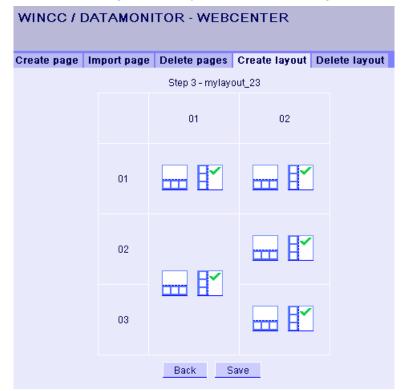
2. Click on the "Creating layout" tab.

3. Define the number of columns and the number of lines.

4. Enter the name in the "Name of the layout file" box, for example, "mylayout_23". Click "Next".

5. Combine the table fields, if necessary. To do so, click the desired arrow symbol, such as "Arrow up", in the desired field, for example line 3 / column 1. The modified view will be displayed.

6. To restore the original table layout, click "Reset configuration". Click "Next".

7. Arrange the web parts in the table fields. If necessary, activate the corresponding symbol in a table field to place the web parts vertically or horizontally.

8. Click "Save".

Result

The layout template "mylayout_23" is created. You can use the layout template as a template for creating a Webcenter page.

4.4.4 Creating Webcenter page

Introduction

You create Webcenter pages in which you add web parts. The Webcenter pages are stored in directories. In this example, the WebCenter page is saved in the "myPart" directory.

You can only change or create Webcenter pages in directories for which the Windows user group has the "Edit" or "Create" access rights.

Requirement

- The directory "myPart" is set up.
- The logged in user is a member of the Windows user group "SIMATIC Report Administrators" or "SIMATIC Report Users".
- The Windows user groups have the access rights "Edit" or "Create" for the directory.
- The start page of the DataMonitor is open.

Procedure

1. Click "Webcenter > Configuration" on the start page.
2. Click on the "Creating page" tab.
3. Click on the desired layout template. The file name is displayed in the "Layout file" box.
4. Enter a name in the "Webcenter page" box, for example, "My_Webcenter".

5. Select the directory in which the Webcenter page is stored. The selected directory is displayed in the box "Save WebCenter page as".

6. Click "Save".

Result

The Webcenter page "My_Webcenter" is created and saved.

See also

Inserting web parts to the Webcenter page (Page 164)

Configuring web parts within Webcenter pages (Page 167)

4.4.5 Inserting web parts to the Webcenter page

Introduction

You compile the contents of the Webcenter pages from the web parts.

Requirement

- The directory "myPart" is set up.
- The Webcenter page "My_Webcenter" is stored in the directory.
- The logged in user is a member of the Windows user group "SIMATIC Report Administrators" or "SIMATIC Report Users".
- The Windows user groups have the access rights "Edit" or "Create" for the directory.
- The start page of the DataMonitor is open.

Procedure

1. Click "Webcenter > Pages" on the start page.
2. Click on the "myPart" tab.

3. Click on the entry "My_Webcenter".

4. To add web parts, click ⊕ at the top right edge of the page. The available web parts are listed.
If you have exported web parts that have already been configured, they are listed under "Imported web parts". If necessary, insert these web parts into your Webcenter page.

5. Activate the entry "Trend (Timestep)".

6. Select the entry "WPZ_01_01" and click "Add".

7. Activate the entry "Hit list of alarms".
If you insert several web parts into a table field, the web parts are arranged horizontally or vertically. You specify the arrangement when you create the layout template.

8. Select the entry "WPZ_02_01" and click "Add".

9. Click "Exit".

Result

Web parts to display data are inserted into the Webcenter page "My_Webcenter". The current compilation of the Webcenter page is displayed.

See also

Overview of Web Parts (Page 107)

Creating Webcenter page (Page 161)

Configuring web parts within Webcenter pages (Page 167)

4.4.6 Configuring web parts within Webcenter pages

Introduction

To display data from WinCC Runtime or an archive, you must configure the web parts.

Web part configuration
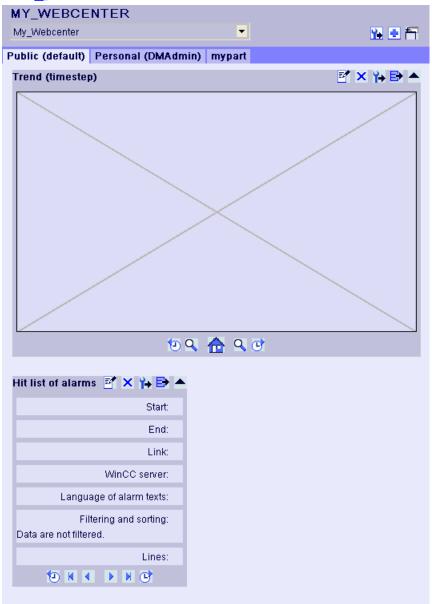
	Open the configuration dialog of the web part
	Deleting the web part
	Minimizing the web part
	Maximizing the web part
	Exporting the web part
	Exporting the configuration of the web part as XML file

Requirement

- The logged in user is a member of the Windows user group "SIMATIC Report Administrators" or "SIMATIC Report Users".

- The Windows user groups have the access rights "Edit" or "Create" for the directory.

- The Webcenter page "My_Webcenter" is open.

- The WinCC project is in Runtime.

Procedure

1. Click in the required web part. The configuration dialog is opened.

2. Configure the web part:

   – Displaying process values in a table (Page 172)

   – Displaying process values in a diagram (Page 173)

   – Displaying alarm hit list (Page 179)

   – Displaying alarms in the alarm table (Page 175)

   – Displaying statistics function for process values (Page 181)

3. To change the position of the web part, move the web part to the desired position with the mouse.

See also

Creating Webcenter page (Page 161)

Inserting web parts to the Webcenter page (Page 164)

4.4.7 Deleting Webcenter pages and layout templates

Introduction

You can delete layout templates and Webcenter pages that are no longer required.

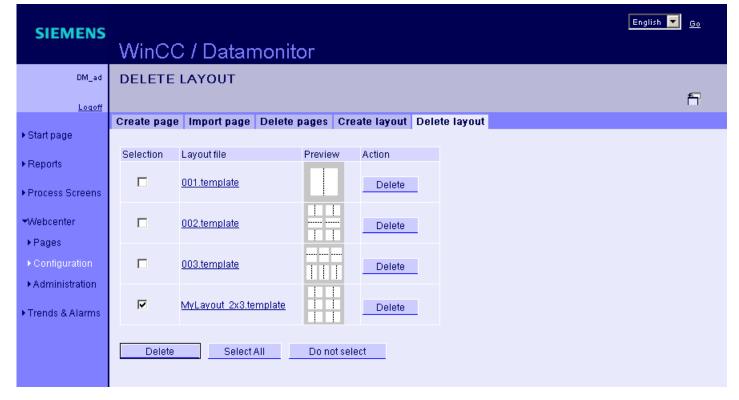### Requirements - Deleting Layout Templates

- The user is a member of the Windows user group "SIMATIC Report Administrators".
- The start page of the DataMonitor is open.

Requirements - Deleting Webcenter pages

- The logged in user must have "Create" access rights for the directory, in which the page to be deleted is stored.
- The start page of the DataMonitor is open.

Deleting layout templates

1. Click "Webcenter > Configuration" on the start page.

2. Click on the "Deleting layout" tab.

3. Delete the required layout files:

   – To delete several layout files, activate the checkbox "Selection" for the files you want to delete. Click "Delete".

   – To delete all layout files, click "Select All". Click "Delete".

   – To delete individual layout files, click the respective "Delete" button in the "Action" column.

Result

The selected layout file is deleted. You can also delete the supplied layout files. Existing Webcenter pages that are using this layout template are not deleted. You cannot create new Webcenter pages with this layout.

