

Information Server - 1 Installation Notes

Information Server - 2 Release Notes

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SIMATIC Information Server

SIMATIC

Information Server SIMATIC Information Server

System Manual

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.

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:

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.

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Information Server - Installation Notes

1.1 Licenses

License types

The following products are available:

Products for PCS 7

The SIMATIC Information Server provides the following products for PCS 7:

Product	Order number (MLFB)
Information Server Basic Package	6ES7652-7EX68-2YB0
	6ES7652-7EX68-2YH0
Information Server (1 Client)	6ES7652-7YA00-2YB0
	6ES7652-7YA00-2YH0
Information Server (3 Clients)	6ES7652-7YB00-2YB0
	6ES7652-7YB00-2YH0
Information Server (5 Clients)	6ES7652-7YC00-2YB0
	6ES7652-7YC00-2YH0
Information Server Datasource Access (1 Source)	6ES7652-7YE00-2YB0
	6ES7652-7YE00-2YH0
Information Server Datasource Access (3 Sources)	6ES7652-7YF00-2YB0
	6ES7652-7YF00-2YH0
Upgrade Package Process Historian and Informa-	6ES7652-8AX68-2YE0
tion Server, V9.0 to V9.1	6ES7652-8AX68-2YH0

Products for WinCC

The SIMATIC Information Server provides the following products for WinCC:

Product	Order number (MLFB)
Process Historian und Information Server 2020 SP1,	6ES7652-7AX68-0YT8
oftware Media Package	6ES7652-7AX68-0YH8

Note

MLFB numbers

MLFB numbers ending with 2YB0/2YE0/2YT8 are goods deliveries. MLFB numbers ending with 2YH0/0YH8 are OSD deliveries (downloads).

1.1 Licenses

Products for PCS neo

The SIMATIC Information Server provides the following products for PCS neo:

Product	Order number (MLFB)	
Information Server	6DL8906-0AC10-0AB5	
Information Server Client Access	6DL8906-0BC10-0AB5	

List of clients

The clients include:

• Any browser when connected to the Information Server

License count for client access

Each active client connection of the Information Server requires a license. The number of clients depends on the number of PCs, not on the number of applications that are open on a PC. Even when multiple report clients are connected to the Information Server from a PC, only one license is required.

Assignment of a client license:

- Connection with the Information Server via Internet browser/Web application
- Use of various URLs which the server cannot identify as one source

Release of a client license:

- Logout from the Web application
- Inactivity after 20 minutes

Trial license

The setup of the Information Server also installs a trial license. The trial license can be selected in the license query.

- 14-day validity
- Start of 14 day period on the day of first use

The trial version becomes a full version when you install a full license. Reinstallation is not necessary.

1.2 System requirement

1.2.1 Checking system requirements

Requirement

You check the requirements on the computer on which the Information Server is installed.

Procedure

- Check if the hardware requirements for your installation are met. Hardware requirements for a Process Historian and Information Server installation on a system (Page 10)
- 2. Ensure you are using an approved operating system. Operating systems (Page 11)
- 3. Ensure you are using an approved SQL Server. SQL Server (Page 11)
- 4. Check which data sources are allowed for use with the Information Server. Data sources (Page 11)
- 5. Ensure you are using an approved browser. Browser (Page 12)
- 6. Check whether all relevant security settings have been made. Security settings (Page 12)
- 7. Check whether all relevant certificates are assigned. Certificates (Page 15)

Result

The system requirements for an Information Server installation are fulfilled.

1.2.2 Hardware requirements

1.2.2.1 Hardware requirements for Process Historian and Information Server installation on a single system

Definition

Medium	Minimal	Recommended
CPU	INTEL XEON E3-1268L V3; 2.3	IPC 647E
	GHz	MLFB: 6ES7661-0PU57-1RA4
		Xeon E-2278GE (8C/16T, 3.3 (4.7) GHz, 16 MB cache, TB, AMT)
CPU	INTEL XEON E3-1268L V3; 2.3	IPC 847E
	GHz	MLFB: 6ES7661-1PW67-1RA4
		Xeon E-2278GE (8C/16T, 3.3 (4.7) GHz, 16 MB cache, TB, AMT)
Work memory (RAM)	16 GB (64-bit operating system)	64 GB (64-bit operating system)
Storage medium	≥ 500 GB SATA	1024 GB SSD M.2 (for operating system and applications)
		RAID 5, \sim 5.7 TB (4 x 1920 GB SSD 2.5" SATA) (for transaction log and database)

Note

The hardware requirements are covered by the current SIMATIC industrial PCs.

Sequence of the installation of Process Historian and Information Server on a system

If you want to install Process Historian and Information Server on the same computer, they must be installed in the same SQL Server instance. You must install the Process Historian first.

Cleanup of the corrupt Information Server installation

If you did not install the Information Server together with the Process Historian but did so at a later time, use the following procedure to clean up the faulty installation:

- Create a full SQL Server backup of the existing PH database. Details are available in the section "Creating a Full PH Database Backup" in the FAQ: Backup and restore of a Process Historian database (<u>https://support.industry.siemens.com/cs/</u> <u>attachments/66579062/66579062_pcs7_ph_backup_restore_en.pdf</u>) The procedure described there also applies to the SQL Server 2017. When you use SIMATIC BATCH, the data provided by the batches are backed up separately in the Process Historian and must therefore be taken into account during the full backup.
- 2. Perform a complete new installation of the operating system.
- 3. Start the general setup and select the installation for Process Historian and Information Server.

- 4. A new, empty Process Historian database is created. Use the same configuration settings for the newly created database.
- 5. Once the functionality is completed and verified, restore the previously created SQL Server backup of the Process Historian database in Microsoft SQL Server Management Studio. Details are available in the section "Restore Historian Storage Database" in the FAQ: Backup and restore of a Process Historian database (<u>https://support.industry.siemens.com/cs/</u> attachments/66579062/66579062 pcs7 ph backup restore en.pdf)

1.2.3 Software requirements

1.2.3.1 Operating systems

Server operating system:

Version	Note
Windows Server 2019	64-bit

Desktop operating system:

Version	Note
Windows 10 LTSC 1809 or later	64-bit

1.2.3.2 SQL Server

When the SIMATIC Information Server is installed, the Microsoft SQL Server is automatically installed.

SQL Server	Comment
Microsoft SQL Server 2017	64-bit

1.2.3.3 Data sources

Data source	Version
Process Historian	2020 or higher
PCS neo	3.1 or higher
WinCC / PCS 7 OS	7.4 SP1
	7.5 SP1
	7.5 SP2
РМО	7.4 SP1
	7.5 SP1
	7.5 SP2
PCS neo Batch	3.1 or higher

Note

Each data source is only compatible with the most recent update of the corresponding version.

1.2.3.4 Browser

Browser	Version	Link to the download
Mozilla Firefox	Current version	Mozilla Firefox Download (<u>https://www.mozilla.org/de/</u> <u>firefox/new/</u>)
Google Chrome	Current version	Google Chrome Download (<u>https://www.google.de/chrome/</u> <u>browser/desktop/</u>)
Microsoft Edge	Current version	Integrated

Note

Browser selection

It is recommended to use Google Chrome.

1.2.3.5 Security settings

Settings of the internal firewall for the Information Server

The firewall settings for the Information Server are automatically changed during the setup. The changes are listed during the setup and can be saved.

Note

The security settings of the firewall are the basis of the security concept.

Name	Protocol	Port	Recommended manual restrictions
IS Network Discovery	UDP	137	No
IS Web Access https	ТСР	443	No
IS Data Host	ТСР	49081	Yes, see note
IS DiscoverServiceInstaller	UDP	5049	No
Scheduler	ТСР	49082	Yes, see note

Note

Note on recommended manual restrictions

Case 1: If the Information Server is installed on the same computer as the Process Historian without connection to other external data sources, it is recommended to disable this rule.

Case 2: If a connection to additional external data sources is planned on which the IS Ready is installed, it is recommended that the range of the rule is adjusted so that only the remote IP addresses of the data sources are allowed.

When IS Ready is installed on a computer, the following firewall settings are changed:

Name	Protocol	Port	Recommended manual restric- tions
IS Ready Update plugin	ТСР	1200	Yes, see note
IS Ready Archive Plugin	ТСР	1201	Yes, see note

Note

Note on recommended manual restrictions

Case 1: If IS Ready is installed on the same computer as the Information Server, this rule should be disabled.

Case 2: When installing IS Ready on a computer other than the Information Server, it is recommended that you adjust the scope of the rule to allow only the remote IP address of the Information Server.

Firewall settings when using different subnets

When using different subnets, you need to adapt certain firewall settings accordingly:

Computer	Action	Name	Protocol	Port
Process Histori- an	Adapt rule	PH SQL server port	ТСР	3723
Process Histori- an	Adapt rule	PH Discovery Services	ТСР	5048
Process Histori- an	Create new rule	IS SQL Server Browsing	UDP	1434
Information Server	Adapt rule	Scheduler	ТСР	49082

Note

Create the rule on the respective computer.

- 1. To modify the rules, open the "Windows Firewall with Advanced Security" dialog.
- 2. Go to the corresponding rule and open "Properties > Area" via the shortcut menu.
- 3. Select "IP Addresses" under "Remote IP Address".
- 4. Click "Add...".

Note

Here you can enter the IP addresses or the subnet.

5. Confirm the dialog.

Note

You must manually remove the firewall ports that have been opened by installing Information Server and IS-Ready after uninstalling.

Measures for communication on the Internet

Configure the server in such a way that only HTTPS connections are supported. You need a digital certificate for the Information Server.

For the **communication of the database and application servers in a shared area** use a demilitarized zone to exchange confidential data.

For the **communication of the database and application servers in a shared area** use, for example, a Private Network Tunnel (VPN), to establish trustworthy communication.

Avoidance of cross-site request forgery for the web server

Avoid working with other applications or services on the Internet. Always immediately log off from the application after using the Web server.

More information on IIS security can be found under the following link. IIS security (<u>https://msdn.microsoft.com/en-us/library/ms172965(v=sql.105).aspx</u>)

Security architecture "defense in depth"

Note the following information from Siemens on the topic "Industrial Security". The Web site contains information on the universal protection concept in accordance with recommendations of the leading standard for security in industrial automation ISA99/IEC 62443.

Link: Industrial Security (<u>http://www.industry.siemens.com/topics/global/en/industrial-security/</u><u>Pages/default.aspx</u>)

Mitigation of "Denial of Service" attacks

The SIMATIC Web Configurator activates the dynamic IP security feature of the Microsoft Internet Information Services page created for the Information Server to mitigate "Denial of Service" attacks on the Information Server. Only up to 50 connections to the site are allowed in total, with no more than 2000 requests per connection in 10 seconds. If the request limit is exceeded, renewed access is temporarily prevented.

See also

Setting up an HTTPS service in IIS (<u>https://support.microsoft.com/en-us/kb/324069</u>) Creating a DMZ network with Proxyserver 2.0 (<u>https://support.microsoft.com/en-us/kb/191146</u>) Creating a VPN connection (<u>https://technet.microsoft.com/en-us/library/</u> <u>cc726062(v=ws.10).aspx</u>)

1.2.3.6 Certificates

You need a certificate for securing the connection between the server and client.

You have the option of creating a temporary self-signed certificate or importing an existing certificate on the computer. You then assign the provided certificate to the corresponding server.

Creating a self-signed certificate:

- 1. Open "Start > Control Panel > System and Security > Administration". The dialog "Administration" opens.
- 2. Double-click the link "Internet Information Services (IIS) Manager". The dialog box "Internet Information Services (IIS) Manager" opens.
- 3. Select the server under "Connections" on the left.



- 4. In the overview, double-click the "Server Certificates" feature in the "IIS" area.
- 5. Select the option "Create a self-signed certificate..." on the right under "Actions...". The "Create self-signed certificate..." dialog opens.
- 6. Select the display name for the certificate and confirm the entry with "OK". The certificate created is located in the overview "Server certificates".

Importing a certificate

Ensure that a certificate is saved on the computer.

- 1. Open "Start > Control Panel > System and Security > Administration". The dialog "Administration" opens.
- 2. Double-click the link "Internet Information Services (IIS) Manager". The dialog box "Internet Information Services (IIS) Manager" opens.

3. Select the server under "Connections" on the left.



- 4. Double-click the feature "Server certificates" in the overview in the "IIS" area.
- 5. Select the option "Import..." under "Actions" on the right. The dialog "Import certificate..." opens.
- Click "..." .
 A dialog opens with which you navigate to the certificate on your computer.
- 7. Load the certificate into the dialog by double-clicking it and click "OK".

Assigning a certificate

- 1. Open "Start > Control Panel > System and Security > Administration". The dialog "Administration" opens.
- 2. Double-click the link "Internet Information Services (IIS) Manager". The dialog box "Internet Information Services (IIS) Manager" opens.
- 3. Select the server under "Connections" on the left.



- 4. Double-click on "Sites" and select "Siemens".
- 5. In the area on the right under "Actions > Edit Site" select the option "Bindings...". The dialog "Site Bindings" opens.
- 6. Select the HTTPS binding and click "Edit...". The "Edit Site Binding" dialog opens.
- 7. Select the corresponding SSL certificate and confirm with "OK".

Exporting a certificate

- 1. Open "Start > Control Panel > System and Security > Administrative Tools". The "Administrative Tools" dialog opens.
- 2. Double-click the "Internet Information Services (IIS) Manager" link. The "Internet Information Services (IIS) Manager" dialog opens.
- 3. Select the server under "Connections" on the left.



- 4. In the overview, double-click the "Server Certificates" feature in the "IIS" area.
- 5. Right under "Actions", select the "Export..." option. The "Export certificate..." dialog opens.

- Click on the "..." button.
 A dialog opens in which you can select the storage location.
- 7. Confirm the backup.

Note

Reports from SIMATIC Batch

If reports from the SIMATIC Batch Server are to be generated with the Information Server, the generated certificate must be exported and imported onto the server or client.

1.2.4 Requirements for installing the Office add-in

Microsoft Office versions

One of the following Microsoft Office versions (including Service Packs of the version) is installed on your computer.

Product	Note
Microsoft Office 2019	64-bit
Microsoft Office 365	64-bit

Note

Parallel use of different Office versions on one computer is not supported.

Microsoft Visual Studio Tools for Office Runtime

The Microsoft Visual Studio Tools for Office Runtime (MS VSTO RT) are installed on your computer.

If you have not yet installed MS VSTO RT, install the program with the same language you have selected for the Information Server.

Microsoft.NET Framework

Microsoft.NET Framework 4.8 is installed on your computer.

If you have not yet installed Microsoft.NET Framework 4.8, install the program with the same language you have selected for the Information Server.

See also

Microsoft Visual Studio Tools for Office Runtime (<u>https://www.microsoft.com/en-US/download/</u> <u>details.aspx?id=48217</u>)

Microsoft .NET Framework 4.5.1 (<u>https://www.microsoft.com/en-US/download/details.aspx?</u> id=40779)

1.3 Installation of the Information Server

1.3.1 Installing the Information Server

Requirement

- The required hardware and software requirements for the installation of the Information Server are fulfilled.
 - Check system requirements (Page 9)
- Close all Windows programs before running the setup.
- The specified user information must match on the different systems: PH Server. Password changes must be tracked in all systems.

Procedure

Note

Depending on the contents of the installation, you might be prompted to restart one or more times during the installation process.

During the installation process, additional setup dialogs can be opened automatically. If the setup does not continue after a while, use the key combination "Alt+Tab" to change the view. This is how you check whether there is another setup dialog in the background that requires additional input.

- Start the setup of the Information Server. Starting the Information Server setup for PCS 7 (Page 19) Starting the Information Server setup for PCS neo (Page 20)
- 2. Configure the Information Server. Configuring the Information Server (Page 22)
- 3. Configure the browser settings before using the Information Server. Configuring browser settings for the Information Server (Page 23)
- 4. Install the Information Server database. Installing the Information Server database (Page 25)

5. Install and configure the IS Ready. Installing IS Ready (Page 28)

Note

The installation of IS Ready is necessary for PCS 7, OS, WinCC and PH installations. This is necessary to connect the data sources in the Information Server.

In the case of a PCS neo or PCS neo Batch installation, IS Ready is only installed on the PH.

We recommend installing IS Ready during the setup of the products specified above as standard.

6. Configure a project on the Information Server. Configuring a project on the Information Server (Page 26)

Result

The Information Server is installed.

1.3.2 Starting the Information Server setup for PCS 7

Requirement

- The required hardware and software requirements for the installation of the Information Server are fulfilled.
 Check system requirements (Page 9)
- Close all Windows programs before running the setup.
- The specified user information must match on the different systems: PH Server. Password changes must be tracked in all systems.

Procedure

Note

Depending on the contents of the installation, you might be prompted to restart one or more times during the installation process.

During the installation process, additional setup dialogs can be opened automatically. If the setup does not continue after a while, use the key combination "Alt+Tab" to change the view. This is how you check whether there is another setup dialog in the background that requires additional input.

- 1. Start the PCS 7 setup from the DVD "PCS 7 V9.1 SP1".
- 2. Select the setup language.
- 3. Read the installation instructions.
- 4. Accept the license agreement.

5. Select the installation content.

Note

It is recommended to install the IS Ready as part of the Information Server setup.

If you want to install Process Historian and Information Server on a system, use the installation package "Process Historian and Information Server".

- 6. Accept the license agreement.
- 7. Accept the changes to the system settings.
- 8. After completion, conclude the setup with a restart.

Result

The setup of the Information Server is started. The "SIMATIC Web Configurator" dialog open.

1.3.3 Starting the Information Server setup for PCS neo

Requirement

- The required hardware and software requirements for the installation of the Information Server are fulfilled.
 Check system requirements (Page 9)
- Close all Windows programs before running Setup.

- The specified user information must match on the different systems: PH Server. Password changes must be tracked in all systems.
- Before manually installing the Process Historian/Information Server, the target computer must be configured in the Administration Console:

Note

Configuration of the target computer in the Administration Console

Before manually installing the Process Historian/Information Server, the target computer must be configured in the Administration Console:

- 1. Install AC Agent via "AdditionalProducts\AC Agent" of the PCS neo setup or a remote installation of the AC agent from the AC Server to the Process Historian-Server/ Information Server.
- 2. Add the Process Historian Server/Information Server to the Administration Console.
- 3. Create an AC server certificate for the Process Historian Server/Information Server.

To do so, follow the instructions in the PUD for the Administration Console:

- Administration > SIMATIC PCS neo Administration Console > Getting Started > Use cases > Create setup definition for AC agent
- Administration > SIMATIC PCS neo Administration Console > Communication > Adding target computer to AC
- Administration > SIMATIC PCS neo Administration Console > Communication > Use cases > Create certificate for target computer

After successful local installation of Process Historian/Information Server, perform the following advanced steps in the Administration Console:

- 1. Connect the PH/IS computer to the UMC domain.
- 2. Determine the inventory data for the PH/IS computer.
- 3. Update the distribution of the configuration.

Follow the instructions in the PUD: "Administration > SIMATIC PCS neo Administration Console > Inventory > Inventory of target computers"

Procedure

Note

Depending on the contents of the installation, you might be prompted to restart one or more times during the installation process.

During the installation process, additional setup dialogs can be opened automatically. If the setup does not continue after a while, use the key combination "Alt+Tab" to change the view. This is how you check whether there is another setup dialog in the background that requires additional input.

1. In the PCS neo setup, select the installation of the Information Server in the module overview: "SIMATIC PCS neo Information Server".

Note

Selecting installation contents

Only a combined installation of the Process Historian and Information Server is released for PCS neo.

- 2. Select the setup language.
- 3. Select the installation content.
- 4. Accept the license agreement.
- 5. Accept the changes of the system settings.
- 6. After completion, conclude the setup with a restart.

Result

The setup of the Information Server is started. The "SIMATIC Web Configurator" dialog open.

1.3.4 Configuring the Information Server

Requirement

- The required hardware and software requirements for the installation of the Information Server are fulfilled.
- Close all Windows programs before running the setup.
- The specified user information must match on the different systems: PH Server. Password changes must be tracked in all systems.
- Installation of the Information Server in combination with PCS neo requires a configuration of the target computer in the Administration Console.

Configuration

- The "SIMATIC Web Configurator" dialog opens. You see an overview of the configuration procedure. The "IIS configuration" dialog opens.
- 2. In the "IIS Configuration" dialog, enter a name under "Application name" or accept the preselection, "Information Server".

Note

Upgrade installation

If an installation has already been performed on this computer, a dialog opens with which you can skip steps 2-4.

3. In the "IIS Configuration" dialog, select the option: "Create a virtual directory":

Note

Do not change the default.

- 4. Confirm with "OK".
- 5. Enter a user name and password in the "Change Service Account" dialog. Leave option enabled if you want the user information to be used for all services.

Note

The user must have local administrator rights and be a system administrator on the local SQL Server instance.

If the computer is part of a domain, the user must be a domain user; otherwise a local user must be used.

- 6. Confirm with "Log on as".
- 7. After completing the configuration, restart the computer.

Result

The Information Server configuration is complete.

1.3.5 Configuring browser settings for the Information Server

Requirement

- The required hardware and software requirements for the installation of the Information Server are fulfilled.
- Close all Windows programs before running the setup.
- The specified user information must match on the different systems: PH Server. Password changes must be tracked in all systems.
- The user that you log on to the "Change Service Account" dialog during configuration must have the following rights for each of the following services:
 - Information Server Scheduler: Access to the WebHost database, access to the configured data sources (e.g. PH), permissions to send e-mails
 - Information Server DataHost Service: Access to the configured data sources (e.g. PH)
 - InfSrvPool: Access to the WebHost database, access to the configured data sources (e.g. PH)

Browser settings

Adapt the settings of your browser for the Information Server .

Note

Do not change the following settings until after the initial commissioning of the Information Server.

- 1. Open the "Internet options" dialog from the Start menu.
- 2. In the "Internet Properties" dialog, select the "Security" tab.
- 3. For the current zone, disable the "Enable Protected Mode" setting.
- 4. Select the "Trusted sites" > "Sites" zone.
- 5. Add the following web page to the "Web pages" list: "https://<Common Name (CN) of the X.509 certificate>".

Note

Common Name of the certificate

- 1. Open the "Internet Information Services (IIS) Manager".
- 2. Under "Connections" "Sites", select the "Siemens" site.
- 3. Select "Edit Site" > "Bindings".
- 4. In the "Site bindings" dialog, select the https connection and select "Edit".
- 5. Select the SSL certificate and select "View".
- 6. The Common Name can be found in the "Details" > "Subject" tab.
- 6. Select "Custom Level".
- 7. Under "User Authentication > Logon" in the "Security Settings" dialog, select the "Automatic logon with user name and password" option.

Note

HTTP Proxy

This configuration must be performed additionally for all computers that require an HTTP proxy and use the Information Server web application or the Information Server Excel add-in.

- 1. Open the "Internet options" dialog from the Start menu.
- 2. In the "Internet Properties" dialog, select the "Connections" tab.
- 3. Select "LAN Settings".
- 4. Activate the option "Proxy server".
- 5. Select "Advanced".
- 6. For "Exceptions", enter the complete FQDN name of the Information Server computer. This name must match the CN of the HTTPS certificate (see above).
- 7. Confirm your entry.

Result

The browser settings are configured.