Deleting Webcenter pages

1. Click "Webcenter > Configuration" on the start page.

2. Click on the "Deleting page" tab.

3. Activate the respective check box to mark the pages to be deleted.

4. Click on the "Delete" button.

Result

The selected Webcenter pages are deleted.

4.5 Working with trends and alarms

4.5.1 Displaying process values in a table

Introduction

Use "Trends & Alarms" to display archived process values in a table.

Requirement

- The connection to the WinCC data is established.
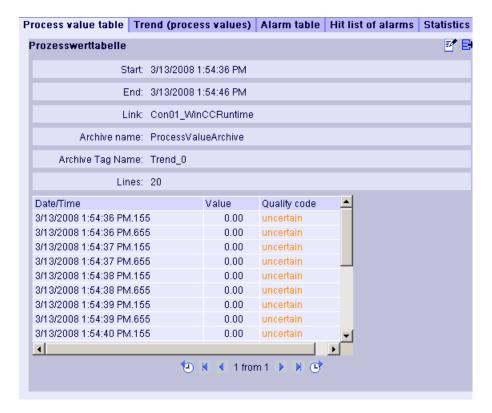- The start page of the DataMonitor is open.

Procedure

1. Click "Trends & Alarms" on the start page.

2. Click the "Process Value Table" tab.
   The Web part "Process Value Table" is displayed.

3. Click ▣. The configuration dialog of the Web part opens.

4. Change the title in the "Title" field. Enter a note in the "Tooltip" field.

5. Select one of the configured connections in the "Connection" field.
   The archive tags available via this connection will be displayed.
   Limit the display of the tags, if necessary:

   – Select individual archives with "Archive selection".

   – Set the filter criteria with "Tag filter".

6. Click "Add" for the required archive tag.

7. Set the time range in the area "Time period".
   With relative times, enter a negative value into the respective field.
   For more information on entering time, click ❓.
   Click "Preview" to check the set time range in the column "Preview Time Range".

8. Specify the number of decimal points in the area "Representation of decimal points".

9. In the "Table size" area, define the size of the display window.
   If the value "0" is entered in both fields, the size is determined automatically. The size depends on the space requirement of the Web part.

10. The available Webcenter pages are displayed in the area "Link to Webcenter pages". Click ▣ to assign the web part to one or several Webcenter pages.

11. Click "OK" to confirm your entries.

Result

The values of the archive tags and the quality code are output in the process value table.

If the manual entry of archive values is allowed during runtime, the modified or newly created values are identified as such. There is an "m" in a separate column to show a manual entry of the archive value.

Process value table	Trend (process values)	Alarm table	Hit list of alarms	Statistics

Prozesswerttabelle

Start:	3/13/2008 1:54:36 PM
End:	3/13/2008 1:54:46 PM
Link:	Con01_WinCCRuntime
Archive name:	ProcessValueArchive
Archive Tag Name:	Trend_0
Lines:	20

Date/Time	Value	Quality code
3/13/2008 1:54:36 PM.155	0.00	uncertain
3/13/2008 1:54:36 PM.655	0.00	uncertain
3/13/2008 1:54:37 PM.155	0.00	uncertain
3/13/2008 1:54:37 PM.655	0.00	uncertain
3/13/2008 1:54:38 PM.155	0.00	uncertain
3/13/2008 1:54:38 PM.655	0.00	uncertain
3/13/2008 1:54:39 PM.155	0.00	uncertain
3/13/2008 1:54:39 PM.655	0.00	uncertain
3/13/2008 1:54:40 PM.155	0.00	uncertain

1 from 1

Operation:

🕐 🕐	In absolute time required to scroll forward or backward in the selected time range.
Arrow buttons	To scroll forward or backward in multi-page tables.
📤	Export alarms in CSV format.
📝	Changing the settings of the Web part.

4.5.2 Displaying process values in a diagram

Introduction

Use "Trends & Alarms" to display archived process values in trends.

Requirement

- The connection to the WinCC data is established.
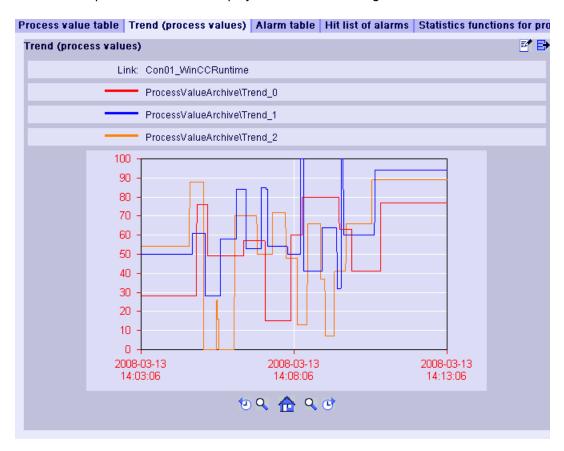- The start page of the DataMonitor is open.

Procedure

1. Click "Trends & Alarms" on the start page.

2. Click the "Trend (Process Values)" tab. The Web part "Trend (process values)" is displayed.

3. Click ![icon]. The configuration dialog of the Web part opens.

4. Change the title in the "Title" field. Enter a note in the "Tooltip" field.

5. Select one of the configured connections in the "Connection" field. The archive tags available via this connection will be displayed.
   Limit the display of the tags, if necessary:

   – Select individual archives with "Archive selection".

   – Set the filter criteria with "Tag filter".

6. Click "Add" for the required archive tags, e.g. "TREND_0", "TREND_1", "TREND_2.
   The archive tags are listed in the area "Current selection".

7. In the section "Current selection", you specify for the individual archive tag:

   – Color of time axis and value axis

   – Trend presentation type

8. In the section "Value axis editor", you can activate the automatic scaling for the different value axes or you can assign a minimum and maximum value to each axis.

9. Set the time range in the area "Time period".
   With relative times, enter a negative value into the respective field.
   For more information on entering time, click ![icon].
   Click "Preview" to check the set time range in the column "Preview Time Range".

10. In the section "Diagram settings", you define the size of the display window.
    If the value "0" is entered in both fields, the size is determined automatically. The size depends on the space requirement of the Web part.

11. Activate the option "Show legend" to display the legend.

12. The available Webcenter pages are displayed in the area "Link to Webcenter pages". Click ![icon] to assign the Web part to one or several Webcenter pages.
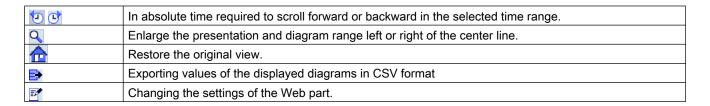
13. Click "OK" to confirm your entries.

Result

The selected process values are displayed as trends in a diagram.

The legend shows the assignment of the colors to the archive tags.

Operation:

(icons)	In absolute time required to scroll forward or backward in the selected time range.
(icon)	Enlarge the presentation and diagram range left or right of the center line.
(icon)	Restore the original view.
(icon)	Exporting values of the displayed diagrams in CSV format
(icon)	Changing the settings of the Web part.

4.5.3 Displaying messages in the alarm table

Introduction

Use "Trends & Alarms" to display alarms in an alarm table.

Requirement

- The connection to the WinCC data is established.
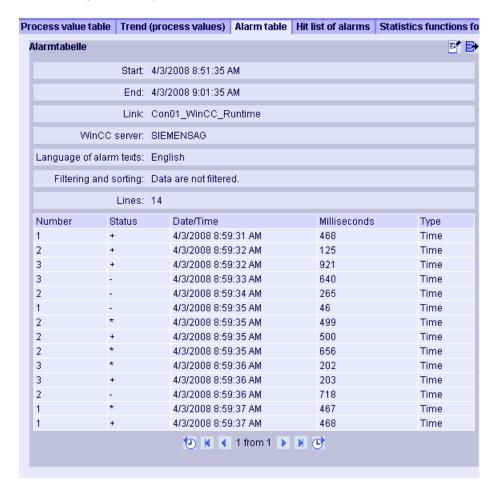- The start page of the DataMonitor is open.

Procedure

1. Click "Trends & Alarms" on the start page.

2. Click on the "Alarm Table" tab.
   The web part "Alarm Table" is displayed.

3. Click ![icon]. The configuration dialog of the Web part opens.

4. Change the title in the "Title" field. Enter a note in the "Tooltip" field.

5. Select one of the configured connections in the "Connection" field.

6. Set the time range in the area "Time period".
   With relative times, enter a negative value into the respective field.
   For more information on entering time, click ![?] .
   Click "Preview" to check the set time range in the column "Preview Time Range".

7. In the section "Language of the alarm texts", select the language, in which the alarms are displayed.

8. Select the respective WinCC server with "Selection of WinCC server", if necessary. The setting is necessary if you select a connection to swapped archives that include archives of several WinCC servers.

9. In the section "Filter selection", you may limit the expected search results with SQL syntax.
   Set the filter conditions for individual columns to do so.
   Enter the filter condition for all columns in the "Extended Filter" field.
   For more information on filter conditions, click ![?] .

10. For representation of the data set the following:

    – Sort order: For more information on sorting, click ![?] .

    – Visible columns: To display all columns, click "Select All".

    – Number of decimal places.

11. In the "Table size" area, define the size of the display window.
    If the value "0" is entered in both fields, the size is determined automatically. The size depends on the space requirement of the Web part.

12. The available Webcenter pages are displayed in the area "Link to Webcenter pages".
    Click ![icon] to assign the Web part to one or several Webcenter pages.

13. Click "OK" to confirm your entries.

Result

The messages are output in a table.

Process value table	Trend (process values)	Alarm table	Hit list of alarms	Statistics functions fo

Alarmtabelle

Start:	4/3/2008 8:51:35 AM
End:	4/3/2008 9:01:35 AM
Link:	Con01_WinCC_Runtime
WinCC server:	SIEMENSAG
Language of alarm texts:	English
Filtering and sorting:	Data are not filtered.
Lines:	14

Number	Status	Date/Time	Milliseconds	Type
1	+	4/3/2008 8:59:31 AM	468	Time
2	+	4/3/2008 8:59:32 AM	125	Time
3	+	4/3/2008 8:59:32 AM	921	Time
3	-	4/3/2008 8:59:33 AM	640	Time
2	-	4/3/2008 8:59:34 AM	265	Time
1	-	4/3/2008 8:59:35 AM	46	Time
2	*	4/3/2008 8:59:35 AM	499	Time
2	+	4/3/2008 8:59:35 AM	500	Time
2	*	4/3/2008 8:59:35 AM	656	Time
3	*	4/3/2008 8:59:36 AM	202	Time
3	+	4/3/2008 8:59:36 AM	203	Time
2	-	4/3/2008 8:59:36 AM	718	Time
1	*	4/3/2008 8:59:37 AM	467	Time
1	+	4/3/2008 8:59:37 AM	468	Time

1 from 1

Operation:

	In absolute time required to scroll forward or backward in the selected time range.
Arrow buttons	To scroll forward or backward in multi-page tables.
	Export alarms in CSV format.
	Changing the settings of the Web part.

See also

Alarm Log Column Names (Page 178)

4.5.4 Alarm Log Column Names

Introduction

You can select the alarm log columns while displaying alarms in "Trends & Alarms".

Overview of column names

Position	Name	Type	Comments
1	MsgNo	Integer 4 Bytes	Message number
2	State	Small Integer 2 Bytes	Alarm Log Status
3	DateTime	DateTime 8 Bytes	Time stamp of message (Date/time without milliseconds)
4	Ms	Small Integer 2 Bytes	Time stamp of message (milliseconds)
5	Instance	VarChar (255)	Instance Name of the Alarm Log
6	Flags1	Integer 4 Bytes	(only for internal use)
7	PValueUsed	Integer 4 Bytes	Process Values used
8 to 17	PValue1 to PValue10	Real 8 Bytes	Numerical Process Value 1 to 10
18 to 27	PText1 to PText10	VarChar (255)	Process Value Text 1 to 10
28	ComputerName	VarChar (255)	Computer Name
29	Application	VarChar (255)	Application Name
30	Comment	VarChar (255)	Comments
31	UserName	VarChar (255)	User Name
32	Counter	Integer 4 Bytes	Running Alarm Message Counter
33	TimeDiff	Integer 4 Bytes	Time difference to "Came in" status
34	ClassName	VarChar (255)	Name of the alarm class
35	Type name	VarChar (255)	Name of the alarm type
36	Class	Small Integer 2 Bytes	Message class ID
37	Type	Small Integer 2 Bytes	Message type ID
38 to 47	Text1 to Text10	VarChar (255)	Message Text 1 to 10
48	AG_NR	Small Integer 2 Bytes	Number of the PLC
49	CPU_NR	Small Integer 2 Bytes	Number of the CPU
50	CrComeFore	Integer 4 Bytes	Foreground Color for the "Came in" Status
51	CrComeBack	Integer 4 Bytes	Background Color for the "Came in" Status
52	CrGoFore	Integer 4 Bytes	Foreground Color for the "Went out" Status
53	CrGoBack	Integer 4 Bytes	Background Color for the "Went out" Status
54	CrAckFore	Integer 4 Bytes	Foreground Color for the "Acknowledged" Status
55	CrAckBack	Integer 4 Bytes	Background Color for the "Acknowledged" Status
56	LocalID	Integer 4 Bytes	Location of the Alarm
57	Priority	Integer 4 Bytes	Priority
58	AP_type	Integer 4 Bytes	Loop-in alarm
59	AP_name	VarChar (255)	Loop-in-Alarm Function Name
60	AP_PAR	VarChar (255)	Loop-in-Alarm Screen

Position	Name	Type	Comments
61	InfoText	VarChar (255)	Info text
62	TxtCame	VarChar (255)	Text came in
63	TxtWent	VarChar (255)	Text went out
64	TxtCameNWent	VarChar (255)	Text came in and went out
65	TxtAck	VarChar (255)	Text acknowledged
66	AlarmTag	Integer 4 Bytes	Message tag
67	AckType	Small Integer 2 Bytes	Acknowledgment Type
68	Params	Integer 4 Bytes	Parameter

4.5.5   Displaying the hit list of messages

Introduction

Use "Trends & Alarms" to display the hit list of alarms in a table.

Note

The display of alarms in the hit list may take some time and may place a strong load on the CPU. A message is displayed in "Trends & Alarms" if the data volume is too high.

Confirm this message to continue without changes. If you want to reduce the data volume, stop the process and change the filter criteria.

Requirement

- Connection to the WinCC data is established.
- The start page of the DataMonitor is open.

Procedure

1. Click "Trends & Alarms" on the start page.

2. Select the "Hit list of the alarms" tab. The web part "Hit list of the alarms" is displayed.

3. Click . The configuration dialog of the web part opens.

4. Change the title in the "Title" field. Enter a short message in the "Tooltip" field.

5. Select one of the configured connections in the "Connection" field.

6. Set the time range in the area "Time period". With relative times, enter a negative value into the respective field. For more information on entering time, click .
   Click "Preview" to check the set time range in the column "Preview Time Range".

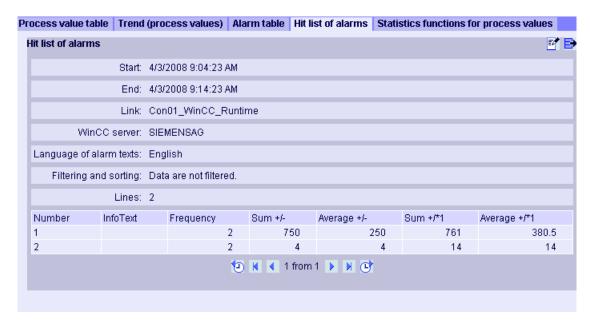7. In the section "Language of the alarm texts", select the language, in which the alarms are displayed.