1.3.6 Installing the Information Server database

Requirement

- The required hardware and software requirements for the installation of the Information Server are fulfilled.
- Close all Windows programs before running the setup.
- The specified user information must match on the different systems: PH Server. Password changes must be tracked in all systems.
- The browser settings must have been defined correctly.
- The user that you log on to the "Change Service Account" dialog during configuration must have the following rights for each of the following services:
 - Information Server Scheduler: Access to the WebHost database, access to the configured data sources (e.g. PH), permissions to send e-mails
 - Information Server DataHost Service: Access to the configured data sources (e.g. PH)
 - InfSrvPool: Access to the WebHost database, access to the configured data sources (e.g. PH)

Installation of the Information Server database

- 1. Open the browser.
- 2. Enter the previously defined URL in the browser bar or use the Information Server shortcut on the desktop The Information Server web application opens.
- 3. From the drop-down list, select a Microsoft SQL Server instance in which the Information Server stores its data.

- 4. Select an option:
 - Enter a database file path

Note

Enter a database file path

If you want to select a location, select the "Enter database file path" option and add the destination path.

If you do not select a storage location, the database files are stored by default in the SQL directory "Data" (e.g. C:\Program Files\Microsoft SQL Server\MSSQL14.HISTORIAN\MSSQL \DATA).

- Enter a path to migration files

Note

Select the folder where you saved the backup files using the IS Backup tool.

Create backup files for migration (Page 37)

- 5. Confirm with "Install or update".
- 6. When the installation is complete, select "Continue".
- Add a project.
 Add project (Page 215) (SIMATIC Information Server > Functions > Web application > Administration > Project configuration > Step by step instructions > Add project)

Result

A database is installed on the Information Server.

1.3.7 Configuring a project in the Information Server

Requirement

- The required hardware and software requirements for the installation of the Information Server are fulfilled.
- Close all Windows programs before running the setup.
- The specified user information must match on the different systems: PH Server. Password changes must be tracked in all systems.

- During the initial installation, the "Automatic logon with user name and password" option must be selected in your browser under "Options > Internet Options > Security > Privacy Level > User Authentication > Logon".
- The user that you log on to the "Change Service Account" dialog during configuration must have the following rights for each of the following services:
 - Information Server Scheduler: Access to the WebHost database, access to the configured data sources (e.g. PH), permissions to send e-mails
 - Information Server DataHost Service: Access to the configured data sources (e.g. PH)
 - InfSrvPool: Access to the WebHost database, access to the configured data sources (e.g. PH)

Project configuration in the Information Server

- 1. Open the administration area of the web application.
- 2. Open the project configuration.
- 3. Select "Add project".
- 4. Select the data source type of the project you want to add and confirm with "Continue".
- 5. Enter the "Host name" or the "Server IP" with which you want to connect.
- 6. Select "Select projects".
- 7. Select the projects you want to add and enter their names.

Note

SIMATIC PCS neo host name

Enter here the FQDN name of the PCS neo Engineering station which is used in the PCS neo Portal certificate so that you can switch to the Information Server in the PCS neo Engineering Portal.

If this name is not entered correctly, the Information Server cannot be successfully integrated into the portal.

8. Select "Add".

Result

A project is configured in the Information Server.

1.3.8 Installing Information Server Ready

It is recommended to install the IS Ready during the installation in the setup.

Note

Configuration of the IS Ready

The configuration of the IS Ready must be performed in any case.

It is only necessary to install IS Ready manually/later if the service was not selected during the setup.

The IS Ready service is required for:

- Direct connection of WinCC (non-redundant): IS Ready is only installed on WinCC.
- Direct connection of WinCC (redundant): IS Ready is installed on every WinCC computer.
- Direct connection of a PCS 7 project: IS Ready is installed on every OS.
- Indirect connection of WinCC or PCS 7 projects via the PH as long-term archive: IS Ready is installed on the PH, installation on WinCC or PCS 7 OS computers is not necessary.
- Indirect connection of PCS neo via the PH as long-term archive (direct connection is planned, but not yet possible at this time): IS Ready is only installed on the PH, installation on PCS neo itself is not possible.
- Connection of PCS 7 Batch via the PH: IS Ready is only installed on the PH.
- Connection of PCS neo Batch via the PH: IS Ready is only installed on the PH.

Requirement

- The required hardware and software requirements for the installation of the Information Server are fulfilled.
- Close all Windows programs before running the setup.
- The specified user information must match on the different systems. Password changes must be tracked in all systems.
- For using IS Ready: The IS Ready Service user must be a Windows administrator and be created as system administrator on the SQL Server instance.

Manual post-installation of the Information Server Ready

Note

It is only necessary to install IS Ready manually later if the service was not selected during the setup.

- 1. Open the "ISReady\Setup" directory on your installation medium.
- 2. Select the "Start.exe" file of the component to be installed.

- 3. Select the language.
- 4. Read the installation instructions.
- 5. Accept the license agreement.
- 6. Select the installation content. You see an overview of the setup for the installation process.
- 7. The installation is completed. Restart the system now or at a later time.

Configuration of the IS Ready

- 1. Open "Start > All Programs > Siemens Automation > SIMATIC > IS Ready".
- 2. Select "IS Ready Configuration". The "IS Ready Configurator" opens.
- 3. Select "Next".
- 4. Enter your logon information. You see an overview of the setup for the installation process.
- 5. Select "Finish".

Note

Check the configuration

The configuration was successful if you have been assigned to the "SIMATIC Reporting Services" group under "Local Users and Groups" on your computer.

Result

Information Server Ready is installed.

1.3.9 Installing Information Server Batch Reports for PCS 7

Requirement

The latest version of the Information Server is installed on the PC.

Procedure

- 1. Start the PCS 7 setup from the DVD "PCS 7 V9.1 SP1".
- 2. Select the setup language.
- 3. Read the installation instructions.
- 4. Accept the license agreement.
- 5. Select the installation content: "Custom installation".

- 6. In the "Archiving and Reporting" category, select the "Information Server Batch Reports" component.
- 7. Accept the license agreement.
- 8. Accept the changes to the system settings.
- 9. After completion, conclude the setup with a restart.

Result

The Information Server Batch Reports component is installed.

1.4 Installation of the Office Add-In Excel

1.4.1 Installing Office add-in

Requirement

You are a member of the Windows user group SIMATIC Report Administrators.

Procedure

Install the Office add-in with the setup or from the web application. Installing Office add-in with setup (Page 31) Installing Office add-in with the web application (Page 32)

Note

HTTP Proxy

This configuration must be performed additionally for all computers that require an HTTP proxy and use the Information Server web application or the Information Server Excel add-in.

- 1. Open the "Internet options" dialog from the Start menu.
- 2. In the "Internet Properties" dialog, select the "Connections" tab.
- 3. Select "LAN Settings".
- 4. Activate the option "Proxy server".
- 5. Select "Advanced".
- 6. For "Exceptions", enter the complete FQDN name of the Information Server computer. This name must match the CN of the HTTPS certificate (see above).
- 7. Confirm your entry.

Result

The Office add-in has been installed.

1.4.2 Installing Office add-in with setup

Requirement

You are a member of the Windows user group SIMATIC Report Administrators.

Procedure

1. Check if all requirements for installing the add-in are met. Requirements for installing the Office add-in (Page 57)

Note

Close all Windows programs before running setup for the Office add-in.

- 2. Perform the setup for the installation of the add-in.
- 3. Select the Office add-in as installation content.
- 4. Select the setup language.
- 5. Select the installation content.
- 6. Accept the license agreement.
- 7. Accept the changes to the system settings.
- 8. After completion, conclude the setup with a restart.
- Connect the Office add-in to the Information Server. Connecting Office add-in with a stored certificate to the Information Server (Page 73)

Note

HTTP Proxy

This configuration must be performed additionally for all computers that require an HTTP proxy and use the Information Server web application or the Information Server Excel add-in.

- 1. Open the "Internet options" dialog from the Start menu.
- 2. In the "Internet Properties" dialog, select the "Connections" tab.
- 3. Select "LAN Settings".
- 4. Activate the option "Proxy server".
- 5. Select "Advanced".
- 6. For "Exceptions", enter the complete FQDN name of the Information Server computer. This name must match the CN of the HTTPS certificate (see above).
- 7. Confirm your entry.

Result

The Office add-in has been installed. Opening an Office add-in (Page 227)

See also

Starting the Information Server setup for PCS 7 (Page 19) Starting the Information Server setup for PCS neo (Page 20)

1.4.3 Installing Office add-in with the web application

Requirement

You are a member of the Windows user group SIMATIC Report Administrators.

Procedure

1. Check if all requirements for installing the add-in are met. Requirements for installing the Office add-in (Page 17)

Note

Close all Windows programs before running setup for the Office add-in.

- 2. Download the Office add-in from the Web application. Downloading the Office add-in from the Web application (Page 33)
- 3. Perform the setup for the installation of the add-in.
- 4. Connect the Office add-in to the Information Server. Connecting Office add-in with a stored certificate to the Information Server (Page 33)

Result

The Office add-in has been installed.

Opening an Office add-in (Page 227)

Note

HTTP Proxy

This configuration must be performed additionally for all computers that require an HTTP proxy and use the Information Server web application or the Information Server Excel add-in.

- 1. Open the "Internet options" dialog from the Start menu.
- 2. In the "Internet Properties" dialog, select the "Connections" tab.
- 3. Select "LAN Settings".
- 4. Activate the option "Proxy server".
- 5. Select "Advanced".
- 6. For "Exceptions", enter the complete FQDN name of the Information Server computer. This name must match the CN of the HTTPS certificate (see above).
- 7. Confirm your entry.

1.4.4 Download Office add-in from the Web application

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- The requirements for installing the Office add-in are met.

Procedure

- 1. Open the "Download" app in the web application.
- 2. Select "Download".

Result

The Office add-in has been downloaded.

1.4.5 Connecting Office add-in with a stored certificate to the Information Server

Requirement

- One of the approved Microsoft Office versions is installed on your computer.
- The Information Server is installed.
- The Office add-in has been downloaded.
- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators

Procedure

- 1. Save the certificate in the folder "Trusted roots certification authorities".
- 2. Open Microsoft Excel.
- 3. Navigate to the "Information Server" tab.
- 4. In the "Configuration" area, select "Server". The "Server settings" dialog opens.
- 5. Enter the URL of the Information Server.

1.5 Upgrade installation of the Information Server

- 6. Select the port corresponding to that of the Information Server.
- Confirm the dialog.
 A logon dialog for authentication dialog opens.
- 8. Enter your logon data and confirm the dialog with "OK".

Note

Repeat this process for each Office add-in that you use to create and edit reports.

The last five server connections are stored in order of their use. In the "Server Settings" dialog, you can check the server settings or select another server.

Result

The add-in is connected to the Information Server.

In the Excel Office add-in, the connection status is visible in the footer.

Note

No connection to the Information Server

If there is no connection to the Information Server, check if an appropriate license is available or if there are network problems. If necessary, repeat the connection procedure.

If there is no existing connection to the Information Server, the commands in the quick access toolbar are not enabled.

1.5 Upgrade installation of the Information Server

1.5.1 Overview of the upgrade installation for PCS 7

You can upgrade a previous version of the Information Server to the current version using the upgrade installation.

Note

Order of the software update of PCS 7 and Process Historian

You need to update the Process Historian server to the corresponding Process Historian version of the new PCS 7 version first before you update the PCS 7 plant.

In this context, also observe the instructions "SIMATIC Process Control System PCS 7 Software update" with the section "How to update the Process Historian and Information Server".

SIMATIC Process Control System PCS 7 Software update (<u>https://support.industry.siemens.com/</u> <u>cs/document/109767557/simatic-process-control-system-pcs-7-software-update-with-</u> <u>utilization-of-new-functions-v9-0-sp2?dti=0&lc=en-WW</u>)</u>

1.5 Upgrade installation of the Information Server

Procedure of the upgrade installation

Depending on the installed version, the upgrade installation may need to take place via intermediate versions, as shown in the following table:

From version	Via version	To version
2014 SP3	2014 SP3 Update 6	2020 SP2
2014 SP3 Update 1	2014 SP3 Update 6	2020 SP2
2014 SP3 Update 2	2014 SP3 Update 6	2020 SP2
2014 SP3 Update 3	2014 SP3 Update 6	2020 SP2
2014 SP3 Update 4	2014 SP3 Update 6	2020 SP2
2014 SP3 Update 5	2014 SP3 Update 6	2020 SP2
2014 SP3 Update 6	-	2020 SP2
2020	-	2020 SP2
2020 SP1	-	2020 SP2

Note

After the upgrade installation, check the settings of the "Information Server Ready" component (IS-ready).

Installation of the upgrade

To upgrade the Information Server , follow the instructions in the Information Server Installation Notes.

Upgrading Information Server (Page 36)

Install the upgrade on all computers on which the following components are installed:

- Information Server
- IS-ready component of the Information Server
- Information Server Office add-in
- Information Server Batch

Uninstalling the update

The upgrade cannot be uninstalled.

1.5.2 Overview of the upgrade installation for PCS neo

You can upgrade a previous version of the Information Server to the current version using the upgrade installation.

1.5 Upgrade installation of the Information Server

Procedure of the upgrade installation

Depending on the installed version, the upgrade installation may need to take place via intermediate versions, as shown in the following table:

From version	Via version	To version
2020 Update 1	2020 Update 2	2020 SP2
2020 Update 2	-	2020 SP2

Note

After the upgrade installation, check the settings of the "Information Server Ready" component (IS-ready).

Installation of the upgrade

To upgrade the Information Server , follow the instructions in the Information Server Installation Notes.

Upgrading Information Server (Page 36)

Install the upgrade on all computers on which the following components are installed:

- Information Server
- IS-ready component of the Information Server
- Information Server Office add-in
- Information Server Batch

Uninstalling the update

The upgrade cannot be uninstalled.

1.5.3 Upgrading Information Server

You can upgrade a previous version of the Information server to the current version using the upgrade installation.

Requirement

- The backup files for the migration have been created with the IS Backup Tool (only necessary when changing the operating system or new hardware). Create backup files for migration (Page 37)
- The data sources have been upgraded.

- The IS Ready was installed again after the PH was upgraded.
- The operating system meets the software requirements. Operating systems (Page 11)

Procedure

Follow the installation instructions. Installing the Information Server (Page 18)

Note

Installing the Information Server database

In step 4, store the file path you specified for the backup files for the migration.

Result

The Information Server is updated.

1.5.4 Create backup files for migration

The IS backup tool (Siemens.InformationServer.ISBackup.exe) backs up all files required for a migration to the current version of the Information Server.

The tool is installed with Version 2014 SP3 Update 6 and with all versions from 2020 Update 1 and is located in the installation directory in the "Tools" folder.

Note

Copy the tool to another computer

If you need the IS Backup tool on another computer, it is necessary to copy the entire "IS Backup" folder.

Requirement

A previous version of Information Server is installed (e.g. 2014 SP3 Update 6 or from 2020).

Procedure

- 1. As administrator, open the command line/prompt of your computer (e.g. Command Shell, DOS).
- 2. Run the IS Backup tool: /backup <"path">

Note

Example: Siemens.InformationServer.ISBackup.exe /backup "C:\Test" Siemens.InformationServer.ISBackup.exe /backup "C:\Test Backup" **File storage** The folder for file storage should be placed on a network drive, if possible.

Result

In the command line/prompt of your computer there is an overview of the exported folders and a confirmation if the backup was successful.

The following structure should be displayed in the destination directory:

IS migration

- Webframe.mdf (database file)
- Webframe_log.ldf (log file)
- RDLs (root directory for the exported report templates)
 - MetaData.xml
 - Templates (directory)
 Public (directory)
 Tags (directory)
 Messages (directory)
 - (User directories with report templates)

1.5.5 Upgrading Information Server Ready

After the upgrade installation of the Information Server, upgrade all computers of the system on which the IS Ready service is installed.

Check the settings of IS Ready after every installation of an update or upgrade.

Requirement

- The required hardware and software requirements for the installation of the Information Server are fulfilled.
- Close all Windows programs before running the setup.
- The specified user information must match on the different systems. Password changes must be tracked in all systems.
- For using IS Ready: The IS Ready Service user must be a Windows administrator and be created as system administrator on the SQL Server instance.

Upgrading Information Server Ready

- 1. Open the "ISReady" directory on your installation medium.
- 2. Select the "Start.exe" file of the component to be installed.
- 3. Select the language.
- 4. Read the installation instructions.
- 5. Accept the license agreement.
- 6. Select the installation content. You see an overview of the setup for the installation process.
- 7. The installation is completed. Restart the system now or at a later time.

Configuration of the service

- 1. Open "Start > All Programs > Siemens Automation > SIMATIC > IS Ready".
- 2. Select "IS Ready Configuration". The "IS Ready Configurator" opens.
- 3. Select "Next".
- 4. Enter your logon information. You see an overview of the setup for the installation process.
- 5. Select "Finish".

Note

Check the configuration

The configuration was successful if you have been assigned to the "SIMATIC Reporting Services" group under "Local Users and Groups" on your computer.

Result

The Information Server Ready has been upgraded.

1.5.6 Upgrading the Information Server Batch Reports for PCS 7

Introduction

If you use the Information Server Batch Reports for PCS 7 to create reports for SIMATIC Batch, you need to install the Batch Reports.

Follow the steps below:

- 1. Installing or upgrading Information Server.
- 2. Installing or upgrading Information Server Batch Reports.

Requirement

The latest version of the Information Server is installed on the PC.

Procedure

- 1. Start the setup from the PCS 7 DVD.
- 2. Follow the instructions of the installation wizard. Read the License Agreement and the Open Source License Agreement.
- 3. Select the "Custom installation" type of installation.
- 4. In the "Archiving and Reporting" category, select the "Information Server Batch Reports" component.
- 5. To complete the installation, reboot the system.

Procedure for upgrading the Information Server

Note

Upgrade installation

Depending on the installed version, the Information Server Batch Reports must be upgraded via intermediate versions, as the table in chapter Overview of the upgrade installation for PCS 7 (Page 34) shows.

- 1. Insert the PCS 7 DVD.
- 2. Open the "Additional_Products" folder and re-install the installed Information Server Batch Reports .
- 3. To complete the installation, reboot the system.
- 4. Configure the Information Server:
 - Start the Internet browser as an administrator.
 Enter the URL defined in the browser settings during the installation from step 5.
 Configuring browser settings for the Information Server (Page 23)
 - Select the report server instance and start the configuration.

- 5. When the configuration is complete, start the setup from the PCS 7 DVD.
- 6. Follow the instructions of the installation wizard. Read the License Agreement and the Open Source License Agreement.
- 7. Select the "Custom installation" type of installation.
- 8. In the "Archiving and Reporting" category, select the "Information Server Batch Reports" component.
- 9. To complete the installation, reboot the system.

Result

The Information Server Batch Reports component has been installed or updated.

1.6 Uninstallation of the Information Server

1.6.1 Uninstalling the Information Server

Requirement

• An Information Server is installed.

Procedure

- 1. Go to "Control Panel > Programs and Features".
- 2. Select the item SIMATIC Information Server.
- 3. Select the "Uninstall" menu command.
- 4. Accept the uninstallation.

Result

The Information Server is uninstalled.

Note

During uninstallation, no generated reports or the database are deleted.

Information Server - Installation Notes

1.6 Uninstallation of the Information Server

Information Server - Release Notes

2.1 Security information

Siemens provides products and solutions with industrial security functions that support the secure operation of plants, systems, machines and networks.

In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial security concept. Siemens' products and solutions constitute one element of such a concept.

Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place.

For additional information on industrial security measures that may be implemented, please visit

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

Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats.

To stay informed about product updates, subscribe to the Siemens Industrial Security RSS Feed under

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

2.2 Release Notes

Contents

These release notes contain important notes for the SIMATIC Information Server and Process Historian. The information in these Release Notes takes precedence over statements in the manuals and in the online help. Read these Release Notes carefully because they contain useful information for you.

2.3 Customer Support

SIMATIC Hotline

You can reach the SIMATIC hotlines at the times specified in the following table. The languages of the SIMATIC hotlines are generally German and English. The Authorization Hotline also speaks French, Italian or Spanish.

2.3 Customer Support

Technical Support

Nuremberg	(GMT + 1:00)
Office hours	Mo Fr. from 8:00 am - 5:00 pm (CET/CEST)
Phone	+49 (0)911 895 7222
Fax	+49 (0)911 895 7223
E-mail	Support request (<u>https://</u> support.industry.siemens.com/My/ww/en/requests)

Automation Value Card (AVC)

The Automation Value Card (AVC) provides you with extended technical support, e.g. 24-hour availability seven days a week. You can find information about the AVC at the following URL:

Automation Value Card (<u>https://support.industry.siemens.com/cs/sc/2021/automation-value-card?lc=en-WW</u>)

SIMATIC Customer Online Support

Service and Support

You can find an overview of the support offerings for our products at the following URL:

Online support (<u>https://support.industry.siemens.com/cs/start?lc=en-WW</u>)

Support app

For Siemens support on the go, get the app:

Support app (https://support.industry.siemens.com/cs/sc/2067/mobile-use-via-app?lc=en-WW)

Documentation

Technical Forum

The Technical Forum supports exchange with other SIMATIC users. You can find it at the following URL:

Technical Forum (https://support.industry.siemens.com/tf/)

Technical documentation for SIMATIC products

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

Technical documentation portal (<u>https://support.industry.siemens.com/cs/document/</u>109742705/documentation?dti=0&lc=en-WW)

FAQ

The following FAQs are available to help you use the Information Server:

2.3 Customer Support

- Creation of report templates for the Information Server based on the Process Historian data in the WinCC and PCS 7 environment. FAQ creation of report templates. (<u>https://support.industry.siemens.com/cs/document/64906050/creation-of-report-templates-for-the-information-server-based-on-process-historian-data-in-the-wincc-und-pcs-7-environment?dti=0&lc=en-US)
 </u>
- How can you update the SQL Server Reporting Services (SSRS)? FAQ Update SQL Server Reporting Services (<u>https://support.industry.siemens.com/cs/</u><u>document/109748195/what-should-you-watch-out-for-when-installing-simatic-process-</u><u>historian-simatic-information-server-2014-sp2-upd3-when-wincc-is-already-installed-?</u> <u>dti=0&lc=en-US</u>)
- How can you update the SQL Server on at SIMATIC Process Historian/ Information Server? FAQ Update SQL Server for SIMATIC PH/IS (<u>https://support.industry.siemens.com/cs/</u> <u>document/109748200/how-do-you-update-the-sql-server-with-simatic-process-historian-information-server-?dti=0&lc=en-US</u>)
- How can you correctly display Information Server reports in Asian languages under Windows 10?

FAQ correct presentation of reports in Asian languages under Windows 10. (<u>https://support.industry.siemens.com/cs/document/109748197/in-windows-10-how-do-you-correctly-display-information-server-reports-in-asian-languages-?dti=0&lc=en-US)</u>

Product information

SIMATIC products

You can find general information on SIMATIC products at the following URL:

Overview of SIMATIC products (<u>http://w3.siemens.com/mcms/topics/en/simatic/Pages/</u> <u>default.aspx</u>)

Information Server

You can find general information about the Information Server at the following URL:

SIMATIC Information Server (<u>http://w3.siemens.com/mcms/automation-software/en/scada-software/scada-options/simatic-information-server/Pages/Default.aspx</u>)

2.3 Customer Support

SIMATIC Information Server

3.1 Security information

Siemens provides products and solutions with industrial security functions that support the secure operation of plants, systems, machines and networks.

In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial security concept. Siemens' products and solutions constitute one element of such a concept.

Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place.