8. Select the respective WinCC server with "Selection of WinCC server". The setting is necessary if you select a connection to swapped archives that include archives of several WinCC servers.

9. In the section "Filter selection", you may limit the expected search results with SQL syntax. Set the filter conditions for individual columns to do so. Enter the filter condition for all columns in the "Extended Filter" field. For more information on filter conditions, click ? .

10. For representation of the data set the following:

   – Sort order: For more information on sorting, click ? .

   – Visible columns: To display all columns, click "Select All".

   – Number of decimal places.

11. In the "Table size" area, define the size of the display window.
   If the value "0" is entered in both fields, the size is determined automatically. The size depends on the space requirement of the web part.

12. The available Webcenter pages are displayed in the area "Link to Webcenter pages". Click 🗶 to assign the web part to one or several Webcenter pages.

13. Click "OK" to confirm your entries.

Result

The analysis values for the alarms are displayed in a hit list.

Process value table	Trend (process values)	Alarm table	**Hit list of alarms**	Statistics functions for process values	

Hit list of alarms

Start:	4/3/2008 9:04:23 AM
End:	4/3/2008 9:14:23 AM
Link:	Con01_WinCC_Runtime
WinCC server:	SIEMENSAG
Language of alarm texts:	English
Filtering and sorting:	Data are not filtered.
Lines:	2

Number	InfoText	Frequency	Sum +/-	Average +/-	Sum +/*1	Average +/*1
1		2	750	250	761	380.5
2		2	4	4	14	14

1 from 1

The table includes configured data and statistical values, such as the frequency of the alarm.

If you move the mouse above the column header, an explanation is displayed in a tooltip.

Operation:

⏪ ⏩	In absolute time required to scroll forward or backward in the selected time range.
Arrow buttons	To scroll forward or backward in multi-page tables.

	Export alarms in CSV format.
	Changing the settings of the web part.

4.5.6 Displaying statistics function for process values

Introduction

Use "Trends & Alarms" to display the statistics functions for process values in a table.

Requirement

- The connection to the WinCC data is established.
- The start page of the DataMonitor is open.

Procedure

1. Click "Trends & Alarms" on the start page.

2. Click on the "Statistics functions for process values" tab. The web part "Statistics functions for process values" is displayed.

3. Click . The configuration dialog of the web part opens.

4. Change the title in the "Title" field.
   Enter a note in the "Tooltip" field.

5. Select one of the configured connections in the "Connection" field. The archive tags available via this connection will be displayed.
   You can limit the number of tags displayed using the "Archive selection" and "Tag filter" fields.

6. Click "Add" for the required archive tag.
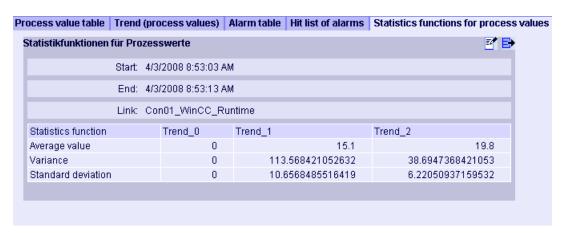
7. Set the time range in the area "Time period".
   With relative times, enter a negative value into the respective field. For more information on entering time, click .
   Click "Preview" to check the set time range in the column "Preview Time Range".

8. For representation of the data set the following:

   – Number of decimal places

   – Aggregate selection: Define the analysis function for the process values.

9. In the "Table size" area, define the size of the display window.
   If the value "0" is entered in both fields, the size is determined automatically. The size depends on the space requirement of the web part.

10. The available Webcenter pages are displayed in the area "Link to Webcenter pages". Click to assign the web part to one or several Webcenter pages.

11. Click "OK" to confirm your entries.

Result

Statistics functions for the selected process values were executed and output in the table.

Process value table	Trend (process values)	Alarm table	Hit list of alarms	Statistics functions for process values

Statistikfunktionen für Prozesswerte			
Start:	4/3/2008 8:53:03 AM		
End:	4/3/2008 8:53:13 AM		
Link:	Con01_WinCC_Runtime		
Statistics function	Trend_0	Trend_1	Trend_2
Average value	0	15.1	19.8
Variance	0	113.568421052632	38.6947368421053
Standard deviation	0	10.6568485516419	6.22050937159532

If you move the mouse above the column header, the archive name and the tag name are displayed in a tooltip.

You can export the displayed table in CSV format using the icon.

To change the settings, click.

4.6 Working with Excel Workbook

4.6.1 Configuring the Excel workbook

4.6.1.1 Applying data from WinCC project

Introduction

You need the WinCC configuration data for the configuration of Excel workbooks. This means you apply the data from a local WinCC project during configuration in the "Excel Workbook Wizard" .

Requirement

- Server computer
  - Office 2007, Office 2010, or Office 2013 is installed.
  - The Excel add-in "Excel Workbook" is installed.
  - The DataMonitor server is installed.
  - The WinCC project is in Runtime.
  - A user is created in WinCC.
- Configuration PC
  - Office 2007, Office 2010, or Office 2013 is installed.
  - The Excel add-in "Excel Workbook Wizard" is installed.
- MS Office
  - Only Excel files with extensions "XLS, "XLSX, "XLSB", and "XLSM" may be used.

Procedure

1. Open an empty Excel workbook.
   Select the command "Excel Workbook Wizard" in the "DataMonitor" menu.

2. Activate the option "Establish connection with WinCC server". The "WinCC Server" box is shown.

3. Enter the desired name of the server and click "Connect". The log in dialog is displayed.

4. Enter the name and password of a WinCC user.

5. Click "Next". The "Add / delete tags" dialog opens.

Result

The Excel workbook is set up to configure the display of process data. Then publish the workbook. The workbook is made available on the DataMonitor client as report tool or as template for "Reports".

Note

Language for the Office package and the Windows Regional Settings

Make sure that the language is the same for the Office package, the "Microsoft Office Language Settings", and the Windows Regional Options.

Example:

- If you are using Office 2007 with the language "English (U.K.)", for instance, select the regional setting "English (U.K.)".
- If you have set "Chinese (PRC)" as a region and language option in Windows, you must also select "Chinese (PRC)" as the primary processing language in the "Microsoft Office Language Settings 2007".

More information can be obtained through Microsoft Support: http://support.microsoft.com/kb/320369/en (http://support.microsoft.com/kb/320369/en)

See also

Configuring the display of tag values (Page 68)

Configuring the display of archive tags (Page 72)

Configuring the display of alarms (Page 76)

4.6.1.2   Applying data from a configuration file

Introduction

You can create reports without connection to the WinCC server.

Configuration steps:

- Create a configuration file on the server.
- Configure data access with the configuration file.
- You can also configure the data access of a dedicated Web server / WinCC client.

Requirement

- Server computer

  - The DataMonitor server is installed.

  - The online tags of the WinCC project are part of one tag group or one structure type.

  - The WinCC project is in Runtime.

  - A user is created in WinCC.

- Configuration PC

  - Office 2007, Office 2010, or Office 2013 is installed.

  - The Excel add-in "Excel Workbook Wizard" is installed.

- MS Office

  - Only Excel files with extensions "XLS, "XLSX, "XLSB", and "XLSM" may be used.

Creating a configuration file on the server

1. Select the entry "WebNavigator" in the navigation window of WinCC Explorer.
   Open the menu command "Export Configuration Data" in the shortcut menu.

2. Specify the data to be exported in the "Export configuration data" dialog.
   If you do not want to create the online tags in one tag group or one structure type, use the "Without structure (fast export)" option for the export.

3. Specify the path and the name of the XML file.

4. Click "Export". An XML file is generated.

5. If no Excel installation exists on the server, transfer the XML file to another computer, on which Excel and the "Excel Workbook Wizard" are installed.

Configuring data access with configuration file

1. Open an empty Excel workbook on the computer with Excel.
   Select the command "Excel Workbook Wizard" in the "DataMonitor" menu.

2. Activate the option "Load configuration data from file". Click "Next".

3. Navigate to the desired XML file.

4. Click "Next". The "Add / delete tags" dialog opens.

Result

The Excel workbook is set up to configure the display of process data. Then publish the workbook. The workbook is made available on the DataMonitor client as report tool or as template for "Reports".

Configuring data access of a dedicated Web server / WinCC client via XML file

If you want to display the project data from a dedicated Web server / WinCC client in the Excel workbook, you need to observe the following when configuring the Excel workbook via an XML file:

- The XML file now includes the data of subordinate servers whose packages are located on the DataMonitor server. The export of the loaded packages to the dedicated DataMonitor server / WinCC client can take several minutes, depending on the size of the package.

- This XML file must be available on the Excel configuration computer. Enter the server prefix when importing the configuration data in the "Excel Workbook Wizard".

- If you configure the data display in the Excel workbook on the WinCC client in the WinCC project, you do not have to specify a server prefix. The server prefix is automatically used when data is inserted from the package.

Note

Language for the Office package and the Windows Regional Settings

Make sure that the language is the same for the Office package, the "Microsoft Office Language Settings", and the Windows Regional Options.

Example:
- If you are using Office 2007 with the language "English (U.K.)", for instance, select the regional setting "English (U.K.)".
- If you have set "Chinese (PRC)" as a region and language option in Windows, you must also select "Chinese (PRC)" as the primary processing language in the "Microsoft Office Language Settings 2007".

More information can be obtained through Microsoft Support: http://support.microsoft.com/kb/320369/en (http://support.microsoft.com/kb/320369/en)

See also

Configuring the display of tag values (Page 68)

Configuring the display of archive tags (Page 72)

Configuring the display of alarms (Page 76)

Publishing the Excel workbook (Page 81)

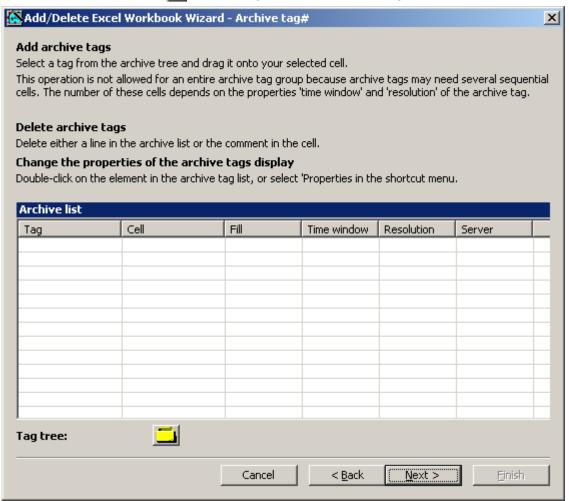## 4.6.1.3   Configuring the display of tag values

Introduction

This chapter describes how to configure the display of tag values.

Requirement

- The "Excel Workbook Wizard" is started and an Excel workbook is configured.
- The dialog "Add/delete tags" is open.

Procedure

1. Check the add sequence of tag groups in the "Adding tags" area.

2. Click on [icon]. The tag selection dialog opens.

3. Select the required tag and move the tag into a field in the Excel table with drag-and-drop.

4. Close the selection dialog. The tag is displayed in the tag list.

5. Select the tag in the tag list and select the "Server settings" entry in the shortcut menu.

6. Enter the name and password of a WinCC user in the "Server setting" dialog.
   To avoid an additional login during online display of process data, enable "Activate automatic login".
   Confirm your entries with "OK".

7. Select the tag in the tag list and select the "Properties" entry in the shortcut menu.
    The dialog "Tag properties" will be opened.

8. Set the properties for display in the table, for example, the update cycle or the display of time stamp and quality code.

9. Specify settings for the headings.

10. You can save the settings to the properties. You can then load the settings and use them again after exiting Excel and opening it again. Click "Save" to save the settings in an "xml" file.

11. Confirm your entries with "OK". If necessary, repeat the procedure for additional online tags. The settings for the properties will be used again. Multiple selection of tags is also possible in the tag list.

12. Click "Next" to display archive tags and alarms.
    Additional information is available under "Configuring display of archive tags (Page 72)" and "Configuring display of alarms (Page 76)".

Result

The display of tag values is configured in the Excel workbook. Once you have saved the properties, you can use the settings whenever you need to.

Each table field receives a short text and a comment in the Excel workbook.

The short text "OV" in tag values stands for online tags. In the comments, the source of the displayed values is shown in the format "WDWO_<number>_<tagname>".

Note

Running the Excel Workbook Wizard again

You need to run the Excel Workbook Wizard again:
- after deleting or moving cells with configuration data.
- after deleting or inserting new rows or columns in the Excel workbook.

The configuration data is checked and automatically adapted as a result. Confirm the data displayed with "Next". Save the workbook and close Excel.

Tags with local computer updating are not supported

In multiple station projects, you can activate the "Computer-local update" option in the tag management for internal tags. Any change of the tags only has an effect on the local computer in this case. This function is not supported by Excel Workbooks.

See also

Publishing the Excel workbook (Page 81)

4.6.1.4   Configuring the display of archive tags

Introduction

This chapter describes how to configure the display of archive tags.

Requirement

- The "Excel Workbook Wizard" is started and an Excel workbook is configured.
- The "Add/delete archive tags" dialog is open.
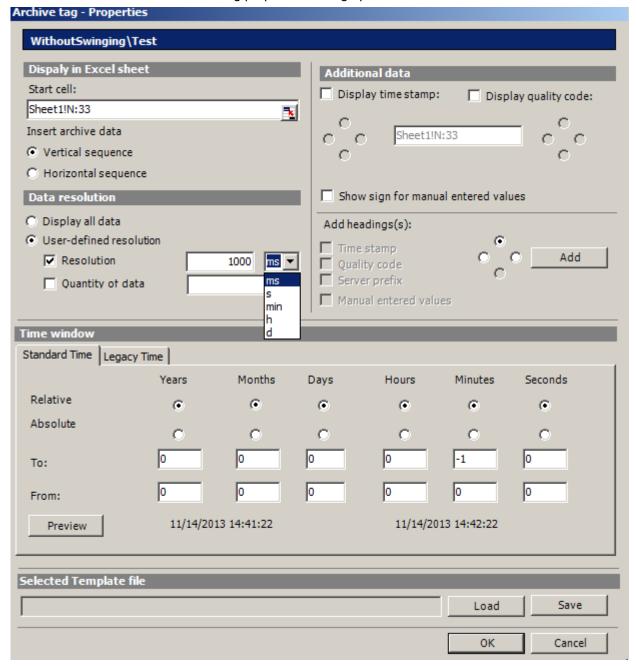
Procedure

1. Click 🔲 in the dialog "Add/delete archive tags".

2. The tag selection dialog opens.
   Select the desired archive tag.
   Drag the tag to a cell in the Excel table with drag-and-drop.

3. Close the selection dialog. The tag is displayed in the tag list.

4. Select the archive tag in the tag list, and select the "Properties" entry in the shortcut menu.
    The "Archive tag properties" dialog opens.

Archive tag - Properties

WithoutSwinging\Test

Dispaly in Excel sheet

Start cell:

Sheet1!N:33

Insert archive data

◉ Vertical sequence

○ Horizontal sequence

Data resolution

○ Display all data

◉ User-defined resolution

☑ Resolution   1000   ms ▼

☐ Quantity of data | ms
                                    | s
                                    | min
                                    | h
                                    | d

Additional data

☐ Display time stamp: ☐ Display quality code:

○
○ ○   Sheet1!N:33   ○ ○
○   ○

☐ Show sign for manual entered values

Add headings(s):
                                    ◉
☐ Time stamp   ○ ○ | Add
☐ Quality code   ○
☐ Server prefix
☐ Manual entered values

Time window

Standard Time | Legacy Time

	Years	Months	Days	Hours	Minutes	Seconds
Relative	◉	◉	◉	◉	◉	◉
Absolute	○	○	○	○	○	○
To:	0	0	0	0	-1	0
From:	0	0	0	0	0	0

Preview   11/14/2013 14:41:22   11/14/2013 14:42:22

Selected Template file

                                                        Load   Save

                                                        OK   Cancel

5. Specify the settings for the insertion sequence and headings.

6. Specify how much data you want to display. For a user-defined resolution, specify an integer number and the time unit or specify the quantity of data.