For additional information on industrial security measures that may be implemented, please visit

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

Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats.

To stay informed about product updates, subscribe to the Siemens Industrial Security RSS Feed under

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

3.2 Installation of the Information Server

3.2.1 Licenses

License types

The following products are available:

Products for PCS 7

The SIMATIC Information Server provides the following products for PCS 7:

Product	Order number (MLFB)
Information Server Basic Package	6ES7652-7EX68-2YB0
	6ES7652-7EX68-2YH0
Information Server (1 Client)	6ES7652-7YA00-2YB0
	6ES7652-7YA00-2YH0
Information Server (3 Clients)	6ES7652-7YB00-2YB0
	6ES7652-7YB00-2YH0
Information Server (5 Clients)	6ES7652-7YC00-2YB0
	6ES7652-7YC00-2YH0
Information Server Datasource Access (1 Source)	6ES7652-7YE00-2YB0
	6ES7652-7YE00-2YH0
Information Server Datasource Access (3 Sources)	6ES7652-7YF00-2YB0
	6ES7652-7YF00-2YH0
Upgrade Package Process Historian and Informa-	6ES7652-8AX68-2YE0
tion Server, V9.0 to V9.1	6ES7652-8AX68-2YH0

Products for WinCC

The SIMATIC Information Server provides the following products for WinCC:

Product	Order number (MLFB)
Process Historian und Information Server 2020 SP1,	6ES7652-7AX68-0YT8
Software Media Package	6ES7652-7AX68-0YH8

Note

MLFB numbers

MLFB numbers ending with 2YB0/2YE0/2YT8 are goods deliveries. MLFB numbers ending with 2YH0/0YH8 are OSD deliveries (downloads).

Products for PCS neo

The SIMATIC Information Server provides the following products for PCS neo:

Product	Order number (MLFB)
Information Server	6DL8906-0AC10-0AB5
Information Server Client Access	6DL8906-0BC10-0AB5

List of clients

The clients include:

• Any browser when connected to the Information Server

License count for client access

Each active client connection of the Information Server requires a license. The number of clients depends on the number of PCs, not on the number of applications that are open on a PC. Even when multiple report clients are connected to the Information Server from a PC, only one license is required.

Assignment of a client license:

- Connection with the Information Server via Internet browser/Web application
- Use of various URLs which the server cannot identify as one source

Release of a client license:

- Logout from the Web application
- Inactivity after 20 minutes

Trial license

The setup of the Information Server also installs a trial license. The trial license can be selected in the license query.

- 14-day validity
- Start of 14 day period on the day of first use

The trial version becomes a full version when you install a full license. Reinstallation is not necessary.

3.2.2 System requirement

3.2.2.1 Checking system requirements

Requirement

You check the requirements on the computer on which the Information Server is installed.

Procedure

- Check if the hardware requirements for your installation are met. Hardware requirements for a Process Historian and Information Server installation on a system (Page 50)
- 2. Ensure you are using an approved operating system. Operating systems (Page 51)
- 3. Ensure you are using an approved SQL Server. SQL Server (Page 51)
- 4. Check which data sources are allowed for use with the Information Server. Data sources (Page 52)

- 5. Ensure you are using an approved browser. Browser (Page 52)
- 6. Check whether all relevant security settings have been made. Security settings (Page 52)
- 7. Check whether all relevant certificates are assigned. Certificates (Page 55)

Result

The system requirements for an Information Server installation are fulfilled.

3.2.2.2 Hardware requirements

Hardware requirements for Process Historian and Information Server installation on a single system

Definition

Medium	Minimal	Recommended
CPU	INTEL XEON E3-1268L V3; 2.3	IPC 647E
	GHz	MLFB: 6ES7661-0PU57-1RA4
		Xeon E-2278GE (8C/16T, 3.3 (4.7) GHz, 16 MB cache, TB, AMT)
CPU	INTEL XEON E3-1268L V3; 2.3	IPC 847E
	GHz	MLFB: 6ES7661-1PW67-1RA4
		Xeon E-2278GE (8C/16T, 3.3 (4.7) GHz, 16 MB cache, TB, AMT)
Work memory (RAM)	16 GB (64-bit operating system)	64 GB (64-bit operating system)
Storage medium ≥ 500 GB SATA		1024 GB SSD M.2 (for operating system and appli- cations)
		RAID 5, \sim 5.7 TB (4 x 1920 GB SSD 2.5" SATA) (for transaction log and database)

Note

The hardware requirements are covered by the current SIMATIC industrial PCs.

Sequence of the installation of Process Historian and Information Server on a system

If you want to install Process Historian and Information Server on the same computer, they must be installed in the same SQL Server instance. You must install the Process Historian first.

Cleanup of the corrupt Information Server installation

If you did not install the Information Server together with the Process Historian but did so at a later time, use the following procedure to clean up the faulty installation:

- Create a full SQL Server backup of the existing PH database. Details are available in the section "Creating a Full PH Database Backup" in the FAQ: Backup and restore of a Process Historian database (<u>https://support.industry.siemens.com/cs/</u> <u>attachments/66579062/66579062_pcs7_ph_backup_restore_en.pdf</u>) The procedure described there also applies to the SQL Server 2017. When you use SIMATIC BATCH, the data provided by the batches are backed up separately in the Process Historian and must therefore be taken into account during the full backup.
- 2. Perform a complete new installation of the operating system.
- 3. Start the general setup and select the installation for Process Historian and Information Server.
- 4. A new, empty Process Historian database is created. Use the same configuration settings for the newly created database.
- 5. Once the functionality is completed and verified, restore the previously created SQL Server backup of the Process Historian database in Microsoft SQL Server Management Studio. Details are available in the section "Restore Historian Storage Database" in the FAQ: Backup and restore of a Process Historian database (<u>https://support.industry.siemens.com/cs/</u><u>attachments/66579062/66579062_pcs7_ph_backup_restore_en.pdf</u>)

3.2.2.3 Software requirements

Operating systems

Server operating system:

Version	Note
Windows Server 2019	64-bit

Desktop operating system:

Version	Note
Windows 10 LTSC 1809 or later	64-bit

SQL Server

When the SIMATIC Information Server is installed, the Microsoft SQL Server is automatically installed.

SQL Server	Comment
Microsoft SQL Server 2017	64-bit

Data sources

Data source	Version	
Process Historian	2020 or higher	
PCS neo	3.1 or higher	
WinCC / PCS 7 OS	7.4 SP1	
	7.5 SP1	
	7.5 SP2	
РМО	7.4 SP1	
	7.5 SP1	
	7.5 SP2	
PCS neo Batch	3.1 or higher	

Note

Each data source is only compatible with the most recent update of the corresponding version.

Browser

Browser	Version	Link to the download	
Mozilla Firefox	Current version	Mozilla Firefox Download (<u>https://www.mozilla.org/de/</u> <u>firefox/new/</u>)	
Google Chrome	Current version	Google Chrome Download (<u>https://www.google.de/chrome/</u> <u>browser/desktop/</u>)	
Microsoft Edge	Current version	Integrated	

Note

Browser selection

It is recommended to use Google Chrome.

Security settings

Settings of the internal firewall for the Information Server

The firewall settings for the Information Server are automatically changed during the setup. The changes are listed during the setup and can be saved.

Note

The security settings of the firewall are the basis of the security concept.

Name	Protocol	Port	Recommended manual restrictions
IS Network Discovery	UDP	137	No
IS Web Access https	ТСР	443	No
IS Data Host	ТСР	49081	Yes, see note
IS DiscoverServiceInstaller	UDP	5049	No
Scheduler	ТСР	49082	Yes, see note

Note

Note on recommended manual restrictions

Case 1: If the Information Server is installed on the same computer as the Process Historian without connection to other external data sources, it is recommended to disable this rule.

Case 2: If a connection to additional external data sources is planned on which the IS Ready is installed, it is recommended that the range of the rule is adjusted so that only the remote IP addresses of the data sources are allowed.

When IS Ready is installed on a computer, the following firewall settings are changed:

Name	Protocol	Port	Recommended manual restric- tions
IS Ready Update plugin	ТСР	1200	Yes, see note
IS Ready Archive Plugin	ТСР	1201	Yes, see note

Note

Note on recommended manual restrictions

Case 1: If IS Ready is installed on the same computer as the Information Server, this rule should be disabled.

Case 2: When installing IS Ready on a computer other than the Information Server, it is recommended that you adjust the scope of the rule to allow only the remote IP address of the Information Server.

Firewall settings when using different subnets

When using different subnets, you need to adapt certain firewall settings accordingly:

Computer	Action	Name	Protocol	Port
Process Histori- an	Adapt rule	PH SQL server port	ТСР	3723
Process Histori- an	Adapt rule	PH Discovery Services	ТСР	5048

SIMATIC Information Server

3.2 Installation of the Information Server

Computer	Action	Name	Protocol	Port
Process Histori- an	Create new rule	IS SQL Server Browsing	UDP	1434
Information Server	Adapt rule	Scheduler	ТСР	49082

Note

Create the rule on the respective computer.

- 1. To modify the rules, open the "Windows Firewall with Advanced Security" dialog.
- 2. Go to the corresponding rule and open "Properties > Area" via the shortcut menu.
- 3. Select "IP Addresses" under "Remote IP Address".
- 4. Click "Add ... ".

Note

Here you can enter the IP addresses or the subnet.

5. Confirm the dialog.

Note

You must manually remove the firewall ports that have been opened by installing Information Server and IS-Ready after uninstalling.

Measures for communication on the Internet

Configure the server in such a way that only HTTPS connections are supported. You need a digital certificate for the Information Server.

For the **communication of the database and application servers in a shared area** use a demilitarized zone to exchange confidential data.

For the **communication of the database and application servers in a shared area** use, for example, a Private Network Tunnel (VPN), to establish trustworthy communication.

Avoidance of cross-site request forgery for the web server

Avoid working with other applications or services on the Internet. Always immediately log off from the application after using the Web server.

More information on IIS security can be found under the following link. IIS security (<u>https://msdn.microsoft.com/en-us/library/ms172965(v=sql.105).aspx</u>)

Security architecture "defense in depth"

Note the following information from Siemens on the topic "Industrial Security". The Web site contains information on the universal protection concept in accordance with recommendations of the leading standard for security in industrial automation ISA99/IEC 62443.

Link: Industrial Security (<u>https://new.siemens.com/global/en/products/automation/topic-areas/industrial-security.html</u>)

Mitigation of "Denial of Service" attacks

The SIMATIC Web Configurator activates the dynamic IP security feature of the Microsoft Internet Information Services page created for the Information Server to mitigate "Denial of Service" attacks on the Information Server. Only up to 50 connections to the site are allowed in total, with no more than 2000 requests per connection in 10 seconds. If the request limit is exceeded, renewed access is temporarily prevented.

Certificates

You need a certificate for securing the connection between the server and client.

You have the option of creating a temporary self-signed certificate or importing an existing certificate on the computer. You then assign the provided certificate to the corresponding server.

Creating a self-signed certificate:

- 1. Open "Start > Control Panel > System and Security > Administration". The dialog "Administration" opens.
- 2. Double-click the link "Internet Information Services (IIS) Manager". The dialog box "Internet Information Services (IIS) Manager" opens.
- 3. Select the server under "Connections" on the left.



- 4. In the overview, double-click the "Server Certificates" feature in the "IIS" area.
- 5. Select the option "Create a self-signed certificate..." on the right under "Actions...". The "Create self-signed certificate..." dialog opens.
- 6. Select the display name for the certificate and confirm the entry with "OK". The certificate created is located in the overview "Server certificates".

Importing a certificate

Ensure that a certificate is saved on the computer.

- 1. Open "Start > Control Panel > System and Security > Administration". The dialog "Administration" opens.
- 2. Double-click the link "Internet Information Services (IIS) Manager". The dialog box "Internet Information Services (IIS) Manager" opens.

3. Select the server under "Connections" on the left.



- 4. Double-click the feature "Server certificates" in the overview in the "IIS" area.
- 5. Select the option "Import..." under "Actions" on the right. The dialog "Import certificate..." opens.
- Click "..." .
 A dialog opens with which you navigate to the certificate on your computer.
- 7. Load the certificate into the dialog by double-clicking it and click "OK".

Assigning a certificate

- 1. Open "Start > Control Panel > System and Security > Administration". The dialog "Administration" opens.
- 2. Double-click the link "Internet Information Services (IIS) Manager". The dialog box "Internet Information Services (IIS) Manager" opens.
- 3. Select the server under "Connections" on the left.



- 4. Double-click on "Sites" and select "Siemens".
- 5. In the area on the right under "Actions > Edit Site" select the option "Bindings...". The dialog "Site Bindings" opens.
- 6. Select the HTTPS binding and click "Edit...". The "Edit Site Binding" dialog opens.
- 7. Select the corresponding SSL certificate and confirm with "OK".

Exporting a certificate

- 1. Open "Start > Control Panel > System and Security > Administrative Tools". The "Administrative Tools" dialog opens.
- 2. Double-click the "Internet Information Services (IIS) Manager" link. The "Internet Information Services (IIS) Manager" dialog opens.
- 3. Select the server under "Connections" on the left.



- 4. In the overview, double-click the "Server Certificates" feature in the "IIS" area.
- 5. Right under "Actions", select the "Export..." option. The "Export certificate..." dialog opens.

- Click on the "..." button.
 A dialog opens in which you can select the storage location.
- 7. Confirm the backup.

Note

Reports from SIMATIC Batch

If reports from the SIMATIC Batch Server are to be generated with the Information Server, the generated certificate must be exported and imported onto the server or client.

3.2.2.4 Requirements for installing the Office add-in

Microsoft Office versions

One of the following Microsoft Office versions (including Service Packs of the version) is installed on your computer.

Product	Note
Microsoft Office 2019	64-bit
Microsoft Office 365	64-bit

Note

Parallel use of different Office versions on one computer is not supported.

Microsoft Visual Studio Tools for Office Runtime

The Microsoft Visual Studio Tools for Office Runtime (MS VSTO RT) are installed on your computer.

If you have not yet installed MS VSTO RT, install the program with the same language you have selected for the Information Server.

Microsoft.NET Framework

Microsoft.NET Framework 4.8 is installed on your computer.

If you have not yet installed Microsoft.NET Framework 4.8, install the program with the same language you have selected for the Information Server.

See also

Microsoft Visual Studio Tools for Office Runtime (<u>https://www.microsoft.com/en-US/download/</u> <u>details.aspx?id=48217</u>)

Microsoft .NET Framework 4.5.1 (<u>https://www.microsoft.com/en-US/download/details.aspx?</u> id=40779)

3.2.3 Installation of the Information Server

3.2.3.1 Installing the Information Server

Requirement

• The required hardware and software requirements for the installation of the Information Server are fulfilled.

Check system requirements (Page 9)

- Close all Windows programs before running the setup.
- The specified user information must match on the different systems: PH Server. Password changes must be tracked in all systems.

Procedure

Note

Depending on the contents of the installation, you might be prompted to restart one or more times during the installation process.

During the installation process, additional setup dialogs can be opened automatically. If the setup does not continue after a while, use the key combination "Alt+Tab" to change the view. This is how you check whether there is another setup dialog in the background that requires additional input.

- Start the setup of the Information Server. Starting the Information Server setup for PCS 7 (Page 59) Starting the Information Server setup for PCS neo (Page 60)
- 2. Configure the Information Server. Configuring the Information Server (Page 62)
- 3. Configure the browser settings before using the Information Server. Configuring browser settings for the Information Server (Page 63)
- 4. Install the Information Server database. Installing the Information Server database (Page 65)

5. Install and configure the IS Ready. Installing IS Ready (Page 67)

Note

The installation of IS Ready is necessary for PCS 7, OS, WinCC and PH installations. This is necessary to connect the data sources in the Information Server.

In the case of a PCS neo or PCS neo Batch installation, IS Ready is only installed on the PH.

We recommend installing IS Ready during the setup of the products specified above as standard.

6. Configure a project on the Information Server. Configuring a project on the Information Server (Page 66)

Result

The Information Server is installed.

3.2.3.2 Starting the Information Server setup for PCS 7

Requirement

- The required hardware and software requirements for the installation of the Information Server are fulfilled.
 Check system requirements (Page 49)
- Close all Windows programs before running the setup.
- The specified user information must match on the different systems: PH Server. Password changes must be tracked in all systems.

Procedure

Note

Depending on the contents of the installation, you might be prompted to restart one or more times during the installation process.

During the installation process, additional setup dialogs can be opened automatically. If the setup does not continue after a while, use the key combination "Alt+Tab" to change the view. This is how you check whether there is another setup dialog in the background that requires additional input.

- 1. Start the PCS 7 setup from the DVD "PCS 7 V9.1 SP1".
- 2. Select the setup language.
- 3. Read the installation instructions.
- 4. Accept the license agreement.

5. Select the installation content.

Note

It is recommended to install the IS Ready as part of the Information Server setup.

If you want to install Process Historian and Information Server on a system, use the installation package "Process Historian and Information Server".

- 6. Accept the license agreement.
- 7. Accept the changes to the system settings.
- 8. After completion, conclude the setup with a restart.

Result

The setup of the Information Server is started. The "SIMATIC Web Configurator" dialog open.

3.2.3.3 Starting the Information Server setup for PCS neo

Requirement

- The required hardware and software requirements for the installation of the Information Server are fulfilled. Check system requirements (Page 49)
- Close all Windows programs before running Setup.

- The specified user information must match on the different systems: PH Server. Password changes must be tracked in all systems.
- Before manually installing the Process Historian/Information Server, the target computer must be configured in the Administration Console:

Note

Configuration of the target computer in the Administration Console

Before manually installing the Process Historian/Information Server, the target computer must be configured in the Administration Console:

- 1. Install AC Agent via "AdditionalProducts\AC Agent" of the PCS neo setup or a remote installation of the AC agent from the AC Server to the Process Historian-Server/ Information Server.
- 2. Add the Process Historian Server/Information Server to the Administration Console.
- 3. Create an AC server certificate for the Process Historian Server/Information Server.

To do so, follow the instructions in the PUD for the Administration Console:

- Administration > SIMATIC PCS neo Administration Console > Getting Started > Use cases > Create setup definition for AC agent
- Administration > SIMATIC PCS neo Administration Console > Communication > Adding target computer to AC
- Administration > SIMATIC PCS neo Administration Console > Communication > Use cases > Create certificate for target computer

After successful local installation of Process Historian/Information Server, perform the following advanced steps in the Administration Console:

- 1. Connect the PH/IS computer to the UMC domain.
- 2. Determine the inventory data for the PH/IS computer.
- 3. Update the distribution of the configuration.

Follow the instructions in the PUD: "Administration > SIMATIC PCS neo Administration Console > Inventory > Inventory of target computers"

Procedure

Note

Depending on the contents of the installation, you might be prompted to restart one or more times during the installation process.

During the installation process, additional setup dialogs can be opened automatically. If the setup does not continue after a while, use the key combination "Alt+Tab" to change the view. This is how you check whether there is another setup dialog in the background that requires additional input.

1. In the PCS neo setup, select the installation of the Information Server in the module overview: "SIMATIC PCS neo Information Server".

Note

Selecting installation contents

Only a combined installation of the Process Historian and Information Server is released for PCS neo.

- 2. Select the setup language.
- 3. Select the installation content.
- 4. Accept the license agreement.
- 5. Accept the changes of the system settings.
- 6. After completion, conclude the setup with a restart.

Result

The setup of the Information Server is started. The "SIMATIC Web Configurator" dialog open.

3.2.3.4 Configuring the Information Server

Requirement

- The required hardware and software requirements for the installation of the Information Server are fulfilled.
- Close all Windows programs before running the setup.
- The specified user information must match on the different systems: PH Server. Password changes must be tracked in all systems.
- Installation of the Information Server in combination with PCS neo requires a configuration of the target computer in the Administration Console.

Configuration

- The "SIMATIC Web Configurator" dialog opens. You see an overview of the configuration procedure. The "IIS configuration" dialog opens.
- 2. In the "IIS Configuration" dialog, enter a name under "Application name" or accept the preselection, "Information Server".

Note

Upgrade installation

If an installation has already been performed on this computer, a dialog opens with which you can skip steps 2-4.

3. In the "IIS Configuration" dialog, select the option: "Create a virtual directory":

Note

Do not change the default.

- 4. Confirm with "OK".
- 5. Enter a user name and password in the "Change Service Account" dialog. Leave option enabled if you want the user information to be used for all services.

Note

The user must have local administrator rights and be a system administrator on the local SQL Server instance.

If the computer is part of a domain, the user must be a domain user; otherwise a local user must be used.

- 6. Confirm with "Log on as".
- 7. After completing the configuration, restart the computer.

Result

The Information Server configuration is complete.

3.2.3.5 Configuring browser settings for the Information Server

Requirement

- The required hardware and software requirements for the installation of the Information Server are fulfilled.
- Close all Windows programs before running the setup.
- The specified user information must match on the different systems: PH Server. Password changes must be tracked in all systems.
- The user that you log on to the "Change Service Account" dialog during configuration must have the following rights for each of the following services:
 - Information Server Scheduler: Access to the WebHost database, access to the configured data sources (e.g. PH), permissions to send e-mails
 - Information Server DataHost Service: Access to the configured data sources (e.g. PH)
 - InfSrvPool: Access to the WebHost database, access to the configured data sources (e.g. PH)

Browser settings

Adapt the settings of your browser for the Information Server .

Note

Do not change the following settings until after the initial commissioning of the Information Server.

- 1. Open the "Internet options" dialog from the Start menu.
- 2. In the "Internet Properties" dialog, select the "Security" tab.
- 3. For the current zone, disable the "Enable Protected Mode" setting.
- 4. Select the "Trusted sites" > "Sites" zone.
- 5. Add the following web page to the "Web pages" list: "https://<Common Name (CN) of the X.509 certificate>".

Note

Common Name of the certificate

- 1. Open the "Internet Information Services (IIS) Manager".
- 2. Under "Connections" "Sites", select the "Siemens" site.
- 3. Select "Edit Site" > "Bindings".
- 4. In the "Site bindings" dialog, select the https connection and select "Edit".
- 5. Select the SSL certificate and select "View".
- 6. The Common Name can be found in the "Details" > "Subject" tab.
- 6. Select "Custom Level".
- 7. Under "User Authentication > Logon" in the "Security Settings" dialog, select the "Automatic logon with user name and password" option.

Note

HTTP Proxy

This configuration must be performed additionally for all computers that require an HTTP proxy and use the Information Server web application or the Information Server Excel add-in.

- 1. Open the "Internet options" dialog from the Start menu.
- 2. In the "Internet Properties" dialog, select the "Connections" tab.
- 3. Select "LAN Settings".
- 4. Activate the option "Proxy server".
- 5. Select "Advanced".
- 6. For "Exceptions", enter the complete FQDN name of the Information Server computer. This name must match the CN of the HTTPS certificate (see above).
- 7. Confirm your entry.

Result

The browser settings are configured.

3.2.3.6 Installing the Information Server database

Requirement

- The required hardware and software requirements for the installation of the Information Server are fulfilled.
- Close all Windows programs before running the setup.
- The specified user information must match on the different systems: PH Server. Password changes must be tracked in all systems.
- The browser settings must have been defined correctly.
- The user that you log on to the "Change Service Account" dialog during configuration must have the following rights for each of the following services:
 - Information Server Scheduler: Access to the WebHost database, access to the configured data sources (e.g. PH), permissions to send e-mails
 - Information Server DataHost Service: Access to the configured data sources (e.g. PH)
 - InfSrvPool: Access to the WebHost database, access to the configured data sources (e.g. PH)

Installation of the Information Server database

- 1. Open the browser.
- Enter the previously defined URL in the browser bar or use the Information Server shortcut on the desktop
 The Information Server web application opens

The Information Server web application opens.

3. From the drop-down list, select a Microsoft SQL Server instance in which the Information Server stores its data.

- 4. Select an option:
 - Enter a database file path

Note

Enter a database file path

If you want to select a location, select the "Enter database file path" option and add the destination path.

If you do not select a storage location, the database files are stored by default in the SQL directory "Data" (e.g. C:\Program Files\Microsoft SQL Server\MSSQL14.HISTORIAN\MSSQL \DATA).

- Enter a path to migration files

Note

Select the folder where you saved the backup files using the IS Backup tool.

Create backup files for migration (Page 77)

- 5. Confirm with "Install or update".
- 6. When the installation is complete, select "Continue".
- Add a project.
 Add project (Page 215) (SIMATIC Information Server > Functions > Web application > Administration > Project configuration > Step by step instructions > Add project)

Result

A database is installed on the Information Server.

3.2.3.7 Configuring a project in the Information Server

Requirement

- The required hardware and software requirements for the installation of the Information Server are fulfilled.
- Close all Windows programs before running the setup.
- The specified user information must match on the different systems: PH Server. Password changes must be tracked in all systems.

- During the initial installation, the "Automatic logon with user name and password" option must be selected in your browser under "Options > Internet Options > Security > Privacy Level > User Authentication > Logon".
- The user that you log on to the "Change Service Account" dialog during configuration must have the following rights for each of the following services:
 - Information Server Scheduler: Access to the WebHost database, access to the configured data sources (e.g. PH), permissions to send e-mails
 - Information Server DataHost Service: Access to the configured data sources (e.g. PH)
 - InfSrvPool: Access to the WebHost database, access to the configured data sources (e.g. PH)

Project configuration in the Information Server

- 1. Open the administration area of the web application.
- 2. Open the project configuration.
- 3. Select "Add project".
- 4. Select the data source type of the project you want to add and confirm with "Continue".
- 5. Enter the "Host name" or the "Server IP" with which you want to connect.
- 6. Select "Select projects".
- 7. Select the projects you want to add and enter their names.

Note

SIMATIC PCS neo host name

Enter here the FQDN name of the PCS neo Engineering station which is used in the PCS neo Portal certificate so that you can switch to the Information Server in the PCS neo Engineering Portal.

If this name is not entered correctly, the Information Server cannot be successfully integrated into the portal.

8. Select "Add".

Result

A project is configured in the Information Server.

3.2.3.8 Installing Information Server Ready

It is recommended to install the IS Ready during the installation in the setup.

Note

Configuration of the IS Ready

The configuration of the IS Ready must be performed in any case.

It is only necessary to install IS Ready manually/later if the service was not selected during the setup.

The IS Ready service is required for:

- Direct connection of WinCC (non-redundant): IS Ready is only installed on WinCC.
- Direct connection of WinCC (redundant): IS Ready is installed on every WinCC computer.
- Direct connection of a PCS 7 project: IS Ready is installed on every OS.
- Indirect connection of WinCC or PCS 7 projects via the PH as long-term archive: IS Ready is installed on the PH, installation on WinCC or PCS 7 OS computers is not necessary.
- Indirect connection of PCS neo via the PH as long-term archive (direct connection is planned, but not yet possible at this time): IS Ready is only installed on the PH, installation on PCS neo itself is not possible.
- Connection of PCS 7 Batch via the PH: IS Ready is only installed on the PH.
- Connection of PCS neo Batch via the PH: IS Ready is only installed on the PH.

Requirement

- The required hardware and software requirements for the installation of the Information Server are fulfilled.
- Close all Windows programs before running the setup.
- The specified user information must match on the different systems. Password changes must be tracked in all systems.
- For using IS Ready: The IS Ready Service user must be a Windows administrator and be created as system administrator on the SQL Server instance.

Manual post-installation of the Information Server Ready

Note

It is only necessary to install IS Ready manually later if the service was not selected during the setup.

- 1. Open the "ISReady\Setup" directory on your installation medium.
- 2. Select the "Start.exe" file of the component to be installed.
- 3. Select the language.
- 4. Read the installation instructions.
- 5. Accept the license agreement.
- 6. Select the installation content. You see an overview of the setup for the installation process.
- 7. The installation is completed. Restart the system now or at a later time.

Configuration of the IS Ready

- 1. Open "Start > All Programs > Siemens Automation > SIMATIC > IS Ready".
- 2. Select "IS Ready Configuration". The "IS Ready Configurator" opens.
- 3. Select "Next".
- 4. Enter your logon information.You see an overview of the setup for the installation process.
- 5. Select "Finish".

Note

Check the configuration

The configuration was successful if you have been assigned to the "SIMATIC Reporting Services" group under "Local Users and Groups" on your computer.

Result

Information Server Ready is installed.

3.2.3.9 Installing Information Server Batch Reports for PCS 7

Requirement

The latest version of the Information Server is installed on the PC.

Procedure

- 1. Start the PCS 7 setup from the DVD "PCS 7 V9.1 SP1".
- 2. Select the setup language.
- 3. Read the installation instructions.
- 4. Accept the license agreement.
- 5. Select the installation content: "Custom installation".
- 6. In the "Archiving and Reporting" category, select the "Information Server Batch Reports" component.
- 7. Accept the license agreement.
- 8. Accept the changes to the system settings.
- 9. After completion, conclude the setup with a restart.

Result

The Information Server Batch Reports component is installed.

3.2.4 Installation of the Excel Office add-in

3.2.4.1 Installing Office add-in

Requirement

You are a member of the Windows user group SIMATIC Report Administrators.

Procedure

Install the Office add-in with the setup or from the web application. Installing Office add-in with setup (Page 70) Installing Office add-in with the web application (Page 71)

Note

HTTP Proxy

This configuration must be performed additionally for all computers that require an HTTP proxy and use the Information Server web application or the Information Server Excel add-in.

- 1. Open the "Internet options" dialog from the Start menu.
- 2. In the "Internet Properties" dialog, select the "Connections" tab.
- 3. Select "LAN Settings".
- 4. Activate the option "Proxy server".
- 5. Select "Advanced".
- 6. For "Exceptions", enter the complete FQDN name of the Information Server computer. This name must match the CN of the HTTPS certificate (see above).
- 7. Confirm your entry.

Result

The Office add-in has been installed.

3.2.4.2 Installing Office add-in with setup

Requirement

You are a member of the Windows user group SIMATIC Report Administrators.

Procedure

1. Check if all requirements for installing the add-in are met. Requirements for installing the Office add-in (Page 57)

Note

Close all Windows programs before running setup for the Office add-in.

- 2. Perform the setup for the installation of the add-in.
- 3. Select the Office add-in as installation content.
- 4. Select the setup language.
- 5. Select the installation content.
- 6. Accept the license agreement.
- 7. Accept the changes to the system settings.
- 8. After completion, conclude the setup with a restart.
- Connect the Office add-in to the Information Server.
 Connecting Office add-in with a stored certificate to the Information Server (Page 73)

Note

HTTP Proxy

This configuration must be performed additionally for all computers that require an HTTP proxy and use the Information Server web application or the Information Server Excel add-in.

- 1. Open the "Internet options" dialog from the Start menu.
- 2. In the "Internet Properties" dialog, select the "Connections" tab.
- 3. Select "LAN Settings".
- 4. Activate the option "Proxy server".
- 5. Select "Advanced".
- 6. For "Exceptions", enter the complete FQDN name of the Information Server computer. This name must match the CN of the HTTPS certificate (see above).
- 7. Confirm your entry.

Result

The Office add-in has been installed.

Opening an Office add-in (Page 227)

3.2.4.3 Installing Office add-in with the web application

Requirement

You are a member of the Windows user group SIMATIC Report Administrators.

SIMATIC Information Server

3.2 Installation of the Information Server

Procedure

1. Check if all requirements for installing the add-in are met. Requirements for installing the Office add-in (Page 57)

Note

Close all Windows programs before running setup for the Office add-in.

- 2. Download the Office add-in from the Web application. Downloading the Office add-in from the Web application (Page 72)
- 3. Perform the setup for the installation of the add-in.
- 4. Connect the Office add-in to the Information Server. Connecting Office add-in with a stored certificate to the Information Server (Page 73)

Result

The Office add-in has been installed.

Opening an Office add-in (Page 227)

Note

HTTP Proxy

This configuration must be performed additionally for all computers that require an HTTP proxy and use the Information Server web application or the Information Server Excel add-in.

- 1. Open the "Internet options" dialog from the Start menu.
- 2. In the "Internet Properties" dialog, select the "Connections" tab.
- 3. Select "LAN Settings".
- 4. Activate the option "Proxy server".
- 5. Select "Advanced".
- 6. For "Exceptions", enter the complete FQDN name of the Information Server computer. This name must match the CN of the HTTPS certificate (see above).
- 7. Confirm your entry.

3.2.4.4 Download Office add-in from the Web application

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- The requirements for installing the Office add-in are met.

Procedure

- 1. Open the "Download" app in the web application.
- 2. Select "Download".

Result

The Office add-in has been downloaded.

3.2.4.5 Connecting Office add-in with a stored certificate to the Information Server

Requirement

- One of the approved Microsoft Office versions is installed on your computer.
- The Information Server is installed.
- The Office add-in has been downloaded.
- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators

Procedure

- 1. Save the certificate in the folder "Trusted roots certification authorities".
- 2. Open Microsoft Excel.
- 3. Navigate to the "Information Server" tab.
- 4. In the "Configuration" area, select "Server". The "Server settings" dialog opens.
- 5. Enter the URL of the Information Server.
- 6. Select the port corresponding to that of the Information Server.
- Confirm the dialog. A logon dialog for authentication dialog opens.
- 8. Enter your logon data and confirm the dialog with "OK".

Note

Repeat this process for each Office add-in that you use to create and edit reports.

The last five server connections are stored in order of their use. In the "Server Settings" dialog, you can check the server settings or select another server.

Result

The add-in is connected to the Information Server.

In the Excel Office add-in, the connection status is visible in the footer.

Note

No connection to the Information Server

If there is no connection to the Information Server, check if an appropriate license is available or if there are network problems. If necessary, repeat the connection procedure.

If there is no existing connection to the Information Server, the commands in the quick access toolbar are not enabled.

3.2.5 Upgrade installation of the Information Server

3.2.5.1 Overview of the upgrade installation for PCS 7

You can upgrade a previous version of the Information Server to the current version using the upgrade installation.

Note

Order of the software update of PCS 7 and Process Historian

You need to update the Process Historian server to the corresponding Process Historian version of the new PCS 7 version first before you update the PCS 7 plant.

In this context, also observe the instructions "SIMATIC Process Control System PCS 7 Software update" with the section "How to update the Process Historian and Information Server".

SIMATIC Process Control System PCS 7 Software update (<u>https://support.industry.siemens.com/</u> <u>cs/document/109767557/simatic-process-control-system-pcs-7-software-update-with-</u> <u>utilization-of-new-functions-v9-0-sp2?dti=0&lc=en-WW</u>)</u>

Procedure of the upgrade installation

Depending on the installed version, the upgrade installation may need to take place via intermediate versions, as shown in the following table:

From version	Via version	To version
2014 SP3	2014 SP3 Update 6	2020 SP2
2014 SP3 Update 1	2014 SP3 Update 6	2020 SP2
2014 SP3 Update 2	2014 SP3 Update 6	2020 SP2
2014 SP3 Update 3	2014 SP3 Update 6	2020 SP2
2014 SP3 Update 4	2014 SP3 Update 6	2020 SP2
2014 SP3 Update 5	2014 SP3 Update 6	2020 SP2
2014 SP3 Update 6	-	2020 SP2

From version	Via version	To version
2020	-	2020 SP2
2020 SP1	-	2020 SP2

Note

After the upgrade installation, check the settings of the "Information Server Ready" component (IS-ready).

Installation of the upgrade

To upgrade the Information Server , follow the instructions in the Information Server Installation Notes.

Upgrading Information Server (Page 36)

Install the upgrade on all computers on which the following components are installed:

- Information Server
- IS-ready component of the Information Server
- Information Server Office add-in
- Information Server Batch

Uninstalling the update

The upgrade cannot be uninstalled.

3.2.5.2 Overview of the upgrade installation for PCS neo

You can upgrade a previous version of the Information Server to the current version using the upgrade installation.

Procedure of the upgrade installation

Depending on the installed version, the upgrade installation may need to take place via intermediate versions, as shown in the following table:

From version	Via version	To version
2020 Update 1	2020 Update 2	2020 SP2
2020 Update 2	-	2020 SP2

Note

After the upgrade installation, check the settings of the "Information Server Ready" component (IS-ready).

Installation of the upgrade

To upgrade the Information Server , follow the instructions in the Information Server Installation Notes.

Upgrading Information Server (Page 76)

Install the upgrade on all computers on which the following components are installed:

- Information Server
- IS-ready component of the Information Server
- Information Server Office add-in
- Information Server Batch

Uninstalling the update

The upgrade cannot be uninstalled.

3.2.5.3 Upgrading Information Server

You can upgrade a previous version of the Information server to the current version using the upgrade installation.

Requirement

- The backup files for the migration have been created with the IS Backup Tool (only necessary when changing the operating system or new hardware). Create backup files for migration (Page 77)
- The data sources have been upgraded.
- The IS Ready was installed again after the PH was upgraded.
- The operating system meets the software requirements. Operating systems (Page 51)

Procedure

Follow the installation instructions. Installing the Information Server (Page 58)

Note

Installing the Information Server database

In step 4, store the file path you specified for the backup files for the migration.

Result

The Information Server is updated.

3.2.5.4 Create backup files for migration

The IS backup tool (Siemens.InformationServer.ISBackup.exe) backs up all files required for a migration to the current version of the Information Server.

The tool is installed with Version 2014 SP3 Update 6 and with all versions from 2020 Update 1 and is located in the installation directory in the "Tools" folder.

Note

Copy the tool to another computer

If you need the IS Backup tool on another computer, it is necessary to copy the entire "IS Backup" folder.

Requirement

A previous version of Information Server is installed (e.g. 2014 SP3 Update 6 or from 2020).

Procedure

- 1. As administrator, open the command line/prompt of your computer (e.g. Command Shell, DOS).
- Run the IS Backup tool: /backup <"path">

Note

Example: Siemens.InformationServer.ISBackup.exe /backup "C:\Test"

Siemens.InformationServer.ISBackup.exe /backup "C:\Test Backup"

File storage

The folder for file storage should be placed on a network drive, if possible.

Result

In the command line/prompt of your computer there is an overview of the exported folders and a confirmation if the backup was successful.

The following structure should be displayed in the destination directory:

IS migration

- Webframe.mdf (database file)
- Webframe_log.ldf (log file)
- RDLs (root directory for the exported report templates)
 - MetaData.xml
 - Templates (directory)
 Public (directory)
 Tags (directory)
 Messages (directory)
 - (User directories with report templates)

3.2.5.5 Upgrading Information Server Ready

After the upgrade installation of the Information Server, upgrade all computers of the system on which the IS Ready service is installed.

Check the settings of IS Ready after every installation of an update or upgrade.

Requirement

- The required hardware and software requirements for the installation of the Information Server are fulfilled.
- Close all Windows programs before running the setup.
- The specified user information must match on the different systems. Password changes must be tracked in all systems.
- For using IS Ready: The IS Ready Service user must be a Windows administrator and be created as system administrator on the SQL Server instance.

Upgrading Information Server Ready

- 1. Open the "ISReady" directory on your installation medium.
- 2. Select the "Start.exe" file of the component to be installed.
- 3. Select the language.
- 4. Read the installation instructions.
- 5. Accept the license agreement.
- Select the installation content. You see an overview of the setup for the installation process.
- 7. The installation is completed. Restart the system now or at a later time.

Configuration of tl	ne service
1.	Open "Start > All Programs > Siemens Automation > SIMATIC > IS Ready".
2.	Select "IS Ready Configuration". The "IS Ready Configurator" opens.
3.	Select "Next".
4.	Enter your logon information. You see an overview of the setup for the installation process.
5.	Select "Finish".
	Note
	Check the configuration
	The configuration was successful if you have been assigned to the "SIMATIC Reporting Services" group under "Local Users and Groups" on your computer.
Result	ne Information Server Ready has been upgraded.
See also	
0	verview of the upgrade installation for PCS neo (Page 75)
3.2.5.6 Upg	rading the Information Server Batch Reports for PCS 7
Introduction	
	you use the Information Server Batch Reports for PCS 7 to create reports for SIMATIC Batch, you eed to install the Batch Reports.
Fo	bllow the steps below:
1.	Installing or upgrading Information Server.
2.	Installing or upgrading Information Server Batch Reports.
Requirement	
Tł	ne latest version of the Information Server is installed on the PC.
Procedure	
	Start the setup from the PCS 7 DVD.
2.	Follow the instructions of the installation wizard. Read the License Agreement and the Open Source License Agreement.

- 3. Select the "Custom installation" type of installation.
- 4. In the "Archiving and Reporting" category, select the "Information Server Batch Reports" component.
- 5. To complete the installation, reboot the system.

Procedure for upgrading the Information Server

Note

Upgrade installation

Depending on the installed version, the Information Server Batch Reports must be upgraded via intermediate versions, as the table in chapter Overview of the upgrade installation for PCS 7 (Page 34) shows.

- 1. Insert the PCS 7 DVD.
- 2. Open the "Additional_Products" folder and re-install the installed Information Server Batch Reports .
- 3. To complete the installation, reboot the system.
- 4. Configure the Information Server:
 - Start the Internet browser as an administrator.
 Enter the URL defined in the browser settings during the installation from step 5.
 Configuring browser settings for the Information Server (Page 23)
 - Select the report server instance and start the configuration.
- 5. When the configuration is complete, start the setup from the PCS 7 DVD.
- 6. Follow the instructions of the installation wizard. Read the License Agreement and the Open Source License Agreement.
- 7. Select the "Custom installation" type of installation.
- 8. In the "Archiving and Reporting" category, select the "Information Server Batch Reports" component.
- 9. To complete the installation, reboot the system.

Result

The Information Server Batch Reports component has been installed or updated.

3.2.6 Uninstalling the Information Server

3.2.6.1 Uninstalling the Information Server

Requirement

• An Information Server is installed.

Procedure

- 1. Go to "Control Panel > Programs and Features".
- 2. Select the item SIMATIC Information Server.
- 3. Select the "Uninstall" menu command.
- 4. Accept the uninstallation.

Result

The Information Server is uninstalled.

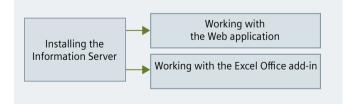
Note

During uninstallation, no generated reports or the database are deleted.

3.3 Concepts

3.3.1 Information Server overview

You need the following information to work with the Information Server: Useful information about the Information Server (Page 82)



Some customizations are necessary to fully use the functions of the Information Server. Check if all the required components are fully and correctly installed and specify other settings.

Installing the Information Server (Page 58)

You can use the Web application to access the apps of the Information Server.

Working with the Web application (Page 83)

You can insert, create and edit reports in the Office add-in Excel.

Working with the Excel Office add-in (Page 94)

3.3.2 Useful information about the Information Server

The SIMATIC information server is a reporting-system which uses the Microsoft Reporting Services and accesses historical data of a process control system.

With the SIMATIC Information Server you can group, evaluate and show the messages, tags and recipe data of a process control system in a table or graphic.

Components of the Information Server

You can work with the following applications:

- Information Server Web application Working with the Web application (Page 83)
- Information Server Office Add-In AUTOHOTSPOT

The installation of IS Ready is necessary for PCS 7, OS, WinCC and PH installations to connect the data sources.

In the case of a PCS neo or PCS neo Batch installation, IS Ready is only installed on the PH.

The Web application and Office add-in user interface have various areas. Each area has a different functionality.

- Operating the user interface of the Information Server Web application (Page 97)
- Operating the user interface of the Office add-in of the Information Server (Page 98)

Data sources

A data source provides historical data that you can process using the Web application or Office add-in.

You can access the data of the data sources that you have connected and for which you have permission. To access the data you need an existing connection to a Process Historian server.

You can work with the following data sources:

Data sources (Page 52)

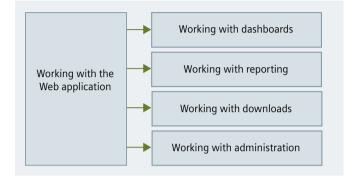
Browser

You access the Web application of the Information Server with a browser with HTML 5 capability. Browser (Page 52)

3.3.3 Web application

3.3.3.1 Working with the Web application

You need the following information to work with the Web application: Useful information about the Web application (Page 83)



In the "Dashboard" app, you visualize data from connected projects using configurable controls. This data is displayed differently in the individual dashboards depending on the selected control, for example, graphically or as a table.

AUTOHOTSPOT

In the "Reporting" app, you create reports or subscriptions using the report templates provided. You define the content of a report by assigning parameters. The report is visualized according to the selected report template, for example, as chart or table.

AUTOHOTSPOT

Using the "Download" app, you can download and install the Excel Office add-in.

AUTOHOTSPOT

In the "Administration" area, you configure users by assigning rights or creating groups. You attach projects that serve as data sources for your reports and define the email settings to send reports. In the license area, you check the existing licenses to ensure they are current.

AUTOHOTSPOT

3.3.3.2 Useful information about the Web application

User interface

The Web application user interface has various areas. Each area has a different functionality.

SIMATIC Informa	tion Server
3.3 Concepts	
	Web application (Page 99)
User profile	
	The user profile contains an overview of the current user and the associated groups <i>l</i> permissions. Some settings for this can be edited directly in the profile.
	User profile (Page 106)
Notifications	
	Depending on the notification type, creating a report triggers a notification by creating a report, or by creating a report using a subscription.
	Notifications (Page 107)
Help	
	The "Help" button opens the PUD Manager. This contains all the documentation of the Information Server.
	Various filter functions are available in the help.
	Help (Page 108)

3.3.3.3 Dashboard

Working with dashboards

You need the following information to work with Dashboards: AUTOHOTSPOT

To fill a dashboard with controls, you create individual dashboards in the workspace of the app. You can view, edit, duplicate, delete, or export these dashboards.

- Creating a dashboard (Page 119)
- Viewing a dashboard (Page 120)
- Editing a dashboard (Page 121)
- Duplicating a dashboard (Page 121)
- Deleting a dashboard (Page 122)
- Exporting a dashboard (Page 122)

To configure the layout of the dashboards created, create master pages and assign them to the corresponding dashboards. You can create as many master pages as you like. In the properties of a dashboard, you select the master page for the dashboard, among other things.

- Create master page (Page 189)
- Editing dashboard properties (Page 140)

The following controls are available for parameter assignment within a dashboard:

- Configuring "Chart" control (Page 140)
- Configuring "Single" control (Page 142)
- Configuring "Tag" control (Page 143)
- Configuring "Gauge" control (Page 144)
- Configuring "Message" control (Page 145)
- Configuring "Text" control (Page 146)
- Configuring "Report" control (Page 147)

In the "Message" control, you have various options for using filter groups. You can show and hide columns within the control and switch between the Message, Archive and Hitlist views.