Note

If you use a user-defined data resolution with a combination of "Resolution" and "Quantity of data", it is possible that the amount of extracted data is not correctly determined. This results under certain circumstances in a mismatch between the displayed values and the configured quantity of data.

If you use the option "Quantity of data" in "User-defined resolution", enter an even value in the input box. Even values ensure a trend-true display.

7. In the "Time window" box, specify the time window from which you want to display archive tags:

● The time settings on the "Standard time" tag are based on the standard times:

   – The settings for the relative time period refer to a period starting from the current time. You can enter positive and negative values for the past time period in the lines "From" and "To". For example, it is 12:00 (noon). You want to display the values for the last ten minutes. Activate all time options in the "Relative" line. Enter the value "-10" in the "Minutes" column of the "From" line.

   – For settings of the absolute time period, enter the corresponding time parameters in the "From" and "To" lines and in the corresponding columns.

   Click on the "Preview" button to check the time range set.

● You can define a time window yourself or set a fixed interval, for example, "last week", on the "Legacy time" tab. If you want to define a time window yourself, you have the following possible settings:

   – Relative time window: Specify the starting point and the duration. You can specify a duration ranging from a minute to days.

   – Absolute time window: Specify the start and end of the time window.

1. If you select the option "Display manually entered values", an additional column is displayed. You then see the letter "m" if an archived value was manually entered during runtime.

2. You can save the settings to the properties. You can then load the settings and use them again after exiting Excel and opening it again. Click "Save" to save the settings in an "xml" file.

3. Confirm your entries with "OK".
   If necessary, repeat the procedure for additional archive tags. The settings for the properties will be used again. Multiple selection of tags is also possible in the tag list.

4. Click "Next" to display alarms. For more information, refer to "Configuring display of alarms (Page 76)".

Result

The display of archive tag values is configured in the Excel workbook. Once you have saved the properties, you can use the settings whenever you need to.

Each table field receives a short text and a comment in the Excel workbook.

The short text "AV" in tag values stands for archive tags. In the comments, the source of the displayed values is shown in the format "WDWA_<number>_<tagname>".

Note

Running the Excel Workbook Wizard again

You need to run the Excel Workbook Wizard again:

- after deleting or moving cells with configuration data
- after deleting or inserting new rows or columns in the Excel workbook

The configuration data is checked and automatically adapted as a result. Confirm the data displayed with "Next". Save the workbook and close Excel.

See also

Publishing the Excel workbook (Page 81)

4.6.1.5 Configuring the display of alarms

Introduction

This chapter describes how to configure the display of alarms.

Requirement

- The "Excel Workbook Wizard" is started and an Excel workbook is configured.
- The "Add/delete alarms" dialog is open.

Procedure

1. Configure the alarms in the dialog "Add/delete alarms".

2. Select the required cell in the Excel table.

3. Click [icon]. The "Alarm - properties" dialog opens.

Alarm - Properties

Standard Configuration | Attributes

New alarm 1

Display in Excel sheet

Description:

New alarm 1

Starting cell:

Sheet1!N:12

Server prefix

LOCALHOST

☐ Server prefix

Filter string

Time window

	Years	Months	Days	Hours	Minutes	Seconds
Relative	◉	◉	◉	◉	◉	◉
Absolute	○	○	○	○	○	○
To:	0	0	0	0	-1	0
From:	0	0	0	0	0	0

Preview   11/14/2013 14:45:02   11/14/2013 14:46:02

☑ Maximum number of alarms: 3

Insert attributes:

◉ Vertical sequence

○ Horizontal sequence

Add headings(s):

Add

Selected Template file

Load   Save

OK   Cancel

4. On the "Standard configuration" tab, define the display options for alarms in the Excel table.

5. Enter a filter condition in the "Filter string" box or use the selection dialog to define a filter, for example, to display only specific alarms. If the filter contains a date or time, the "Time window" box is disabled.

6. In the "Time window" box, specify the time window from which you want to display alarms:

   – The settings for the relative time period refer to a period starting from the current time. You can enter positive and negative values for the past time period in the lines "From" and "To". For example, it is 12:00 (noon). You want to display the alarms for the last ten minutes. Activate all time options in the "Relative" line. Enter the value "-10" in the "Minutes" column of the "From" line.

   – For settings of the absolute time period, enter the corresponding time parameters in the "From" and "To" lines and in the corresponding columns.

   Click on the "Preview" button to check the time range set.

7. Use the "Maximum number of alarms" option to limit the number of most recent alarms displayed. You can display maximum 1,000 messages.

8. On the "Attributes" tab, select the required attributes of the alarms that you want to display. Further details can be found in "Alarm attributes (Page 203)".

9. Specify the settings for the attribute insertion sequence and headings.

10. You can save the settings to the properties. You can then load the settings and use them again after exiting Excel and opening it again. Click "Save" to save the settings in an "xml" file.

11. Confirm your entries with "OK".
If necessary, repeat the procedure for additional alarms. The settings for the properties will be used again. Multiple selection of alarms is also possible in the "Alarm list".

12. Click "Next". The "Description" dialog box opens.

13. You can enter a comment if needed. This comment is displayed when selecting files provided for download by the DataMonitor server.

Result

The display of alarms is configured in the Excel workbook. Once you have saved the properties, you can use the settings whenever you need to.

Each table field receives a short text and a comment in the Excel workbook.

The short text for alarms is "AL". In the comments, the source of the displayed alarm is shown in the format "WDWL_<number>_<box name>".

Note

Running the Excel Workbook Wizard again

You need to run the Excel Workbook Wizard again:
- after deleting or moving cells with configuration data
- after deleting or inserting new rows or columns in the Excel workbook

The configuration data is checked and automatically adapted as a result. Confirm the data displayed with "Next". Save the workbook and close Excel.

See also

4.6.1.6   Publishing the Excel workbook

Introduction

You make the configured Excel workbooks available on the DataMonitor client. The workbooks are published as report tool for the Intranet/Internet or used as template for "Reports".

Requirement

- The DataMonitor server is installed on the computer.
- The display of tag values, archive values and alarms is configured.
- The "Description" dialog is open in the "Excel Workbook Wizard".

Procedure

1. You make the workbooks available in the "Description" dialog.

2. If you click "Publish", the Excel workbook is made available on the DataMonitor client under "Report tools" in "Reports".
   If you click "Template", the Excel workbook is made available on the DataMonitor client as template in "Reports" under "Excel Workbooks".

3. Exit the Excel Workbook-Wizard.

4. Save the workbook and close Excel.

Alternative Procedure

You upload the Excel workbooks on the DataMonitor client. Additional information is available under "Making Excel workbooks available as template (Page 206)" and "Making Excel workbooks available as report tool (Page 207)".

Result

The Excel workbooks are made available on the DataMonitor client:

● The workbook is available on the "Report tools" tab. You can use the workbook to display process data in runtime. For more information, refer to "Displaying process data in an Excel workbook (Page 201)".

● You can create time-controlled and event-controlled reports using the workbook as template. For more information, refer to "Creating reports with an Excel workbook (Page 210)".

See also

Configuring the display of tag values (Page 68)

Configuring the display of archive tags (Page 72)

Configuring the display of alarms (Page 76)

4.6.2   Displaying process data in an Excel workbook

Introduction

You can display process values or archive values and alarms in an available Excel workbook. You can edit and save the workbook.