- Creating a filter group (Page 148)
- Activate/deactivate filter group (Page 148)
- Editing a filter group (Page 149)
- Deleting a filter group (Page 149)
- Deleting all filter groups (Page 150)
- Show/hide columns (Page 150)
- Sorting the columns in ascending or descending order (Page 151)
- Changing views (Page 151)

You can edit, duplicate, delete or enlarge the controls created.

- Editing controls (Page 152)
- Duplicating a control (Page 152)
- Deleting controls (Page 153)
- Enlarging controls (Page 153)

To filter by time within a dashboard, you can create time filters in the dashboard properties and use them to filter the dashboard.

- Creating a time filter for a dashboard (Page 139)
- Filtering in dashboards by time (Page 139)

Adapt the directory structure of the dashboards in the app by creating, renaming, deleting folders or importing/exporting folder hierarchies. Sort the overview by name or last modified or browse the dashboard overview by name.

- Create folder (Page 116)
- Edit folder (Page 117)
- Delete folder (Page 117)
- Import folder hierarchy (Page 118)
- Export folder hierarchy (Page 118)
- Sorting an overview of the dashboards (Page 123)
- Browsing the overview of the dashboards (Page 123)

Useful information about dashboards

In this area, you can use dashboards and controls to process and visualize data in a variety of ways.

User interface

The "Dashboard" app user interface has various areas. Each area has a different functionality.

Dashboard (Page 114)

The master page is selected in the Dashboard properties.

Master pages (Page 188)

Any number of controls can be created and configured within the respective dashboard using drag-and-drop.

Controls (Page 124)

Overview of controls

The following controls are available for processing and visualizing data in the dashboards.

- "Chart" control (Page 126)
- "Single" control (Page 129)
- "Tag" control (Page 130)
- "Gauge" control (Page 131)
- "Message" control (Page 132)
- "Text" control (Page 136)
- "Report" control (Page 137)

Data modes for the "Chart" control

The parameter assignment of the "Chart" control requires you to select a data mode. The choices are start and end date, a time range, or live data. The selection of start and end date or time interval in combination with the "List" setting requires a time filter to be created beforehand.

Data modes (Page 128)

Filter criteria for "Message" control

The parameter assignment of the "Message" control requires the selection of one or more filters. The selection of filters varies depending on the connected data source.

Filter criteria (Page 134)

3.3.3.4 Reporting

Working with reporting

You need the following information to work with reporting:

AUTOHOTSPOT

You can create and edit reports for the connected data sources using the pre-defined report templates for messages, tags, advanced reports, alarm statistics, batch logs and batch.

- Creating a report (Page 168)
- Viewing a report (Page 169)
- Export report (Page 170)
- Edit report (Page 171)
- Remove report (Page 171)
- Rerun report (Page 172)

To conveniently browse the tag hierarchies and directories when creating reports or subscriptions with tags, you can filter or sort the display or search for a specific tag name.

```
Browsing tags (Page 161)
```

To generate reports for specified events, create a subscription. You can edit or delete the created subscriptions.

- Creating a subscription (Page 175)
- Edit subscription (Page 177)
- Deleting a subscription (Page 177)

Configure a trigger for the report cleanup, which configures the storage space if your available space reaches defined limits.

Configuring storage space (Page 199)

You can create, reuse or edit parameter presets in the toolbar.

- Creating parameter preset (Page 162)
- Reusing parameter preset (Page 162)
- Editing parameter preset (Page 163)

There are several ways to customize the tables for created reports and subscriptions.

- Show/hide columns (Page 172)
- Sorting the columns in ascending or descending order (Page 173)
- Set filter (Page 173)
- Reset filter (Page 174)

Useful information about Reporting

In this area, you can use reports and subscriptions to process and visualize data in a variety of ways.

User interface

The Reporting user interface has various areas. Each area has a different functionality. Reporting (Page 154)

Reporting

Reporting contains report templates that you configure to generate reports or subscriptions. The report templates provide an overview of the functions for generating reports.

Report generation (Page 164)

There are different templates for messages, tags, advanced reports and alarm statistics. The display of the report templates varies depending on the connected data source.

Report templates (Page 165)

During report generation, the process is aborted after a time interval defined by default. This time range can be extended.

Time limit for creating reports (Page 167)

Subscriptions

A subscription generates reports at regular intervals for defined events.

Subscriptions (Page 174)

The subscriptions are initiated by defined events, which are referred to as triggers. Depending on the connected data source, you can define message, tag and time triggers.

Trigger for subscriptions (Page 180)

When creating the subscription, you define additional properties relating to privacy, storage and transmission.

Settings for subscriptions (Page 184)

Public and private subscriptions have different rights for reading, writing and deleting subscriptions.

Authorization matrices for subscriptions (Page 182)

There are several delivery methods for providing reports from subscriptions. You choose between storage in the database, local storage or transmission by email.

Delivery method (Page 183)

To make the optimal use of database or disk space, configure Report Clean Up. This allows you to automatically define the further procedure if an action is required to free up storage space.

Report Clean Up (Page 195)

Parameter presets

By using a parameter preset, the parameters are copied to the report template when the new report or subscription is created.

Parameter presets (Page 161)

Time information

You configure absolute or relative time specifications for all reports. Pay attention to the time specifications in different time zones as well as the special features and the use of relative time specifications.

Time information (Page 157)

Browsing tags

When creating reports or subscriptions with tags, the tags are displayed in the hierarchy with all directories and subdirectories in a dialog. The display can be modified.

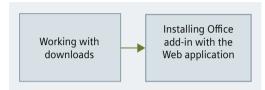
Browsing tags (Page 159)

3.3.3.5 Download

Working with Download

You need the following information to work with Download:

AUTOHOTSPOT



To use the Office add-in for the Information Server, you can install the add-in via the "Download" app.

Installing Office add-in with the web application (Page 185)

Useful information about Download

The Information Server Office add-in can be installed by download in the Web application or via setup.

Using the Excel Office add-in

Installing the Excel Office add-in provides a variety of Information Server functions in Excel. Download (Page 184)

For more information about the functions, see the Office add-in overview. AUTOHOTSPOT

3.3.3.6 Administration

Working with Administration

You need the following information to work with Administration: Useful information about Administration (Page 93)

To configure the layout of the dashboards created, create master pages and assign them to the corresponding dashboards using the dashboard properties. You can create as many master pages as you like.

- Create master page (Page 189)
- Deleting a master page (Page 190)
- Saving a master page (Page 190)
- Duplicate a master page (Page 190)
- Exporting a master page (Page 191)
- Importing a master page (Page 191)

Customize the directory structure of report templates in reporting by creating, renaming, deleting or showing/hiding folders.

- Create folder (Page 195)
- Renaming folders (Page 195)
- Delete folder (Page 196)
- Show/hide folder (Page 196)

Configure the selection and display of report templates by importing, exporting, deleting or showing / hiding report templates.

- Import report template (Page 197)
- Export report template (Page 197)
- Move report template (Page 198)
- Delete report template (Page 198)
- Show/hide a report template (Page 199)

To free up disk space for the generated reports, define limits. Based on these limits, subsequent actions are configured for the files that occupy the storage space.

Configuring storage space (Page 199)

To send reports and subscriptions by email, enable the email settings. You can choose from different email providers, such as Gmail or Office 365. You can test the settings made and restore their factory settings.

- Configuring e-mail settings (Page 201)
- Testing e-mail settings (Page 209)
- Resetting e-mail settings to factory defaults (Page 209)

The Application Installer shows an overview of the installed apps of the Web application. You check and update the individual apps if necessary. If an app is outdated, you are redirected to the Application Installer page directly at the beginning of the Web application.

Using the Application Installer (Page 210)

Check the existing licenses (and their validity) that are available to you for using the Information Server.

Check licenses (Page 212)

To start working with the Information Server, create new projects in the project configuration that will serve as data sources for the reports.

- Create new folder (Page 215)
- Add project (Page 215)
- Rename project (Page 216)
- Delete project (Page 217)

In addition, you can make other settings in the project configuration. Start a synchronization or a diagnostic run, assign permissions to individual users for a project, or make a host change when you move a project such as PH or WinCC to another computer.

- Start simulation (Page 214)
- Starting a diagnostic run (Page 217)
- Assigning authorizations (Page 218)
- Changing the host (Page 218)

Create a new domain user and add it to the required Windows groups to integrate the Information Server into a domain. The new profile is created in the database with the first login.

Subsequent integration of the Information Server into a domain (Page 187)

In the User configuration, you can create, edit and activate / deactivate users as well as create, edit and delete user groups. The email address, the language settings and the associated Windows user groups for each user are stored.

- Create user (Page 221)
- Edit user (Page 222)
- Activate / deactivate user (Page 223)
- Creating a user group (Page 224)
- Editing a user group (Page 224)
- Deleting user groups (Page 225)

Useful information about Administration

In this area, you can make settings that are exclusively reserved for the administrative user group.

User interface

The Administration user interface has various areas. Each area has a different functionality.

Administration (Page 186)

App configuration

The representation of a Dashboard is defined by selecting and configuring a master page. The master page is selected in the Dashboard properties.

Master pages (Page 188)

In the Administration area for reporting, you specify which report templates are displayed in which structure in the Reporting app. Independent of this, the display of report templates varies depending on the connected data source.

Reporting (Administration) (Page 193)

To make the optimal use of database or disk space, configure Report Clean Up. This allows you to automatically define the further procedure if an action is required to free up storage space.

Report Clean Up (Page 195)

Email settings

The settings define the transmission of reports and subscriptions via email. The email settings can be configured for the following providers:

- Generic
- Gmail
- Office 365

E-mail settings (Page 200)

Application Installer

In the Application Installer section, you can see an overview of the installed apps in the Web application and their installation status.

Application Installer (Page 209)

Licensing

The available licenses for the Information Server differ depending on the connected data source. The license count for client access depends on various factors. There is an additional 14-day trial license.

Licenses (Page 210)

Project configuration

The project configuration includes all administrative, project-related activities.

Project configuration (Page 212)

User configuration

The Information Server uses local Windows user groups to assign roles and rights. You assign the appropriate group to the created users.

User configuration (Page 219)

To use the Information Server in combination with PCS neo, the UMC user groups must be mapped once to the Windows user groups.

Mapping of UMC and Windows groups in PCS neo (Page 220)

3.3.4 Office add-in

3.3.4.1 Working with the Excel Office add-in

The Information Server provides an add-in for the Microsoft Excel application. You can use this add-in to insert and create reports in Excel.

You need the following information to work in Excel:

AUTOHOTSPOT

You configure the connection to the Information Server directly in the Office add-in.

Configuring server settings (Page 245)

To include reports in Excel, you can create the reports directly in Excel or open reports already created from a local storage location or from the Information Server Web application.

- Creating a report in Excel (Page 229)
- Opening locally saved Excel reports (Page 230)
- Open Excel reports from the Information Server (Page 231)

To generate reports for specified events, create a subscription. Creating a subscription in Excel (Page 233)

Excel report templates can be saved locally or to the Information Server Web application.

- Saving Excel report templates locally (Page 232)
- Save Excel report templates to the Information Server (Page 232)

You can create, configure, or delete tags to display tags in the Excel worksheet.

- Create tag (Page 234)
- Configuring tag (Page 235)
- Deleting a tag (Page 239)

You can create, configure, or delete messages to display messages in the Excel worksheet.

- Create message (Page 239)
- Configuring a message (Page 240)
- Delete message (Page 243)

For the configured tags and/or messages, data from the connected data sources are retrieved and displayed.

Updating an Excel workbook (Page 244)

Selected process values can be displayed graphically in the Excel worksheet.

Display process values graphically (Page 244)

Filters for displaying messages can be configured based on links or groupings.

Configuring a message filter (Page 246)

For the configuration of tags and messages, there are various functions in the dialogs that facilitate the operation of the Excel Office add-in.

- Filter table (Page 248)
- Replace tag (Page 249)
- Apply parameters (Page 249)
- Copy message/tag or its configuration (Page 250)
- Insert copied message/tag (Page 251)
- Transfer configuration of the copied message/tag (Page 251)

- Delete message/tag (Page 252)
- Select multiple messages/tags (Page 253)

By using a parameter preset, the parameters are copied to the report template when the new report or subscription is created.

- Creating parameter presets in Excel (Page 254)
- Reusing parameter presets in Excel (Page 254)

3.3.4.2 Useful information about the Office add-in

User interface

The Information Server add-in is integrated into the toolbar. The Office add-in user interface has various areas. Each area has a different functionality.

Toolbar in Excel (Page 228)

Reports

Report templates can be used to create reports in the Office add-in. Report types in the Office add-in (Page 226)

Time information

The Office Add-In allows you to enter absolute and relative times and to select pre-defined times from a list.

Time information (Page 157)

Subscriptions for report templates

A subscription is a regularly recurring report created according to defined parameters. Subscriptions for report templates in Excel (Page 227)

You can use time, tag and message triggers to perform the subscriptions automatically. Trigger for subscriptions (Page 180)

Connection status

A connection to the Information Server must exist to retrieve information for a report. Connection status (Page 255)

3.4 Functions

Message filter

The message filter has various options for filtering the display of messages. Filtering is done by groupings and/or links.

Message filters (Page 245)

Simplified operation

Simplified operation is used for faster processing of tags and messages. You can edit one or more columns at the same time using buttons.

Simplified operation (Page 247)

Parameter presets

A parameter preset contains pre-defined parameters for a report template. In Excel, you can adopt parameter presets that were created in the Web application.

Parameter defaults in Excel (Page 253)

3.4 Functions

3.4.1 Basics

3.4.1.1 Operating the user interface of the Information Server Web application

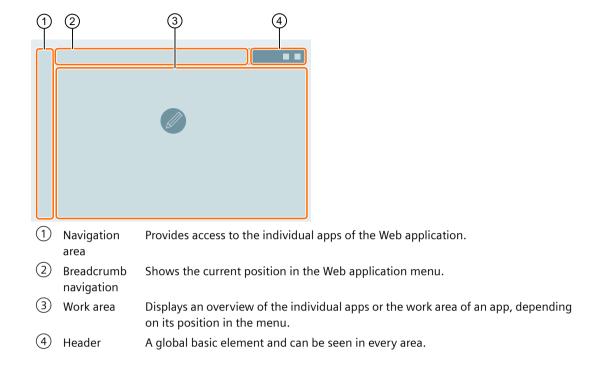
Below, reference is made to:

• Layout of the user interface

3.4 Functions

Layout of the user interface

The user interface contains the following elements:



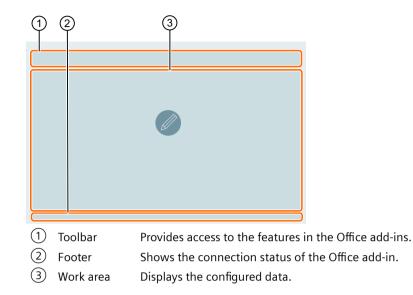
3.4.1.2 Operating the user interface of the Office add-in of the Information Server

Below, reference is made to:

• Layout of the user interface

Layout of the user interface

The user interface contains the following elements:



3.4.2 Web application

3.4.2.1 Web application

Definition

You access the Web application of the Information Server with a browser with HTML 5 capability:

SIMATIC Information Server

3.4 Functions

Structure

1		3 (4)
	Home	User name 🖂 [] ? 🕩
62 20	The following applications are available:	
*	Create dashboard	Reporting Show all subscriptions Show all reports
>	Download	Administration App configuration Email settings Application installer Licensing Project configuration User configuration
	Navigation bar (Page 101) Breadcrumb navigation (Page 102)	

The Web application consists of the following areas:

- (2) Breadcrumb navigation (Page 102)
- ③ Work area in the Web application (Page 103)
- (4) Header (Page 105)

3.4.2.2 Step-by-step instructions

Opening a Web application

Requirement

You are a member of one of the following Windows user groups:

- SIMATIC Report Publishers
- SIMATIC Report Users
- SIMATIC Report Administrators

3.4 Functions

Procedure

Enter the URL in the browser bar that you specified during installation in the SIMATIC Web Configurator.

Note

Browser selection and display

Google Chrome is recommended for using the Information Server Web application.

If the browser does not display the Web application of the Information Server, check that all software requirements in the installation instructions are met.

Result

The Web application is open.

Note

License release by logging off the Web application

If you close the Web application without logging off, the license can remain inactive for 20 minutes until it expires.

3.4.2.3 Navigation area

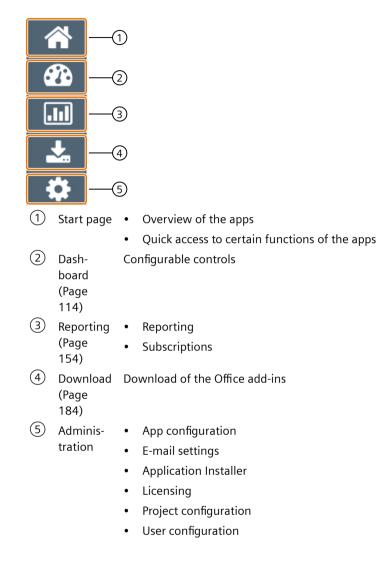
Definition

The navigation area provides access to the apps of the Web application.

3.4 Functions

Structure

The navigation area is divided into the following areas:



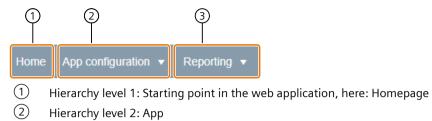
3.4.2.4 Breadcrumb bar

Definition

The breadcrumb bar gives you information about the current position in the menu of the web application with the respective higher hierarchy levels up to the start page.

Structure

The breadcrumb navigation is structured as follows:



(3) Hierarchy level 3: Subarea of the app

3.4.2.5 Work area Web application

Work area in the Web application

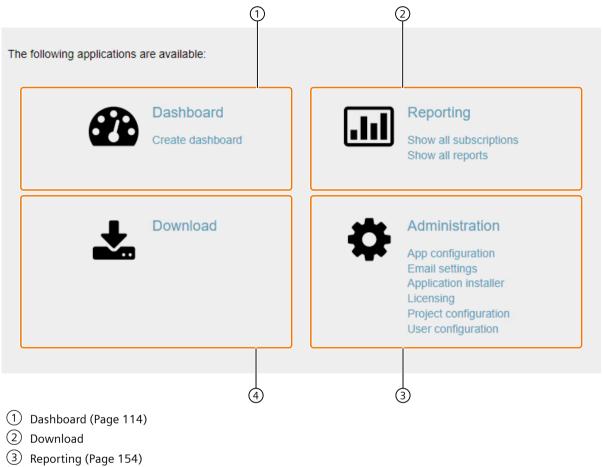
Definition

The work area is the main area in the Web application. An overview of the individual apps is shown on the start page. You can select specific contents of the apps directly. The division of the work area can vary within the apps.

3.4 Functions

Structure

The work area in the web application is divided into the following areas:



(4) Administration

Step-by-step instructions

Opening the work area in the Web application

Requirement

You are a member of one of the following Windows user groups:

- SIMATIC Report Publishers
- SIMATIC Report Users
- SIMATIC Report Administrators

Procedure	
	1. Open the Web application of the Information Server by entering the URL defined during installation into the address bar of the browser.
	2. Select an app in the work area.
Result	
nesure	The work area of the selected app is open.
3.4.2.6	Header
Header	
Definition	
	The login name of the currently logged in user is visible in the header.
	You can open the user profile, notifications and help in the header.
Structure	
	The header has the following structure:
	(1) (2) (3) (4) (5)

R	User name	≤ [] 0 0
1	User profile (Page 106)	Opens the user profile.
2	Notifications (Page 107)	Displays the notifications to which you have subscribed.
3	Full-screen mode (Page 114)	Enables or disables full-screen mode.
4	Help (Page 109)	Opens the Information Server help.

(5) Logout (Page 113) Logs the user out.

3.4 Functions

User profile

Definition

The user profile contains the following information and specifications:

- General:
 - Specification of the display names
 - Selection of a profile picture
 - E-mail address
 - Selection of the display language
 - Delete status data of the application
- Selection of the notification types that are received or sent
- Effective authorizations: Overview of the current authorizations of the assigned Windows user group

Structure

Use	r profile						×
		rcint					
	General Notifica	tions Gro	oups/Permissions	Effective Permissions			
		Display name		User name			
r		Email address		test@server.com			
		Language		English (United S	itates)		•
		Clear all application	state data				
						Cancel	Save
1	Profile picture (Pa	age 109)	Upload	s a new profile p	victure.		
② General (Page 110) D		Display	s general inform	nation about the use	r profile, e.g.	the lar	
③ Notifications (Page 111)		Shows	the list of notific	ations that can be a	ctivated.		
④ Groups/Permissions (Page 112)		Shows	s the overview of the groups assigned to your profile.				
5	5 Effective permissions (Page 113)		Shows	the list of all per	missions assigned to	o your profile	and ro

The user profile is structured as follows:

Notifications

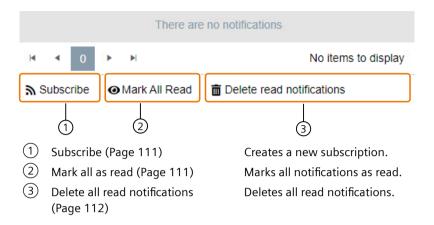
Definition

In the Notifications area you receive the news that you have selected in your profile under "Notifications".

3.4 Functions

Structure

The following functions are available:



Help

The help of the Information Server is displayed by the PUD Manager.

The help consists of modern documentation that concentrates on the use of filters based on metadata (attributes, product properties) and the search function (e.g. consideration of synonyms).

Through nesting, the user can decide on the degree of detail required in the information. The user can specifically filter the contents using metadata such as user group, application phase, or software area

Step-by-step instructions

Clear all application state data

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
 - The user profile is open.

Procedure

- 1. Select the "General" tab.
- 2. Select the "Clear all application state data" button.

Note

You delete the following data by confirming this option:

- Configuration of tables in reporting (sorting, filters, displayed columns).
- · Selection of tags/messages/batch: Position, size, last selected folder

Result

The application state data is deleted.

Upload profile picture

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- The Web application is open.

Procedure

- 1. Open the user profile.
- 2. Select the placeholder of the profile picture.
- 3. Select the required profile picture.
- 4. Confirm your selection.

Result

The profile picture is uploaded.

Opening online help

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- The Web application is open and the PUD is installed.

SIMATIC Information Server

3.4 Functions

Procedure

Select the "?" button.

Result

The PUD online help opens.

Opening a user profile

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- The Web application is open.

Procedure

Select "User profile".

Result

The "User profile" dialog opens.

Select language

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- The Web application is open.

- 1. Open "User profile".
- 2. Select the "General" tab.
- 3. Select the language from the drop-down menu.
- 4. Select "Save".

Result

The display language is changed.

Subscribing to notifications

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- The Web application is open.

Procedure

- 1. Select "User profile".
- 2. Select the "Permissions" tab.
- 3. In the list, select the notification types that you want to receive and send.
- 4. Select "Save".

Result

The notifications are activated.

Mark all notifications as read

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- The Web application is open.

- 1. Open "Notifications".
- 2. Select "Mark all notifications as read".

SIMATIC Information Server

3.4 Functions

Result

All notifications are marked as read.

Delete all read notifications

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- The Web application is open.

Procedure

- 1. Open "Notifications".
- 2. Select "Delete read notifications".

Result

All read notifications are deleted.

Checking groups/permissions

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- The Web application is open.

- 1. Open "User profile".
- 2. Select the "Groups/Permissions" tab.
- 3. Check the overview of the groups assigned to your profile.
- 4. Select "Save".

Result

The user is logged off.

Checking effective permissions

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- The Web application is open.

Procedure

- 1. Open "User profile".
- 2. Select the "Effective permissions" tab.
- 3. Check the list of all rights assigned to your profile and role.
- 4. Select "Save".

Result

The user is logged off.

Log out user

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- The Web application is open.

Procedure

1. Select "Logout".

Note

Logout is only available when the Information Server is not opened via the PCS neo Portal.

Result

The user is logged out.

Enable full-screen mode

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- The Web application is open.

Procedure

1. Select "Full-screen mode".

Result

Full-screen mode is enabled.

3.4.2.7 Dashboard

Dashboard

Definition

Various data visualization options are available within the dashboard using the configurable controls.

Layout

			1									
🕒 Create 🛛 🗹	Edit 🛅 Delete	- Import	Export Export	 Create 	🗗 Duplicate	● View	🕑 Edit	🛅 Delete	Export Export	Sort Name	▼ S	Search
Folder	1			Dashbo	»							
			3			2						
1	Toolbar (F	Page 11	5)			-						
2	Overview	of the	dashboards	already	created							

The "Dashboard" app is structured as follows:

Toolbar in the "Dashboard" app

Overview of the folder hierarchy

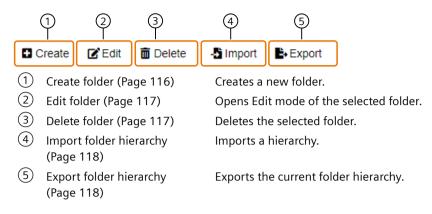
Definition

(3)

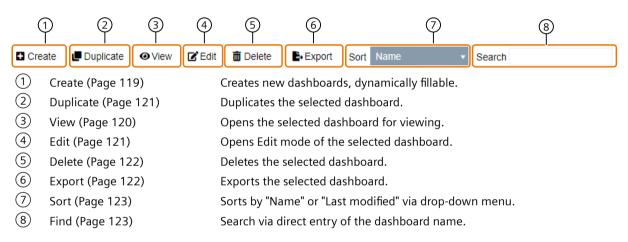
The toolbar contains all functions within the "Dashboard" app.

Structure

The toolbar for the folders contains the following functions:



The dashboard toolbar contains the following functions:



Step-by-step instructions

Create folder

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- The "Dashboard" app is open.

Procedure

- 1. Select "Create" in the toolbar of the folder hierarchy.
- 2. Assign a name.
- 3. Select "Save".

Result

A folder for dashboards is created.

Edit folder

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- The "Dashboard" app is open.

Procedure

- 1. Select the folder you want to rename.
- 2. Select "Edit".
- 3. Change the name.
- 4. Select "Save".

Result

The name of the folder has changed.

Delete folder

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- The "Dashboard" app is open.
- A folder has been created.

SIMATIC Information Server

3.4 Functions

Procedure

- 1. Select the folder you want to delete.
- 2. Select "Delete".
- 3. Confirm your selection.

Result

The folder and all the dashboards it contains are deleted.

Import folder hierarchy

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- The "Dashboard" app is open.

Procedure

- 1. Select "Import".
- 2. Select the file you want to import.
- 3. Confirm the selection with "Import".

Result

The folder hierarchy is imported.

Export folder hierarchy

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- The "Dashboard" app is open.

Procedure

- 1. Select the folder you want to export.
- 2. Select "Export".

Note

To export all dashboards, select the root folder and click the button to confirm the export. The dashboards are created in the specified location with the same folder structure as in the Web application.

Result

The folder has been saved locally in the specified target directory.

Creating a dashboard

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators

Procedure

1. Select "Create".

Note

In contrast to version 2014 SP2, the dynamic dashboard template no longer statically links the controls to the divisions of the selected dashboard. Instead, they can be dragged and dropped to the desired location.

- 2. Drag-and-drop controls into the dashboard to suit your needs. Controls (Page 124)
- 3. Select "Save".

Note

The "Properties" dialog opens automatically when saving for the first time. You can open the dialog at any time using the "Properties" button.

4. Select the properties of the dashboard. Editing the properties of a dashboard (Page 140)

5.	Select one of the master pages created for the dashboard layout.
	Master pages (Page 188)

Note

Time filter

You have the option of creating one or more time filters that you can use to filter for controls within the dashboard. The created filters appear in the header of the dashboard. Filter in dashboards by time

6. Select "Save".

Result

The dashboard is created and appears in the overview of the "Dashboard" app.

See also

Filtering in dashboards by time (Page 139)

Viewing a dashboard

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- A dashboard is created.

Procedure

- 1. Select the dashboard you want to view.
- 2. Select the "View".

Note

Print function

When you open a selected dashboard with the "View" function, you have the option to print the view. The computer's own dialog opens for this. For a proportional view of the dashboard displayed on the printout, make sure you layout or scale the view and preview it.

Result

The selected dashboard is open in View mode.

Editing a dashboard

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- A dashboard is created.

Procedure

- 1. Select the dashboard you want to edit.
- 2. Select "Edit".

Result

The selected dashboard is open in Edit mode.

Duplicating a dashboard

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- A dashboard is created.

Procedure

- 1. Select a dashboard that you want to duplicate.
- 2. Select "Duplicate".

Result

The selected dashboard is duplicated.

Deleting a dashboard

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- A dashboard is created.

Procedure

- 1. Select the dashboard you want to delete.
- 2. Select "Delete".

Result

The selected dashboard is deleted.

Exporting a dashboard

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- A dashboard is created.

Procedure

- 1. Select the dashboard you want to export.
- 2. Select "Export".

Result

The dashboard has been saved locally in the default destination directory.

Sorting an overview of the dashboards

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- The "Dashboard" app is open.

Procedure

- 1. Select a sorting order for the created dashboards:
 - Name
 - Last modified

Result

The dashboards are displayed sorted according to your selection.

Browsing the overview of the dashboards

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- The "Dashboard" app is open.

Procedure

Enter the name of the dashboard you are looking for.

Result

The dashboard you are looking for is displayed in the overview.

Controls

Controls

Definition

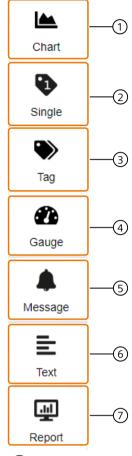
A control is an object for visualizing specific values. Each control displays these values from the projects differently.

The following options are available:

- Historical values or continuous adding of the latest values via the "Live data" mode
- Single or multiple tags, their values and quality codes
- Tags as gauge, renewed by live data
- Historical messages, currently pending messages and message statistics
- Integration of text and placeholders
- Integration of reports

Layout

The following controls are available:



- 1 "Chart" control (Page 126)
- 2 "Single" control (Page 129)
- ③ "Tag" control (Page 130)
- (4) "Gauge" control (Page 131)
- (5) "Message" control (Page 132)
- 6 "Text" control (Page 136)
- (7) "Report" control (Page 137)

- Open the dialog for the "Chart" control in the work area using drag-anddrop.
- Open the dialog for the "Single" control in the work area using drag-anddrop.
- Open the dialog for the "Tag" control in the work area using drag-and-drop.
- Open the dialog for the "Gauge" control in the work area using drag-anddrop.
- trol Open the dialog for the "Message" control in the work area using drag-anddrop.
- Open the dialog for the "Text" control in the work area using drag-and-drop.
 - Open the dialog for the "Report" control in the work area using drag-anddrop.

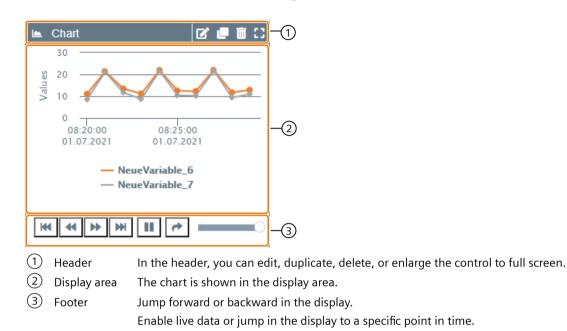
"Chart" control

Definition

With the "Chart" control, you can display tag values as a chart. The control supports both historical queries and a "Live data" mode that continuously adds the latest values to the view. Tags can be displayed with different time axes and value axes.

Layout

The "Chart" control is divided into the following areas:



Settings for the control

"General" tab	Description
Project	Selection of the data source
Tag browsing	Select New tag, Edit tag, Delete tag
Title	Header of the control, optional
Step forward/backward	Determines the number of seconds, minutes, hours or days to jump to the future or past when using the Forward/Back button.
Maximum number of values	Determines the maximum number of tag values that may be read from the server per query. For security reasons, the value must be limited to protect server resources.
Legend position	Determines the position of the legend in the chart.
Legend in the layout	Determines whether the legend of tag names should be structured horizontally or vertically.
Crosshairs	Turns on a mode in which an additional vertical line is displayed when the cursor contacts the graph.

"Edit element" dialog	Description
Tag	Tag name
Enable aggregation	Toggles between aggregated values and raw values.
Aggregate function	If aggregation is enabled, the desired aggregate function can be selected here (e.g. interval-based summary or determination of maximum values).
Aggregation interval	Determines the interval size to be used for the aggregate function.
Туре	Allows the tag values to be displayed in different forms (e.g. as a line chart or as a bar chart).
Enable data labels	Determines whether a window with the time and value of the current data point of the tag should be displayed when the mouse hovers over the chart.
Line style	Graphical representation of the line within the chart.
Line width (pixels)	Line width within the chart, in pixels.
Color	Line color
Time axis	The control supports the simultaneous display of several time axes, so that values from different days can be compared graphically, for example. The time axis for the current tag can be determined here.
Value axis	The control supports the simultaneous display of several value axes, so that values of different days can be compared graphically, for example. The value axis for the current tag can be determined here.

"Time axes" tab	Description
Time axes	Allows adding additional time axes that can be assigned to individual tags and are displayed below or above the chart.
Object name	Name of the time axis within the settings. The name is not displayed in the chart and is only used for identification.
Axis title (optional)	Labeling of the time axis, optional
Data mode	Toggles between different query modes.
Enable grid lines	Displays additional vertical lines for subdivision of the chart by time.
Position	Determines whether the time axis should be displayed above or below the chart.

"Value axes" tab	Description
Value axis	Allows you to add additional value axes that can be assigned to individual tags and displayed either to the left or to the right of the chart.
Object name	Name of the value axis within the settings. This name is not displayed in the chart and is only used for identification.
Axis title (optional)	Labeling of the value axis, optional
Enable grid lines	Displays additional horizontal lines for subdivision of the chart by values.
Activate limits	Switches between automatic value range determination and static minimum and maximum values for the value axis.
Interval between ticks	Automatic: Distributes the horizontal bars of the value axis automatically.
	• Manual: Manual definition of the distance between horizontal marks on the value axis.
Position	Determines whether the time axis should be displayed on the left or right of the chart.

Data modes

Definition

You can choose from different data modes when configuring the "Chart" control.

Layout

The following data modes are available:

Data mode	Setting				
Specify start and end date	Shows tag values from the specified time range.				
	• Start and end time Selection between:				
	 Default: Date and time information 				
	 Relative: Relative time information (Time information (Page 157)) 				
	 List: Selection of filters already created 				
Time interval	Shows tag values within an interval starting at the specified time.				
	Start time selection between:				
	 Default: Date and time information 				
	 Relative: Relative time information (Time information (Page 157)) 				
	 List: Selection of filters already created 				
	Time interval				
Live data	Shows tag values from the last 10 minutes and contin- uously adds new tag values to the view. The interval size can be changed.				
	Time interval				

List of time filters

By selecting the "List", you select one of the time filters already defined or create new filters for filtering the dashboard.

The selected time filter appears in the dashboard header and is applied to all "Chart" controls in the selected dashboard for which "Specify start and end date" or "Time interval" is selected as the "List" setting in the data mode.

You can toggle in the header between the different time filters for the selected dashboard.

Creating a time filter for a dashboard (Page 139)

Filtering in dashboards by time (Page 139)

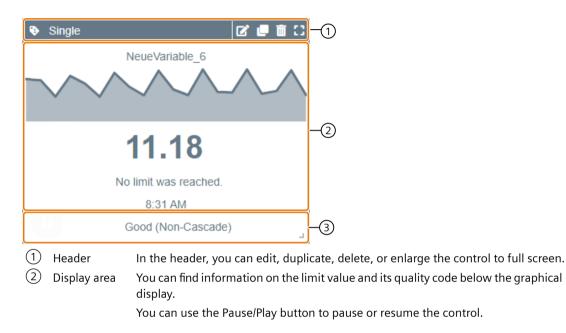
"Single" control

Definition

The "Single" control allows you to view live data of a single tag, its current value and its quality code. In addition, warnings can be configured when limits are violated.

Layout

The "Single" control is divided into the following areas:



Note

When you pause the control, values are displayed at certain intervals, for which the corresponding data is displayed when you mouse-over.

If the configured high or low limit is violated, the value display takes on the color that corresponds to the limit.

Settings for the control

"General" tab	Description
Title	Header of the control, optional
Project	Selection of the data source
Tag	Tag whose values are to be displayed.
Number of decimal places	Number of decimal places to be displayed as a numerical value below the chart.
Displaying quality code	Switches on the display of the quality code. The quality code is a numeric value that contains additional information about the last tag value. The codes are explained in the "Quality codes" tab.

"Quality codes" tab	Description
Table	Overview of all quality codes, their meaning and the configured colors.
	The color can be configured for each quality code.

"Tag" control

Definition

With the "Tag" control, you can display the live data of several tags in tabular form, as well as their current values and quality codes. Optionally, aggregate values over the past hour or additional time intervals can also be displayed.

Layout

The "Tag" control is divided into the following areas:

🗞 Tag			2 6 6 3	-1
Name	History	Value	Quality code	
NeueVariable_6		10.89	Good	
NeueVariable_7		8.03	Good	-2
0				-3
 Header In the header, you can edit, duplicate, delete, or enlarge the control to full screen. Display area The display area shows the values and the chart. Footer You can use the Pause/Play button to pause or resume the control. 				

Settings for the control

"General" tab	Description
Title	Header of the control, optional
Project	Selection of the data source
Tags	Tags whose values are displayed in tabular form.
Number of decimal places	Number of decimal places to be displayed as a numerical value below the chart.

"General" tab	Description
Displaying quality code	Switches on the display of the quality code. The quality code is a numeric value that contains additional information about the last tag value. The codes are explained in the "Quality codes" tab.
Functions	Aggregate functions, which are shown as additional columns. In each case, a single aggregate value is calculated for the specified time interval.
Time interval	By default, the aggregate value is calculated for the past hour. The interval is configurable.

"Quality codes" tab	Description
	Overview of all quality codes, their meaning and the configured colors. The color can be configured for each quality code.

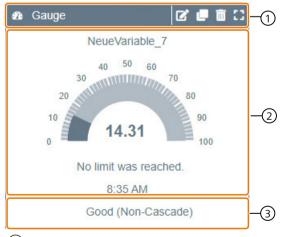
"Gauge" control

Definition

You can use the "Gauge" control to visualize the current value of a tag in form of a gauge with configurable value range. The value is continuously refreshed by live data. The control supports the display of quality codes.

Layout

The "Gauge" control is divided into the following areas:



Header In the header, you can edit, duplicate, delete, or enlarge the control to full screen.
 Display area You can find information about the limit below the graphical display.

③ Footer

Display of the quality code You can use the Pause/Play button to pause or resume the control.

Note

If the configured high or low limit is violated, the value display takes on the color that corresponds to the limit.

Settings for the control

"General" tab	Description	
Title	Header of the control, optional	
Project	Selection of the data source	
Tag	Tag whose values are to be displayed.	
Number of decimal places	Number of decimal places to be displayed as a numerical value below the chart.	
Displaying quality code	Switches on the display of the quality code. The quality code is a numeric value tha contains additional information about the last tag value. The codes are explained in the "Quality codes" tab.	
Min. value	Determines the minimum value on the left side of the measurement display.	
Max. value	Determines the maximum value on the right side of the measurement display.	
Interval between ticks	Automatic: Distributes the horizontal bars of the value axis automatically.	
	Manual: Manual definition of the distance between horizontal marks on the value axis.	

"Quality codes" tab	Description
Table	Overview of all quality codes, their meaning and the configured colors.
	The color can be configured for each quality code.

"Message" control

Definition

The "Message" control allows you to display historical messages, currently pending messages and message statistics (hitlist) in tabular form. The control allows you to configure filters to limit the messages to be read out, e.g. based on a certain error type or a certain location.

Note

Only messages can be displayed with this control. It is not possible to acknowledge or comment messages.

Layout

🜲 Message					e e a 2 <mark>-0</mark>	D
Number	<u>Time</u> ↓	: <u>s</u>	status	:	Message text	
1	7/1/2021 8:37:10 AM	-			A	
2	7/1/2021 8:37:08 AM	-			High Limit Value	
1	7/1/2021 8:37:08 AM	+				
1	7/1/2021 8:37:08 AM	А	cknowled	I	-(2	2)
1	7/1/2021 8:37:06 AM	-				
1	7/1/2021 8:37:04 AM	+				
1	7/1/2021 8:37:04 AM	А	cknowled	I		
1	7/1/2021 8:37:02 AM	-				
🛃 Message I	ist 🛢 Archive list 🔟	Hitlist	н	••		\mathbb{B}
1 Header	In the header, you	u can e	dit, dupli	cate	, delete, or enlarge the control to full	screen.
 Display a 			-		n the display area.	
					ling or ascending order using the arrow dditional attributes to the table.	ws next
③ Footer	Scroll the table in	the fo	oter forw	ards	s or backwards.	

The "Message" control is divided into the following areas:

You can switch between three different views, depending on the data source: Message list (live mode), archive list (archive mode) and hit list (statistical analysis mode).

Views in the control

The control supports three different views, which you can switch between using the corresponding buttons in the footer of the control.

- Message bar: Display of currently pending messages
- Archive list: Display of historical messages from a specific time interval
- Hit list: Display of statistics related to the occurrence frequency of messages

Restrictions

The following table shows the restrictions of the view according to the connected data source.

Data source	Message bar	Archive list	Hit list
PCS 7/WinCC OS	Yes	Yes	Yes
PH PCS 7/WinCC	Yes	Yes	No
PCS neo	Yes	Yes	No

Settings for the control

"Settings" dialog	Description		
Title	Header of the control, optional		
Project	Data sources from which messages are to be displayed.		
Messages per page	Determines the maximum number of messages to be displayed in tabular form per page.		
Filter	Allows the creation and management of filter groups.		
	Each of these groups consists of a number of linked filters (logical AND) that further limit the selection of messages to be read. Groups can be enabled or disabled individually and logically linked (logical OR).		
	When creating a new group, a range of validity must be selected:		
	• Only for this dashboard: The filter group can be used only in the "Message" controls of the same dashboard. The filter group is not visible in other dashboards.		
	• For all dashboards: The filter group can be used in all "Message" controls in all dashboards.		

Add filter group	Description
Name	Name of the filter group within the settings
	The name has no effect on the display of the data.
Private	Determines whether the filter group is visible only to the current user or to all users.
Filter	Defines a filter condition that further restricts the selection of messages to be read.
	• Filter by: The message attribute by which to filter.
	• Operator The operator to use to compare the message attribute to the value.
	• Setting: The value to which the message attribute is compared.

Filter criteria

Definition

You can select different filter criteria when configuring a "Message" control.

Layout

The following filter criteria are available:

Filter	Setting
Date/time	 Operators: = l > l ≥ l < l ≤ Select between:
	 Default: Date and time information
	 Relative: relative time information (see section Time information (Page 157))
	 List: Selection from filters already created
	Input: Character string or numeric, depending on selection
State	• Operators: = $l > l \ge l < l \le$
	Input: Numeric
Number	 Operators: = / > / ≥ / < / ≤
	Input: Numeric
Class	• Operators: include = /
	Input: Character string
Туре	Operators: include = /
	Input: Character string
AG number	Operators: include = /
	Input: Character string
CPU number	Operators: include = /
	Input: Character string
Computer name	Operators: include = /
	Input: Character string
User name	• Operators: include = /
	Input: Character string
Priority	 Operators: = / > / ≥ / < / ≤
	Input: Numeric
Message text	• Operators: include = /
	Input: Character string
Fault location	• Operators: include = /
	Input: Character string
Block 3 to block 10	Operators: include = /
	Input: Character string
Process value 1 to process value 10	Operators: = / equal (text) / include (text) / > / ≥ / < / ≤
	Input: Character string or numeric
Name	Operators: include = I
	Input: Character string

Filter	Setting	
Area	• Operators: include = /	
	Input: Character string	
Origin	Operators: include = /	
	Input: Character string	
Event message	Operators: include = /	
	Input: Character string	
Process value (text) to process value 9 (text)	Operators: include = /	
	Input: Character string	

Note

The possible filter criteria vary depending on the connected data source.

"Text" control

Definition

The "Text" control allows you to display and format text and images. You can use special placeholders within the text, which are later replaced dynamically.

Layout

The "Text" control is divided into the following areas:

≣ Text	C 🖉 🖬 🕄	-1
Example		
		-2

Header In the header, you can edit, duplicate, delete, or enlarge the control to full screen.
 Display area The display area shows the integrated information, graphics, etc.

Settings for the control

"Settings" dialog	Description
Title	Header of the control, optional
Contents	Text to be displayed within the control.
	By using the buttons above the text input box, the text can be displayed as bold, italic, underlined, left-justified, centered, right-justified, as a list or as an enumera- tion. Special placeholders can be inserted using the drop-down menu on the right side:
	• {name} – Name of the dashboard
	{description} – Description of the dashboard
	• {currentdate} – Today's date
Show header and border	Determines whether to display the header and border around the control.

"Report" control

Definition

The "Report" control allows you to include reports from the "Reporting" app in the dashboard. The report is generated once when the dashboard is opened with the parameters previously set.

Note

Rendering a report within a "Report" control in a dashboard is faster than in reporting because only one page is rendered at a time.

Layout

		Mes from 7/1/2021 8:39	sages by origin 57 AM to 7/1/2021 8:40	:57 AM		
Dee	High Linit Value					(
	0	5	18 Count	15	20	
71528218	et de ame		Sinoka_63_017			
1 of 1	N	44	⇒ N	Q F	t page	_

The "Report" control is divided into the following areas:

ontrol to full screen.

2 Display area The process values are displayed as configured in the display area.

3 Footer Scroll the table forward or backward in the footer or adjust the display size of the report.

Settings for the control

"Settings" dialog	Description
Title	Header of the control, optional
Report template	The report template to be used for embedding.
	The selection is the same as in the "Reporting" app.
Parameter	The parameters to be used to generate the report.
	Select "Edit parameters" to open the dialog for configuring the parameters. The dialog is functionally identical to the app.

Step-by-step instructions for a dashboard

Creating a time filter for a dashboard

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- A dashboard is open and a control is created.

Procedure

- 1. Open the "Properties" dialog.
- 2. Select "Add".
- 3. Assign a name for the time filter.
- 4. Enter a relative or absolute value by which to filter.
- 5. Select "Save".

Result

The time filter appears in the header of the dashboard.

Filtering in dashboards by time

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- A time filter for the dashboard is created.

- 1. Select the time filter you want to apply in the dashboard header.
- 2. Select "Apply".

SIMATIC Information Server

3.4 Functions

Result

The time filter is applied to the dashboard.

Editing dashboard properties

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- A dashboard is open.