Requirement

● The Excel workbooks were made available as report tool.

● MS Excel for online display in the Excel workbook

● The DataMonitor server is installed.

● The WinCC project is in Runtime.

● The start page of the DataMonitor is open.

● A user is created in WinCC.

Procedure

1. Click "Reports" on the start page.

2. Click "Report tools".
   You see the Excel workbooks that you have published in the Excel Workbook Wizard or made available as report tool.

Published Reports	Report tools	Download area	Upload templates	Print jobs

   Excel table

Open/Save	Excel Workbook	Date created	WinCC project
📊	Book1.xls	12/16/2010 6:58:19 AM	DemoProjectV7
📊	Book3.xls	12/16/2010 7:25:13 AM	DemoProjectV7.mcp

3. Select a workbook.

4. Double-click the icon of the Excel workbook.

5. In the dialog that follows, click "Open". The workbook is opened.

6. Select the entry "Excel Workbook" in the "DataMonitor" menu.

7. The name of the server whose process data are configured in the workbook is displayed in the "WinCC server" field.
   The "WinCC Server" field can include the following information:

   – Access via domain: The server name and the domain are listed for access outside the network domain.

   – The DataMonitor start page is the default web page: The "WinCC Server" field contains only the server name.

   – The DataMonitor start page is in the virtual folder: The server name and the name of the virtual folder are displayed, e.g. "/webnavigator".

8. If the tags in the Excel sheet are from several servers, activate "all servers". The tag values of all servers are updated in the online display.

   Note

   To establish connections to all servers, activate "all servers" with "Connect" before you establish the connections.

9. Activate the connection to the WinCC project via the button "Connect". After a successful connection, the log-in dialog will be opened.
   Type in the user name and associated password.
   In case of several servers, the log-in dialogs of the respective servers open one after the other.
   If a connection was not established, a corresponding alarm is displayed. Clicking on the dialog will display additional information about the error that has occurred.

   Note

   Do not close the "Excel Workbook" dialog as long as the log-in dialog for connection establishment to the server is still open.

10. The connection status will be displayed in the dialog.
Click the "Read tags", "Read archive tags" and "Read alarms" buttons to update the respective values or displays.

11. Activate the check box "Read cyclically" to update the tag values in cycles.

12. Close the "Excel Workbook" dialog after finishing your calculations in Excel.

13. Save the results in the workbook with the "Save as" menu command.

14. Close Excel.

Result

The process data are displayed in the Excel workbook and can be processed further.

If errors occur during display of the Excel workbook or no connection to the WinCC server is established, the log entries are displayed in a workbook. The entries contain the date, the tags or alarms affected, the server, and the error message.

See also

Administering users for DataMonitor (Page 123)

4.6.3   Alarm Attributes

Introduction

When displaying alarms in "Excel Workbook" you can select the attributes to be displayed in the table in the "Excel Workbook Wizard" .

Overview

Position	Attribute	Type	Comments
1	Name of the alarm class	VarChar (255)	
2	Name of the alarm type	VarChar (255)	
3	Foreground color	Integer 4 Bytes	
4	Background color	Integer 4 Bytes	
5	Flash color	Integer 4 Bytes	
6 to 15	Message Text 1 to 10	VarChar (255)	
16 to 25	Process value 1 to 10	Real 8 Bytes	Numerical Process Value 1 to 10
26	State	VarChar (255)	Status text
27	Info text	VarChar (255)	
28	Message class ID	Integer 4 Bytes	
29	Message type ID	Integer 4 Bytes	
30	AS Number	Small Integer 2 Bytes	
31	CPU Number	Small Integer 2 Bytes	
32	Duration	Integer 4 Bytes	Time difference to "Came in" status
33	Alarm counter	Integer 4 Bytes	Consecutive alarm counter
34	Acknowledgment Status	VarChar (255)	Text of the acknowledgement status
35	Priority	Integer 4 Bytes	
36	Application		Application with which the comment was created.
37	Computer	VarChar (255)	Computer on which the comment was created.
38	Users	VarChar (255)	User who created the comment.
39	Comments	VarChar (255)	

4.6.4   VBA Functions of the Excel Workbook

VBA Functions of the Excel Workbook

The following functions are available to you in an Excel workbook if you have generated an instance of the Excel workbook object using the "Application.COMAddIns.Item("ExcelWorkbook.Connect").Object":

- ShowDialog(0):
  Opens the "Excel Workbook" dialog with a normal size.

- ShowDialog(1):
  Opens the "Excel Workbook" dialog with a minimized size.

- ShowDialog(2):
  Opens the "Excel Workbook" dialog hidden.

- CloseDialog:
  Closes the "Excel Workbook" dialog.

- GetServerID(server name):
  Gets the ID of the WinCC server with a specified name, for example: "http://Local_PC".

- Connect(ServerID):
  Connects the specified WinCC server to the Excel workbooks. You can get the "ServerID" using the "GetServerID(server name)" function.
  The "Excel Workbook" dialog must be opened before establishing a connection.

- ConnectAll:
  Connects all WinCC servers to Excel workbooks. The "Excel Workbook" dialog must be opened before establishing a connection.

- Disconnect(ServerID):
  Disconnects the Excel workbook from the specified WinCC server.

- DisconnectAll:
  Disconnects the Excel workbook from all WinCC servers.

- ReadTags(ServerID):
  Reads the tags from WinCC server with "ServerID". The connection must be established before tags can be read.

- ReadArchives(ServerID):
  Reads the archives from WinCC server with "ServerID". The connection must be established before archives can be read.

- ReadAlarms(ServerID):
  Reads the alarms from the WinCC server with "ServerID". The connection must be established before alarms can be read.

As soon as a connection is established or closed, the event "ServerConnected(ServerID)" or "ServerDisconnected(ServerID)" is output by the "ExcelWorkbook.Connect" object. These events can be integrated, for example, using "WithEvents" (VB standard).

4.7 Working with reports

4.7.1 Making an Excel workbook available as template

Introduction

You can make Excel workbooks available as templates to create ""Reports"". For this you have the following options:

- You publish the Excel workbooks on the WinCC server with "Excel Workbook Wizard" using the "Template" button.

- You upload an Excel workbook not yet published to the DataMonitor client.

This page includes a description of how you make a template available on a DataMonitor client.

Requirement

- The Excel workbook is created.

- The start page of the DataMonitor is open.

Procedure

1. Click "Reports" on the start page.

2. Click the "Uploading templates" tab.

3. Select a directory, in which the template will be stored in the "Target directory" field. Only the directories, for which the user that is logged in has "Create" access rights, can be selected.

4. Click "Find" for the "Selected template". Navigate to the desired Excel workbook.

5. Click the "Upload" button.

Result

You can create time-controlled and event-controlled reports using the workbook as template.

See also

Assigning Access Rights (Page 144)

Configuring the Excel workbook (Page 65)

Displaying a report with an Excel Workbook (Page 210)

4.7.2 Making an Excel workbook available as a report tool

Introduction

You can make Excel workbooks centrally available as report tools in "Reports". For this you have the following options:

● You publish the Excel workbooks on the WinCC server with "Excel Workbook Wizard" using the "Publish" button.

● You upload an Excel workbook not yet published to the DataMonitor client.

Here you find a description of how you make an Excel workbook not yet published available on the DataMonitor client.

Requirement

● The Excel workbook is created.

● The start page of the DataMonitor is open.

Procedure

1. Click "Reports" on the start page.

2. Click the "Uploading templates" tab.

3. Click "Find" for "Uploading templates for Excel workbooks". Navigate to the desired Excel workbook.

4. Click the "Upload" button.

Result

The workbook is available on the "Report tools" tab. You can use the workbook to display process data in runtime.

See also

Displaying process data in an Excel workbook (Page 201)

4.7.3 Making Settings for Reports

Introduction

Different settings are required for using the "Reports" function in DataMonitor.