Procedure

- 1. Open the "Properties" dialog.
- 2. Assign a name.
- 3. Add an optional description.
- 4. Select a master page for the dashboard.
- 5. Optionally, select a time filter or create a new time filter. Creating a time filter for a dashboard (Page 139)
- 6. Select "Save".

Result

The properties of the dashboard are edited.

Configuring step-by-step instructions for controls

Configuring "Chart" control

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- A dashboard is open.

Procedure

- 1. Use drag-and-drop to place the "Chart" control on the dashboard.
- 2. Select a project in the "General" tab.
- 3. Select "Add" and select the appropriate tags. The tags appear in the table.

Note

You can select several tags at the same time. They are automatically assigned different colors in the overview.

- 4. Select a tag.
- 5. Select the "Edit" button.
- 6. If needed, enable an aggregate function and set an aggregation interval.
- 7. Select the diagram type for displaying the data from the drop-down menu.
- 8. Select "Enable data labels" if required.

Note

The data label appears in the chart and shows you the data values. The data label can be faded in/out or displayed transparently, i.e. the label is only visible when moving the mouse over the position in the diagram.

9. Configure the display of the diagram and the tag values in the diagram.

10. Select the time and value axes.

11. Repeat the configuration for each tag and confirm with "Save".

12. Configure the following display options:

- Step forward/backward
- Maximum number of values
- Legend position
- Legend in the layout
- Enable crosshairs

13. Configure one or more time and value axes in the "Time axes" and "Value axes" tabs.

Note

Vertical axis

Specify a minimum and maximum limit for the representation of the data in the diagram. The marking interval can be set automatically or manually.

Data modes

The following data modes are available during the parameter assignment of the control: Data modes (Page 128)

14. Select "Save".

SIMATIC Information Server

3.4 Functions

Result

A "Chart" control is configured.

Configuring "Single" control

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- A dashboard is open.

Procedure

- 1. Use drag-and-drop to place the "Single" control on the dashboard.
- 2. Optionally, enter a title for the control.
- 3. Select a project.
- 4. Select a tag from the connected archives.
- 5. Select "Edit".
- 6. Optionally, enable a custom unit.
- 7. Optionally, define one or more high and low limits and save the settings.

Note

Display of the limits in the control

Depending on the configuration, the limits are displayed in color in the control. If the limit is exceeded or undershot, the value with the selected color for this limit is displayed.

- 8. Select the number of decimal places displayed.
- 9. If required, disable the check box for displaying the quality code.

Note

The quality code is activated by default.

10. Configure the display and description of the quality codes in the "Quality Codes" tab.

11. Select "Save".

Result

A "Single" control is configured.

Pausing and resuming "Single" control

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- A dashboard with a configured "Single" control is open.

Procedure

Select "Play/Pause" to pause or resume the "Single" control.

Note

When the control is paused the individual values are displayed. The label is visible when moving the mouse to the position in the diagram.

Result

The "Single" control is paused / continued.

Configuring "Tag" control

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- A dashboard is open.

- 1. Use drag-and-drop to place the "Tag" control on the dashboard.
- 2. Optionally, enter a title for the control.
- 3. Select a project.
- 4. Select the tag from a linked archive or edit a tag.
- 5. Optionally, enable a custom unit.
- 6. Select the number of decimal places.

7. Optionally, disable the check box for displaying the quality code.

Note

The quality code is activated by default.

- 8. Optionally, enable one or more aggregate functions.
 - Sum
 - Maximum
 - Minimum
 - Average
- 9. Select a time interval.
- 10. Configure the display and description of the quality codes in the "Quality Codes" tab.
- 11. Select "Save".

Result

A "Tag" control is configured.

Configuring "Gauge" control

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- A dashboard is open.

- 1. Use drag-and-drop to place the "Gauge" control on the dashboard.
- 2. Optionally, enter a title for the control.
- 3. Select a project.
- 4. Select a tag from the connected archives.
- 5. Select "Edit".
- 6. Optionally, enable a custom unit.

7. Optionally, define one or more high and low limits and save the settings.

Note

Display of the limits in the control

Depending on the configuration, the limits are displayed in color in the control. If the limit is exceeded or undershot, the value with the selected color for this limit is displayed.

- 8. Select the number of decimal places.
- 9. If required, disable the check box for displaying the quality code.

Note

The quality code is activated by default.

10. Define the displayed range of values for the control by entering a minimum and maximum.

11. Select the marking interval.

12. Configure the display and description of the quality codes in the "Quality Codes" tab.

13. Select "Save".

Result

A "Gauge" control is configured.

Configuring "Message" control

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- A dashboard is open.

Procedure

- 1. Use drag-and-drop to place the "Message" control on the dashboard.
- 2. Optionally, enter a title for the control.
- 3. Select one or more projects.
- 4. Select the number of messages per page.

Note

If you have already configured filters for this control, you can activate/deactivate the created filters here.

- 5. Select "Add" and between "Only for this dashboard" and "For all dashboards".
 - You create a local filter group with the selection "Only for this dashboard".
 - Select "For all dashboards" to create a global filter group.
- 6. Configure one or more filters. Creating a filter group (Page 148) Editing a filter group (Page 149)
- 7. Activate the filters you want to apply in this control. Activating / deactivating a filter group. (Page 148)
- 8. Select "Save".

Result

A "Message" control is configured. You can switch between three different views, depending on the data source: Message list (live mode), archive list (archive mode) and hit list (statistical analysis mode).

Show/hide columns (Page 150)

Sorting the columns in ascending or descending order (Page 151)

Changing views (Page 151)

Configuring "Text" control

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- A dashboard is open.

Procedure

- 1. Use drag-and-drop to place the "Text" control on the dashboard.
- 2. Select a title.
- 3. Enter a text and format the content with the tools in the input window.

Note

You can also insert hyperlinks, graphics and tables here.

4. Using the drop-down menu, you can insert the dashboard name, the description of the dashboard and the current date and time.

- 5. Disable the "Show header and frame" option if you only want to display the contents of the control.
- 6. Select "Save".

Result

A "Text" control is configured.

Configuring "Report" control

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- A dashboard is open.

Procedure

- 1. Use drag-and-drop to place the "Report" control on the dashboard.
- 2. Select a title.
- 3. Select a report template and configure the parameters.

Note

For details on configuration of the individual report templates, see the section "Reporting". Report generation (Page 164)

4. Select "Save".

Note

Rendering a report as a "Report" control in a dashboard is faster than in reporting because only one page is rendered at a time.

Result

A "Report" control is configured.

Step-by-step instructions for a "Message" control

Creating a filter group

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- A dashboard is open.

Procedure

- 1. Enter a name for the filter group.
- 2. Activate the "Private" option if the filter group should not be visible to all users.
- 3. Create filters based on the specified criteria. Filter criteria (Page 134)
- 4. Select "Add" when you have configured the filter group.

Result

The created filter group appears in the list.

Activate/deactivate filter group

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- A dashboard is open.
- A "Message" control is open in edit mode and at least one filter has been created.

Procedure

1. In the overview of the filter groups, activate / deactivate the option for the filter group you want to activate / deactivate in the "Activated" column.

Result

The filter group is activated / deactivated.

Editing a filter group

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- A dashboard is open.
- A "Message" control is open in edit mode and a filter group has been created.

Procedure

- 1. Select the filter group from the list.
- 2. Select "Edit".
- 3. Edit the filter group.
- 4. Save your changes.

Result

The filter group is processed.

Deleting a filter group

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- A dashboard is open.
- A "Message" control is open in edit mode and a filter group has been created.

Procedure

- 1. Select the filter group from the list.
- 2. Select "Delete".

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Result

The filter group is deleted.

Deleting all filter groups

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- A dashboard is open.
- A "Message" control is open in edit mode and a filter group has been created.

Procedure

1. Select "Delete all".

Result

All filter groups are deleted.

Show/hide columns

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- A dashboard is open and a "Message" control has been configured.

Procedure

- 1. Open the column settings of the table.
- 2. Select "Columns".
- 3. Activate / deactivate the columns you want to show or hide.

Result

The columns are activated / deactivated.

Sorting the columns in ascending or descending order

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- A dashboard is open and a "Message" control has been configured.

Procedure

- 1. Go to the column you want to sort.
- 2. Select "Column settings".
- 3. Select "Sort in ascending order" or "Sort in descending order".

Result

The columns are sorted in ascending / descending order.

Changing views

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- A dashboard is open and a "Message" control has been configured.

Procedure

Select the view for the control in the footer:

- Message bar: Live mode
- Archive list: Archive mode
- Hit list: Statistical analysis mode

Result

The contents of the control are displayed in the selected view.

Step-by-step instructions for controls in general

Editing controls

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- A dashboard is open and a control is created.

Procedure

Select "Edit control" in the control.

Result

Edit mode for the selected control opens.

Duplicating a control

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- A dashboard is open and a control is created.

Procedure

Select the "Duplicate control" option in the control.

Result

The selected control is duplicated.

Deleting controls

Requirement	
	You are a member of one of the following Windows user groups:
	 SIMATIC Report Publishers
	 SIMATIC Report Users
	 SIMATIC Report Administrators
	A dashboard is open and a control is created.
Procedure	
	Select "Delete control" in the control.
Result	
	The selected control is deleted.
Enlarging cont	role
Requirement	
	You are a member of one of the following Windows user groups:
	 SIMATIC Report Publishers
	– SIMATIC Report Users
	 SIMATIC Report Administrators
	A dashboard is open and a control is created.
Procedure	
	Select the "Enable full-screen mode" option in the control.
	Note
	By zooming into the control, more information is displayed in the Single and Gauge controls.
Result	
	The selected control is enlarged.

3.4.2.8 Reporting

Reporting

Definition

The "Reporting" app enables the creation of reports and subscriptions. Report generation (Page 164) You define the content of the report or subscription with the parameter assignment. Reporting contains the following functions for reports:

- Create
- Edit
- View
- Export
- Remove
- Rerun

Reporting contains the following functions for subscriptions:

- Create
- Edit
- Remove

The report is visualized according to the selected report template, as chart, table or batch report. The overview and details of report templates can be found here: Report templates (Page 165)

Structure

Duration until acknowledgment User name Created by Frequency distribution chart over specified time frame, that shows the number of messages requiring 6/29/2021 6:38 AM Created acknowledgment. User name Modified by Modified 6/30/2021 11:54 AM Reports (2) Let Create report 🔹 💿 View S Reset filter 6 1 Export 🕑 Edit Remove C Rerun <u> U</u>ser name Project Project User name Report 7/1/2021 8:49:25 AM Start 7/1/2021 8:4. 7/1/2021 8:4. End Subscriptions (1) Create subscription 🗹 Edit 🛛 🛅 Remove S Reset filter -(3) (1)Reporting Shows the overview and configuration options for reports. (2) Parameter presets Creates a parameter preset or shows the parameter presets already created. (3) Subscriptions Shows the overview and configuration options for subscriptions.

Reporting is subdivided into the following areas:

Overview table

The columns in the table are can be shown or hidden. Not all columns are shown by default. Show/hide columns (Page 172)

The tables in reporting provide you with an overview of the following information:

Table	Column	Description		
Reports	Preview	Preview of the created report		
	Name	Name of the report		
	Processing	Current editing status		
	Created by	User		
	Comment	Comment on this report, optional entry		
	Created	Date created		
	Modified	Date of the last change		
	Parameters	Project parameters: Project name, start data, end date, selec- ted message classes		
	Private	Indicates whether the report is visible to all Information Server users or only to the user who created the report.		
	Cleanup	Indicates whether the report is selected for automatic release of storage space.		
Subscriptions	Name	Name of the subscription		
	Last executed	Date of the last execution		
	Triggers	A report is generated and sent based on the specified triggering criteria.		
	Parameters	Project name, start data, end date		
	Comment	Comment on this report, optional entry		
	Created by	User		
	Created	Date created		
	Modified	Date of the last change		
	Private	Indicates whether the subscription is visible to all Information Server users or only to the user who created the subscription.		
	Cleanup	Indicates whether the subscription is selected for automatic release of storage space.		
	Enabled	Indicates whether the subscription is activated and creates/ sends the reports for the specified triggers.		
	Project	Selected project		
	Start	Start time		
	End	End time		

Filter

Depending on the column type in the column header, different filters with up to two conditions per column can be used via the shortcut menu.

Set filter (Page 173)

Reset filter (Page 174)

Sorting

The columns can be sorted in ascending or descending order using the shortcut menu.

Sorting the columns in ascending or descending order (Page 173)

See also

Browsing tags (Page 159) Parameter presets (Page 161) Subscriptions (Page 174)

Time information

Definition

The time specifications define for reports:

- The start and end date
- A time period in which the data is accessed to evaluate the report

In the Information Server, enter absolute or relative times or select predefined times from a list.

Note

Time data in different time zones

If the Information Server and Information Server Client are in different time zones, the reports display the local time of the Information Server.

The inputs in the Information Server Client are in the local time of the client.

The local time of the client is always displayed in the Excel AddIn.

Example: The IS client is running in Germany (UTC+1), the IS server is running in China (UTC+8). The output of the query in the Excel Add-In is in UTC+1.

Exception

When using the "Create" or "Insert" options, the server time is displayed in the report.

Absolute time information

Absolute time information describe a specific point in time.

The following table shows possible absolute times:

Absolute time information	Time unit	Web application
dd.mm.yyyy hh:mm:ss	Date with time	✓

The following table shows examples of absolute times:

Example	Description
12/08/2012	Specified date
12.08.2012 14:30:00	14:30 on the specified date

Relative time information

Relative time information is a placeholder for a time interval. The time interval does not have an absolute start and end time. The relative time requires a reference time.

The reference time can be absolute or relative. If a plus sign precedes the relative time, the specified time interval is after the reference time. If a minus sign precedes the relative time, the specified time interval precedes the reference time.

The following table shows regular relative times:

Relative time information	Time unit	Web application
ms	Millisecond	1
S	Second	1
m	Minute	1
h	Hour	1
d	Day	1
w	Week	1
mo	Month	1
У	Year	1

The following table shows separate relative times:

Relative time information	Time unit	Web application
t	Current day	✓
у	Yesterday	✓
*	Current time	✓
1-31	1st-31st of the current month	✓

Special feature of the relative time "y":

The relative time "y" denotes both a "year" and a "yesterday". The context in which "y" is used decides the relative time specification:

- "y" at the beginning of a time span: "y" represents the relative time specification "yesterday".
- "y" in connection with a number: "y" stands for the relative time specification "year".

Special feature of the relative time "1-31":

The relative time "1-31" contains all numbers between 1 and 31. If one of these numbers is not used in direct connection with another relative time, the number stands for this day of the month.

The following table shows examples of relative times:

Example	Description
12.08.12 10:00:00+1d-2h+30m	12.08.12 10:00 plus 1 day minus 2 hours plus 30 minutes
*-24h+25m	Current time minus 24 hours plus 25 minutes
d-3h	00:00 of the current day minus 3 hours
*-2y-3mo	Current date minus 2 years minus 3 months
y-15h	Yesterday minus 15 hours
12	The 12th of the month

Note

Using relative time information

The use of relative times is especially useful in reporting for subscription reporting. Cyclic reports can be generated using relative time information.

Example: The production committee of the early shift is to be represented. Have the report generated for your subscription every day at 15:00 and enter *-9h and end time * as the start time.

See also

Creating a time filter for a dashboard (Page 139)

Browsing tags

Browsing tags

Definition

The dialog for browsing tags can be called from the following situations:

- When creating reports with tags
- When creating subscriptions with tags

Structure

(1) Archives Enter text to search for Q (2)Prozesswertarchiv : Data type 🕇 Compressed archives 3 Verdichtungsarchiv ٠ NeueVariable 5 Technological view ٠ NeueVariable 6 Select Columns NeueVariable 7 🗹 Tag NeueVariable_8 Batch ID WinCC tag ID Archive Data type 🗹 Unit NeueVariable 7 Scan cycle Archiving cycle Numeric Supports aggregation 亩 Remove all Cancel (1)Tag hierarchy with directories and subdirectories (2)Search for tags

The dialog for browsing tags is structured as follows:

Filtering and display

(3)

Sorting and table modification

Open the shortcut menu of the table from the options in the table header. The tables can be sorted in ascending or descending order and columns can be shown or hidden.

Search for tags

Sorting and table modification

When a search term is entered, the directory selected in the tag hierarchy is searched. If you have not selected a directory or subdirectory, the tag search is performed in all directories. If a directory is selected but the search should be performed in all directories, clicking in the empty area in the tag view restores the status. The search term must be contained as part of the tag name. Search entries consisting of multiple words are not permitted.

Step-by-step instructions

Browsing tags

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- "Reporting" > "Report templates" > "Templates" is open.
- The "Create report" or "Create subscription" dialog opens for a report template for tags and a project is selected.

Procedure

- 1. Open the dialog for tag selection.
- 2. Open the tag hierarchy to expand the directories and subdirectories.
- 3. Select the directory from which you want to add one or more tags.
- 4. Select the tags you want to add from the directory overview.

Note

Filtering the tags

For more information on filtering the tags within this dialog, refer to "Browsing tags (Page 159)"

5. Save your selection.

Result

The selected tags are added.

Parameter defaults

Parameter presets

Definition

Parameter presets are saved presets for a report that are applied when a new report is generated for the selected report template.

You can edit or delete the presets. The parameter presets are valid for the report templates for which they were created.

Step-by-step instructions

Creating parameter preset

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- "Reporting" > "Report templates" > "Templates" is open.

Procedure

- 1. Select the desired report template from the templates.
- 2. Select "Create report".
- 3. Parameterize the report.
- 4. Select "Create parameter presets".
- 5. Select a name.
- 6. If you want the presets to only be visible to yourself, select the "Private" option.

Note

Users of the "SIMATIC Report Administrators" group can view all templates, including private ones.

7. Select "Save".

Result

The parameter preset has been created.

Reusing parameter preset

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- "Reporting" > "Report templates" > "Templates" is open.
- A parameter preset has been created.

Procedure

- 1. From the folders, choose a report template for which you are creating a new report and for which you have already created a parameter preset.
- 2. Open the drop-down list.
- 3. Select one of the previously created parameter presets.

Result

The parameter presets are reused and the "Create report" dialog opens with the stored presets.

Editing parameter preset

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- "Reporting" > "Report templates" > "Templates" is open.
- A parameter preset has been created.

Procedure

- 1. From the folders, choose a report template for which you have already created parameter presets.
- 2. Open the drop-down menu to "Create report".
- 3. Select "Manage presets"
- 4. Select the parameter preset that you want to edit.
- 5. You can edit, delete, or move the saved presets up and down.
- 6. Select "Save".

Result

The saved parameter presets have been edited.

Report generation

Report generation

Definition

Report generation templates are divided into:

- Messages
- Tags
- Extended reports
- Alarm statistics
- Batch logs

Depending on the template, the representation varies between different chart forms or tables. The supplied templates are intended as templates for your templates and do not represent finished report templates. They provide an overview of the report creation functions.

Report templates (Page 165)

Use the toolbar to configure the report templates.

Report generation toolbar (Page 168)

Note

Generating an online preview for reports with many pages

When generating an online preview for reports with many pages, the displayed number of maximum pages per page function may temporarily not match the number of pages displayed in the report.

The behavior is caused by the generation method of the preview graphics; due to the scaling, only up to 1000 pages are generated in each step. To make the first pages available faster, the first step only contains 25 pages.

Possible data sources

For PCS 7 OS and WinCC, access is possible directly to data of the OS server as well as the Process Historian.

For PCS neo, access is possible to the PCS neo Batch and Process Historian data.

Note

Display of report templates specific to the data source

Only the report templates that are compatible with the connected data sources are displayed in the reporting.

Adapting fields in data records

After modifying an SQL query that uses the "InfoServer" data source, Microsoft Report Builder will display an error message regarding refreshing the fields because the Custom Data Source ("ISRSE") used by the Information Server is incompletely supported.

If the columns output by the query do not change, you can ignore this error and confirm with "OK". If they change, they must first manually adjust the fields displayed in the dialog so that they match the columns.

Report templates

Possible data sources

For PCS 7 OS and WinCC, access is possible directly to data of the OS server as well as the Process Historian.

For PCS neo, access is possible to the Process Historian data.

Note

Display of report templates specific to the data source

Only the report templates that are compatible with the connected data sources are displayed in the reporting.

Limitation in report creation for messages and tags with a PCS neo data source

To comply with the limitation in report creation, you can either decrease the time range of the report or increase the aggregation interval for aggregated tags.

Limitation for tabular messages: 2500 messages

Limitation for non-aggregated tabular tags: 10000 values

Limitation for aggregated tags: 10000 intervals

Templates for messages

Template	Representation	Possible data sources
Duration until acknowledgment	Bar chart	PCS 7 OS, WinCC, PCS neo
Messages per day	Bar chart	PCS 7 OS, WinCC
Messages by origin	Bar chart	PCS 7 OS, WinCC, PCS neo
Messages by priority	Bar chart	PCS 7 OS, WinCC
Messages per 10 minute period	Bar chart	PCS 7 OS, WinCC, PCS neo
Messages by priority	Pie chart	PCS 7 OS, WinCC, PCS neo
Average duration until acknowledgment	Bar chart	PCS 7 OS, WinCC
Messages filtered by message class	Table	PCS 7 OS, WinCC
Messages sorted by priority	Table	PCS 7 OS, WinCC
Messages sorted by timestamp	Table	PCS 7 OS, WinCC
Commented messages	Table	PCS 7 OS, WinCC

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Number of messages by message class	Bar chart	PCS 7 OS, WinCC, PCS neo
Total duration until acknowledgment	Bar chart	PCS 7 OS, WinCC
Total duration until gone	Bar chart	PCS 7 OS, WinCC

Templates for tags

Template	Representation	Possible data sources
Trend	Line chart	PCS 7 OS, WinCC, PCS neo
Aggregation matrix	Table	PCS 7 OS, WinCC, PCS neo
Matrix	Table	PCS 7 OS, WinCC, PCS neo
Aggregation table	Table	PCS 7 OS, WinCC, PCS neo
Table	Table	PCS 7 OS, WinCC, PCS neo

Note

Using aggregates

Aggregates are easier to process than raw values because they can be displayed faster and produce less load. Especially when creating reports over a longer period of time, a trend is better recognized via aggregates than via raw values.

Note

FAQ: Creation of report templates for the Information Server on data basis of the Process Historian

This application example describes the basics and principle of operation of the Process Historian (PH) and the Information Server (IS). The example describes how to create individual reports in order to be able to promptly read out data from the PH database. In addition, you learn how to work with the Process Historian database.

Link to FAQ (https://support.industry.siemens.com/cs/document/64906050/creation-of-reporttemplates-for-the-information-server-based-on-process-historian-data-in-the-wincc-and-pcs-7environment?dti=0&dl=en&lc=de-DE)

Templates for advanced reports

Template	Representation	Possible data sources
Message sequence	Table	PCS 7 OS, WinCC, PCS neo
Analog table	Table	PCS 7 OS, WinCC, PCS neo
Analog interval	Table	PCS 7 OS, WinCC, PCS neo
Analog intervals, detailed	Table	PCS 7 OS, WinCC, PCS neo
Analog sequence	Table	PCS 7 OS, WinCC, PCS neo
Operation sequence	Table	PCS 7 OS, WinCC, PCS neo
Operating hours	Table	PCS 7 OS, WinCC, PCS neo
Switching cycle	Table	PCS 7 OS, WinCC, PCS neo
Trend	Line chart	PCS 7 OS, WinCC, PCS neo

Note

Templates for "Operating hours" and "Switching cycle"

The "Operating hours" and "Switching cycle" report templates only work with the "cntohsc" counter blocks from the PCS neo standard component library.