Requirement

- PDF Reader is installed.
- The WinCC project is activated on the DataMonitor server.

- The option "Report Runtime" is activated in the WinCC project in the properties of the computer.

- The start page of the DataMonitor is open.

Procedure

1. Click "Reports" on the start page.

2. Click on the "Settings" tab. The "Settings" page is displayed.

3. Check the entries in the section "General project settings".
   You can now select the printer of the Web server. Printing is only possible in files.

4. To enable the output to a PDF file, activate the option "Activate API print".

5. Enter the data for sending mail in the "Mail" area:

   – Server: Outgoing mail server (SMTP)

   – User name: Name for the sender

   – Password

   – Sender: E-mail account used to sending the e-mail

6. Click the disk icon in the section "General project settings" to save your settings.

7. In the "Settings of the circular buffer" area, you can define the number of created reports that are stored in the selected destination directory. The box has a pre-assigned value of 20. If the maximum number of reports of the same type has been reached, the "First in First out" principle applies. For example, if 21 reports of "Alarm Table" type have been created, the report that was created first is removed.

8. Click the disk icon in this section to save your settings.

Result

The settings for "Reports" have been made.

Product support - example

FAQ "51334611" on the Internet under "Product support" gives a detailed example:

- http://support.automation.siemens.com/WW/view/en/51334611 (http://support.automation.siemens.com/WW/view/de/51334611)

See also

Sending WinCC/DataMonitor reports by e-mail (http://support.automation.siemens.com/WW/view/de/51334611)

4.7.4   Displaying a report with an Excel Workbook

Introduction
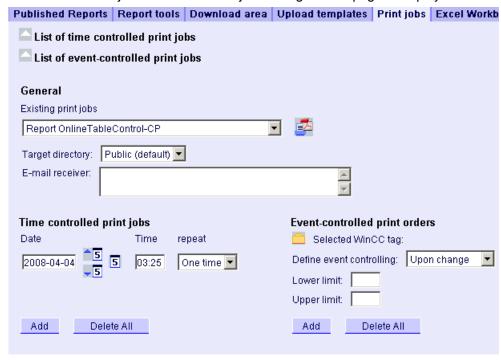
Use "Reports" to create reports from Excel workbooks or print jobs in PDF format. The following is a description for creating reports from Excel workbooks.

Requirement

- The WinCC project is activated on the DataMonitor server.

- The option "Report Runtime" is activated in the WinCC project in the properties of the computer.

- You have already published or made available as templates the Excel workbooks you want to use.

- The start page of the DataMonitor is open.

Procedure

1. Click "Reports" on the start page.

2. Click on the "Excel Workbooks" tab. The "Excel Workbooks" page is displayed.

The icons in front of "List of time-controlled Excel workbooks" and "List of event-controlled Excel workbooks" are deactivated. The icons indicate that no reports are currently configured.

3. Select one of the available Excel workbooks under "Available Excel workbooks".

4. Select the target directory in which you want to store the reports. Only the directories, for which the user that is logged in has "Create" access rights, can be selected.

5. If you want to send the report as an e-mail, enter the e-mail addresses in the "E-mail recipient" field. You can enter several recipients as you would with any standard e-mail program.

6. Use ![icon] to create the report immediately.

7. If you do not want to create the report immediately, configure a time-controlled or event-controlled creation of the report in the following steps.

8. To configure a time-controlled report, enter the following in the "Time-controlled Excel workbooks" area:

   – Date: Enter the date in the respective field or enter the date using the calendar. To open the calendar, click the "Calendar" icon.

   – Time: Define the time when you want the report to be created.

   – Repetition: Define the repetition rate, for example, "Once" or "Weekly".

9. Click "Add" in the "Time-controlled Excel workbooks" area. The report is displayed in the "List of time-controlled Excel workbooks".

10. To configure an event-controlled report, enter the following in the "Event-controlled Excel workbooks" area:

   – Selected WinCC tag: Click 🗀. Select the required tag in the selection dialog.

   – Defining event control: Set the triggering event, for example, when the tag value changes.
     If you have selected "lower limit", "upper limit" or "both limits" for event control, enter the respective limits.

11. Click "Add" in the "Event-controlled Excel workbooks" area. The report is displayed in the "List of event-controlled Excel workbooks".

Result

A time-controlled or event-controlled report is configured as "Excel Workbook".

The configured reports are displayed in the lists of the "Excel Workbooks" . You can edit or delete the reports in the lists.

Once the report has been created, it is available in runtime on the "Published Reports" tab in the selected directory.

Note

Information on event-controlled "Excel Workbooks"

An event-controlled report is only created if the time period in which the tag changes is greater than one minute.

Keep in mind that the frequent creation of one or more event-controlled reports over a long period of time takes up a lot of memory and uses up valuable resources. This case often occurs, for example, with frequent signal changes of a tag that trigger an event-controlled report.

See also

Making an Excel workbook available as template (Page 206)

Publishing the Excel workbook (Page 81)

4.7.5 Creating a report with a print job

Introduction

Use "Reports" to create reports from Excel workbooks or print jobs in PDF format. The following is a description for creating reports using print jobs in PDF format.

Requirement

- PDF Reader is installed.
- The WinCC project is activated on the DataMonitor server.
- The option "Report Runtime" is activated in the WinCC project in the properties of the computer.
- The start page of the DataMonitor is open.

Procedure

1. Click "Reports" on the start page.
2. Click on the "Print jobs" tab. The "Print jobs configuration" page is displayed.

The icons in front of "List of time-controlled print jobs" and "List of event-controlled print jobs" are deactivated. The icons indicate that no print jobs are currently configured.

3. Select the desired print job under "Available print jobs".
4. Select the target directory in which you want to store the reports. Only the directories, for which the user that is logged in has "Create" access rights, can be selected.

5. If you want to send the report as an e-mail, enter the e-mail addresses in the "E-mail recipient" field. You can enter several recipients as you would with any standard e-mail program.

6. Use to create the report immediately.

7. If you do not want to create the report immediately, configure a time-controlled or event-controlled creation of the report in the following steps.

8. To configure a time-controlled report, enter the following in the "Time-controlled print jobs" area:

   – Date: Enter the date in the respective field or enter the date using the calendar. To open the calendar, click the "Calendar" icon.

   – Time: Define the time when you want the report to be created.

   – Repetition: Define the repetition rate, for example, "Once" or "Weekly".

9. Click "Add" in the "Time-controlled print jobs" area. The report is displayed in the "List of time-controlled print jobs".

10. To configure an event-controlled report, enter the following in the "Event-controlled print jobs" area:

    – Selected WinCC tag: Click . Select the required tag in the selection dialog.

    – Defining event control: Set the triggering event, for example, when the tag value changes.
      If you have selected "lower limit", "upper limit" or "both limits" for event control, enter the respective limits.

11. Click "Add" in the "Time-controlled print jobs" area. The report is displayed in the "List of event-controlled print jobs".

Result

A time-controlled or event-controlled report is configured as print job in PDF format.

The configured reports are displayed in the lists of the print jobs. You can edit or delete the reports in the lists.

The report is created in the language that was set during WinCC configuration. The WinCC Runtime language does not have an effect on the representation of dynamic elements, such as tables.

Once the report has been created, the PDF files are available in runtime on the "Published Reports" tab in the selected directory.

Note

Opening Asian PDF files with Acrobat Reader

To open the Asian PDF files created with "Reports", you need the country-specific version or the respective font package of the Adobe Acrobat Reader.

The four Asian languages are fixed to one font each. This means the font settings in the report layout will not have an effect on the Asian languages.

Information on event-controlled print jobs

An event-controlled print job is only created if the time period in which the tag changes is greater than one minute.

Keep in mind that the frequent creation of one or more event-controlled print jobs over a long period of time takes up a lot of memory and uses up valuable resources. This case often occurs, for example, with frequent signal changes of a tag that trigger an event-controlled print job.

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Error report , (See support)

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