Templates for alarm statistics

Template	Representation	Possible data sources	
Messages per time interval	Bar chart	PCS 7 OS, WinCC	
Messages by area	Pie chart	PCS 7 OS, WinCC	
Messages by message class	Pie chart	PCS 7 OS, WinCC	
Messages by quantity	Table	PCS 7 OS, WinCC	
Messages by state	Pie chart	PCS 7 OS, WinCC	
Chattering messages	Table	PCS 7 OS, WinCC	
Messages per day	Table/bar chart	PCS 7 OS, WinCC	
Messages by priority	Pie chart	PCS 7 OS, WinCC	

PCS neo Batch templates

Template	Representation	Possible data sources
PCS neo Batch batch log	Batch log	PCS neo Batch

Time limit for creating reports

Definition

By default, a time limit is defined for creating reports, which after the defined time interval interrupts the creation of reports.

You can extend the time limit to prevent an interruption caused by the time limit when creating particularly large reports.

To do this, follow the instructions on the following Internet site:https://technet.microsoft.com/ en-us/library/jj969577.aspx (<u>https://technet.microsoft.com/de-de/library/jj969577.aspx</u>)

Note

Pay special attention to the sections "Specify the report execution time-out period" and "Specify the user session time-out period". You can adjust the time limit for one report or for all reports.

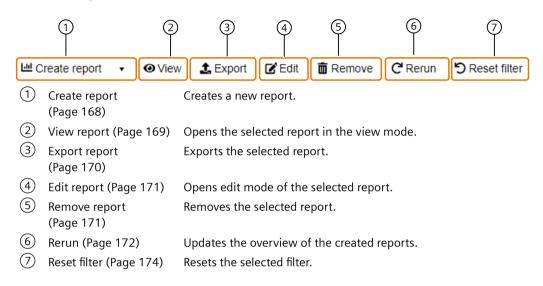
Report generation toolbar

Definition

The reporting toolbar contains all functions with which you can edit reports.

Structure

The following functions are available:



Step-by-step instructions

Creating a report

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- "Reporting" > "Report templates" > "Templates" is open.

Procedure

- 1. Select a report template.
- 2. Select "Create report".

3. Parameterize the report template

Note

Time information

For report creation, you can enter absolute and relative time information by enabling the "Standard" or "Relative" option under "Time range". The selectable time specifications and examples can be found in "Time specifications" (Page 157).

- 4. Select "Create report".
- 5. Assign a name and an optional comment.
- 6. Enable/disable the following options:
 - Private: When you disable the option, all users of the Information Server can access the subscription.
 - Online report: When you disable the option, no online report can be generated that can be displayed in the Web browser. This reduces the load on the report server and therefore less storage space is used in the database. To display the report, you must download the report.
 - Cleanup: Releases the report for cleanup if too little storage space is available in the database.
 - Export type: Select an export format for this report.
- 7. Save the report.

Result

A report has been created.

Viewing a report

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- "Reporting" > "Report templates" > "Templates" is open.
- A report has been created.

Procedure

- 1. Select the report in the table.
- 2. Select the "View".

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Result

The report is shown in the display mode.

Export report

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- "Reporting" > "Report templates" > "Templates" is open.
- A report has been created.

Procedure

- 1. Select the report in the table.
- 2. Select "Export".

Note

Multiselection

Using the "Ctrl+Shift" key combination, you can select several reports in the overview at the same time and export them as a .zip file using the "Export" button.

Result

The report is exported.

Note

The file name contains the date and time of the report generation.

Edit report

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- "Reporting" > "Report templates" > "Templates" is open.
- A report has been created.

Procedure

- 1. Select the report in the table.
- 2. Select "Edit".
- 3. Make your changes.
- 4. Select "Save".

Result

The report has been edited and saved.

Remove report

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- "Reporting" > "Report templates" > "Templates" is open.
- A report has been created.

Procedure

- 1. Select the report in the table.
- 2. Select "Remove".
- 3. Select "Yes".

Note

Multiselection

Using the "Ctrl+Shift" key combination, you can select several reports in the overview at the same time and remove them simultaneously using the "Remove" button.

Result

The report is removed.

Rerun report

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- "Reporting" > "Report templates" > "Templates" is open.
- A report has been created.

Procedure

- 1. Select the report in the table.
- 2. Select "Repeat".

Result

The report is run again and appears in the overview.

Show/hide columns

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- Reporting is open.

Procedure

- 1. Open the column settings of the table.
- 2. Select "Columns".
- 3. Activate / deactivate the columns you want to show or hide.

Result

The columns are activated / deactivated.

Sorting the columns in ascending or descending order

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- Reporting is open.

Procedure

- 1. Go to the column you want to sort.
- 2. Select "Column settings".
- 3. Select "Sort in ascending order" or "Sort in descending order".

Result

The columns are sorted in ascending / descending order.

Set filter

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- Reporting is open.

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Procedure

- 1. Go to the column you want to filter.
- 2. Select "Column settings".
- 3. Configure the filter for the selected column with up to two conditions.

Result

The filter is enabled.

Reset filter

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- "Reporting" > "Report templates" > "Templates" is open.
- One or more filters have been parameterized for the table.

Procedure

1. Select "Reset filter".

Result

The filtering in the table is reset.

Subscriptions

Subscriptions

Definition

A subscription is a regularly recurring report that according to set parameters:

- retrieves data
- evaluates data
- triggers reports when a specified event occurs

For the subscription, relative times are used, with which you can compare certain data, for example, weekly or monthly.

Time information (Page 157)

Subscriptions toolbar

Definition

The toolbar contains all functions for configuration of subscriptions.

Structure

The following functions are available:

	1	2	3	(4)
پ (create subscription	🕑 Edit	🛅 Remove	S Reset filter
1	Create subscription (Page 175)	n Create	es a subscriptio	on.
2	Edit subscription (Page 177)	Open	s edit mode of	the selected subscription.
3	Remove subscrip- tion (Page 177)	Remo	ves the selecte	ed subscription.
4	Reset filter (Page 179)	Reset	s the selected	filter.

Step-by-step instructions

Creating a subscription

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- "Reporting" > "Report templates" > "Templates" is open.

Procedure

- 1. Select the report template for which you are creating the subscription.
- 2. Select "Create subscription".

3. Enter a name for the subscription.

Note

Text fields whose names are shown in italics are optional.

- 4. Disable the following settings as required: Settings for subscriptions (Page 184)
- 5. Select the parameters for the subscription.

Note

Corresponding tag trigger

When creating a subscription for a tag, you can add a corresponding tag trigger to your defined parameters in the "Create subscription" dialog. This appears in the "Trigger" tab. This replaces steps 6 to 8.

- 6. Select the "trigger" tab.
- 7. Open the list of triggers with "Add".
- 8. Use the triggers to specify when the reports are created. Trigger for subscriptions (Page 180)
- 9. Select the export format. The following formats are available:
 - PDF
 - Microsoft Excel
 - Microsoft Word
 - XML
 - Microsoft HTML
- 10. Define the report parameters in the "Parameter" tab.
- 11.Select a delivery method in the "Delivery method" tab. Delivery method (Page 183)
- 12. Select "Save".

Result

The subscription is created and appears in the list.

Edit subscription

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- "Reporting" > "Report templates" > "Templates" is open.
- A subscription has been created.

Procedure

- 1. Select the subscription you want to edit in the list of subscriptions.
- 2. Edit the subscription.
- 3. Select "Save".

Result

The subscription has been edited.

Deleting a subscription

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- "Reporting" > "Report templates" > "Templates" is open.
- A subscription has been created.

Procedure

- 1. Select the subscription you want to delete in the list of created subscriptions.
- 2. Select "Delete subscription"

Note

Multiselection

You can use the Ctrl+Shift key combination to select multiple subscriptions and the "Delete" button to delete them simultaneously.

Result

The subscription is deleted.

Show/hide columns

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- Reporting is open.

Procedure

- 1. Open the column settings of the table.
- 2. Select "Columns".
- 3. Activate / deactivate the columns you want to show or hide.

Result

The columns are activated / deactivated.

Sorting the columns in ascending or descending order

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- Reporting is open.

Procedure	 Go to the column you want to sort. Select "Column settings". Select "Sort in ascending order" or "Sort in descending order".
Result	The columns are sorted in ascending / descending order.
Set filter	
Requirement	 You are a member of one of the following Windows user groups: SIMATIC Report Publishers SIMATIC Report Users SIMATIC Report Administrators Reporting is open.
Procedure	
	 Go to the column you want to filter. Select "Column settings". Configure the filter for the selected column with up to two conditions.
Result	The filter is enabled.
Reset filter	
Requirement	 You are a member of one of the following Windows user groups: SIMATIC Report Publishers SIMATIC Report Users SIMATIC Report Administrators "Reporting" > "Report templates" > "Templates" is open. The table with subscriptions is filtered.

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3.4 Functions

Procedure

In the "Subscriptions" area, select "Reset filter".

Result

The filters in the table are reset and all subscriptions created are displayed unfiltered.

Trigger for subscriptions

Definition

Triggers are pre-defined events which have to occur to ensure that a pre-defined action is initiated. Subscriptions can be triggered by:

- Time trigger
- Tag trigger
- Message trigger

Note

Message triggers are only available for the PCS 7 and WinCC data sources.

Time trigger

One or more fixed times trigger the subscription.

One-off time trigger

This time trigger is only initiated once at a specified point in time.

Recurring time trigger

Recurring time triggers are initiated cyclically by defined time parameters.

The following recurring triggers can be configured:

• "Daily" frequency:

Selection	Description	
Daily	Enter number	
Frequency per day	"Once" or "Recurring"	
Frequency per day > Once	Select time of day	
Frequency per day > Recurring	Specify delay per minute or hour	
	Define start, optionally also end	

• "Weekly" frequency:

Selection	Description
Weekly	Enter number
Weekday	Select day of week, multiselection possible
Frequency per day	"Once" or "Recurring"
Frequency per day > Once	Select time of day
Frequency per day > Recurring	Specify delay per minute or hour
	Define start, optionally also end

• "Monthly" frequency for an "Absolute" offset:

Selection	Description
Offset	"Absolute"
Day of the month	Between 1 and 31
Monthly	Enter number
Frequency per day	"Once" or "Recurring"
Frequency per day > Once	Select time of day
Frequency per day > Recurring	Specify delay per minute or hour
	Define start, optionally also end

• "Monthly" frequency for a "Relative" offset:

Selection	Description
Offset	"Relative"
Week of the month	Select week: First, Second, Third, Fourth or Last
Weekday	Select week of the month
Frequency per day	"Once" or "Recurring"
Frequency per day > Once	Select time of day
Frequency per day > Recurring	Specify delay per minute or hour
	Define start, optionally also end

Note

Full-day recurring subscriptions

If you want to create a subscription that generates recurring reports around the clock, define 00:00 as the start time.

Tag trigger

The selected tag triggers the subscription.

Select one of the following event types for the tag:

- On change
- High limit
- Low limit
- High and low limit

Note

Corresponding tag trigger

When creating a subscription for a tag, you can add a corresponding tag trigger to your defined parameters in the "Create subscription" dialog. This appears in the "Trigger" tab.

Message trigger

The selected message triggers the subscription.

Authorization matrices for subscriptions

Authorization matrices for subscriptions

Authorization matrix for public subscriptions:

User	Read	Write	Delete
Owner	Yes	Yes	Yes
Administrator	Yes	Yes	Yes
Publisher	Yes	Yes	Yes
User	No	No	No
Viewer	No	No	No

Authorization matrix for private subscriptions:

User	Read	Write	Delete
Owner	Yes	Yes	Yes
Administrator	Yes	Yes	Yes
Publisher	No	No	No
User	No	No	No
Viewer	No	No	No

Delivery method

Definition

Select one of the various delivery methods for the created subscription in the "Delivery method" tab.

Layout

The following options are available:

- Only in the database: The report is only saved in the database.
- Folder: The report is saved locally or via a network share in the folder.

Note

Parameter %-ts%

The file name in the target folder consists of the specified file name and the timestamp. If no file name is specified, the name of the subscription and the timestamp is used. The reports are saved to the target folder after triggering the specified trigger.

If the file should always be overwritten with the current report, the following key must be added to the file name: <file name>%-ts%

The key only replaces the file in the target folder.

- E-mail: This e-mail contains the report as an attachment. The priority of the e-mail is set to "Normal" by default.
- E-mail (link): This e-mail contains a link to the report in the specified target directory.

Note

Delete after delivery

If you select the option "Delete after delivery", the report is deleted from the database after successful delivery. The "Online report" option can be disabled automatically.

Settings for subscriptions

Definition

When creating a subscription, you can make settings relating to privacy, delivery or use of storage space.

Settings

Setting	Description	
Private	If you disable the option, all users of the Information Server can access the sub- scription.	
Enabled	If you disable the option, the subscription can no longer provide reports.	
Online report	If you disable the option, no online report can be generated that can be displayed in the Web browser. This reduces the load on the report server and therefore less storage space is used in the database. To display the report you have to download the report.	
	If PDF is selected as the export format, the online report is available at:	
	Creation with "Create report"	
	• Creation by means of a subscription with the transmission method "Only in the database" or "Email (link)".	
Clean up reports	Provides the reports for cleanup if too little storage space is available in the database.	

3.4.2.9 Download

Download

The "Download" app allows you to install the Information Server Office add-in on your computer.

The following options are available for installation:

- You have already installed the Microsoft Office add-in when you installed the SIMATIC Information Server.
- You install the add-in directly from the Web application via the "Download" app. Installing the Office add-in (Page 185)

Note

Note the requirements for the installation.

Requirements for installing the Office add-in (Page 57)

Step-by-step instructions

Installing Office add-in with the web application

Requirement

You are a member of the Windows user group SIMATIC Report Administrators.

Procedure

1. Check if all requirements for installing the add-in are met. Requirements for installing the Office add-in (Page 57)

Note

Close all Windows programs before running setup for the Office add-in.

- Download the Office add-in from the Web application.
 Downloading the Office add-in from the Web application (Page 72)
- 3. Perform the setup for the installation of the add-in.
- 4. Connect the Office add-in to the Information Server. Connecting Office add-in with a stored certificate to the Information Server (Page 73)

Result

The Office add-in has been installed.

Opening an Office add-in (Page 227)

Note

HTTP Proxy

This configuration must be performed additionally for all computers that require an HTTP proxy and use the Information Server web application or the Information Server Excel add-in.

- 1. Open the "Internet options" dialog from the Start menu.
- 2. In the "Internet Properties" dialog, select the "Connections" tab.
- 3. Select "LAN Settings".
- 4. Activate the option "Proxy server".
- 5. Select "Advanced".
- 6. For "Exceptions", enter the complete FQDN name of the Information Server computer. This name must match the CN of the HTTPS certificate (see above).
- 7. Confirm your entry.

3.4.2.10 Administration

Administration

Definition

In the Administration app you make central settings for the Information Server. The administration consists of the following areas:

- Project configuration
- User configuration
- App configuration
- Email settings
- Licensing
- App installation

Structure

1	Use this menu to configure SIMATIC Information Server			
6-	App configuration	0	Email settings	> -(1)
	Reporting Pashboard		Enable email delivery	
	Application installer	Ø	Licensing	⊘
5-	Install new applications		Status License name Installed Used ✓ Client access 10 1 ✓ Data Source Access (WinCC) 3 1 ✓ Data Source Access (PCS 7) 0 0	-2 -2
4-	Project configuration Configuration of the project connections for the ins	tailed applications	User configuration Assign security rights for each user. • 2 User configuration	• -3
1	Email settings (Page 200)	Opens the email setti	ngs.	
2	Licensing (Page 210)	Opens the overview of	of licenses.	
3	User configuration (Page 219)	Opens the user config	guration.	
4	Project configuration (Page 212)	Opens the project co	nfiguration.	
5	App installation (Page 209)	Opens the app install	ation.	
6	App configuration	In the configuration f	or reporting, edit:	
		Report templates		
		• Report Clean Up (Page 195)	
		Edit the master pages	in the configuration for the dashboard.	
		Master pages (Pages (Pages (Pages))	ge 188)	

The administration has the following structure:

Subsequent integration of the Information Server into a domain

Requirement

- You have administrative rights in the domain.
- You are entered as an administrator in the local Windows user group.

Procedure

- 1. Add the computer on which the Information Server is installed to the domain.
- 2. Create a new domain user.

Note

This step is not necessary if there is already a designated service user to run the Information Server with access to the data sources.

- 3. Add the new domain user to the "SIMATIC Report Administrators" and "SIMATIC Report Services" groups.
- Start the SIMATIC Web Configurator: C:\Program Files\Siemens\InformationServer\ConfigurationManager \ConfigurationManager.exe
- 5. In the service configuration dialog, specify the domain user credentials from step 2.
- 6. Restart the system.
- 7. Log in with the domain user credentials and configure the web browser settings. Configuring browser settings for the Information Server (Page 63)

Result

The first logon operation, in combination with the Windows user group, creates the new profile in the database.

Dashboard app configuration

Master pages

Definition

With the master page selected, you define the layout of the dashboard.

It is possible to create, configure and assign any number of master pages for the dashboard layout.

Toolbar for master pages

Definition

The toolbar contains all functions for configuring the master pages for the dashboards.

Structure

Administration > "Configuration" > "Dashboard" contains the following functions:

		3	4	5	6
H (create 🛅 Delete 🖬	Save	Duplicate	1 Export	🛓 Import
1	Create a master page (Page 189)	Creates a m	naster page.		
2	Deleting a master page (Page 190)	Deletes the	selected m	aster page.	
3	Saving a master page (Page 190)	Saves the n	naster page		
4	Duplicate a master page (Page 190)	Duplicates	the selected	l master pag	e.
5	Exporting a master page (Page 191)	Exports the	e selected m	aster page.	
6	Importing a master page (Page 191)	Opens the	dialog to im	port an exist	ting master page.

Step-by-step instructions

Create master page

Requirement

- You are a member of the SIMATIC Report Administrators Windows user group.
- "Administration" > "Configuration" > "Dashboard" is open.

Procedure

- 1. Select "Create".
- 2. Assign a title.
- 3. Optionally choose a background color.
- 4. Optionally choose a font color.
- 5. Optionally, configure a header. Configure header for a master page (Page 192)
- 6. Optionally, configure a footer. Configure footer for a master page (Page 192)

Result

The master page is created.

Deleting a master page

Requirement

- You are a member of the SIMATIC Report Administrators Windows user group.
- "Administration" > "Configuration" > "Dashboard" is open.
- A master page is created.

Procedure

Select the master page that you want to delete.

Result

The selected master page is deleted.

Saving a master page

Requirement

- You are a member of the Windows user group SIMATIC Report Administrators.
- "Administration" > "Configuration" > "Dashboard" is open.
- A master page has been edited.

Procedure

Select "Save" to save the changes to the master page.

Result

The changes to the master page are saved.

Duplicate a master page

Requirement

- You are a member of the SIMATIC Report Administrators Windows user group.
- "Administration" > "Configuration" > "Dashboard" is open.
- A master page is created.

Procedure

- 1. Select the master page that you want to duplicate.
- 2. Select "Duplicate".

Result

The selected master page is duplicated.

Exporting a master page

Requirement

- You are a member of the SIMATIC Report Administrators Windows user group.
- "Administration" > "Configuration" > "Dashboard" is open.
- A master page is created.

Procedure

- 1. Select the master page you want to export.
- 2. Select "Export".

Result

The master page is exported to the local repository.

Importing a master page

Requirement

- You are a member of the SIMATIC Report Administrators Windows user group.
- "Administration" > "Configuration" > "Dashboard" is open.
- A master page is stored locally.

Procedure

- 1. Select "Import".
- 2. Select the file to be imported with "Select file".
- 3. Confirm your selection with "Import".

Result

The master page is imported and is displayed in the overview.

Configure header for a master page

Requirement

- You are a member of the Windows user group SIMATIC Report Administrators.
- "Administration" > "Configuration" > "Dashboard" > "Creation" is open.

Procedure

1. Enable "Use image" if you want to add a graphic to the default header for the master page.

If you do not need a header line, enable "No header".

By default, the header contains a placeholder for a title and a description.

- 2. Upload the image to the header by selecting the field provided for the image and opening the corresponding image for upload in the dialog.
- 3. If you want to create a custom layout for the header, enable the "Use user-defined header" button.
- 4. Enter text for the header and format the text using the tools in the input window.
 - Bold, italic or underlined
 - Align right, centered, align left
 - List or enumeration
 - Indentation
 - Insert hyperlinks, images or tables
 - Placeholder for dashboard title, description, and current date

Result

The header for a master page is configured.

Configure footer for a master page

Requirement

- You are a member of the Windows user group SIMATIC Report Administrators.
- "Administration" > "Configuration" > "Dashboard" > "Creation" is open.

Procedure

1. Select the "Use user-defined footer" button if you want to use a user-defined layout for the master page footer.

Note

If you do not need a footer, enable "No footer".

The footer is hidden by default.

- 2. Upload the image to the footer by selecting the field provided for the image and opening the corresponding image for upload in the dialog.
- 3. Enable the "Use user-defined footer" button if you want to use a user-defined layout for the footer.
- 4. Enter text for the footer and format the text using the tools in the input window.
 - Bold, italic or underlined
 - Align right, centered, align left
 - List or enumeration
 - Indentation
 - Insert hyperlinks, images or tables
 - Placeholder for dashboard title, description, and current date

Result

The footer for a master page is configured.

Reporting app configuration

Reporting (Administration)

Definition

The report generation of the web application allows the use of different report templates for messages, tags, extended reports, alarm statistics and batch logs.

The following functions are available in the "Administration > Reporting" area for the existing report templates:

- Sort
- Export/Import
- Show/hide
- Create/delete folders for report templates
- Show/hide folders for report templates

The Report Clean Up allows you to make settings for optimal storage use. Report Clean Up (Page 195)

Toolbar in Reporting (Administration)

Definition

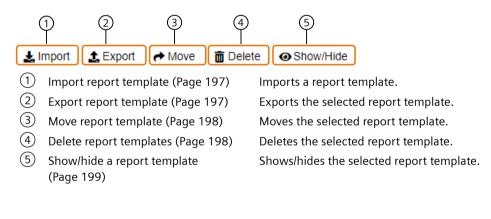
The toolbar contains all functions for configuration of report templates.

Structure

The following functions are available for the folders:



The following functions are available for the report templates:



See also

Configuring storage space (Page 199)

Report Clean Up

Definition

Report Cleanup allows you to configure a limit for storing reports. When this limit is reached, database or disk space is automatically freed by stopping reporting, or exporting or deleting reports.

Application recommendations

Configuring storage space (Page 199)

Step-by-step instructions

Create folder

Requirement

- You are a member of the Windows user group SIMATIC Report Administrators.
- "Administration > Configuration > Reporting > Templates" is open.

Procedure

- 1. Select "Create".
- 2. Enter a name for the new folder.
- 3. Select "Save".

Result

A folder has been created.

Renaming folders

Requirement

- You are a member of the Windows user group SIMATIC Report Administrators.
- "Administration > Configuration > Reporting > Templates" is open.

Procedure

- 1. Select the folder you want to rename.
- 2. Select "Rename".

3.4 Functions	
	 Enter the new name. Select "Save".
Result	The folder is renamed.
Delete folder	
Requirement	 You are a member of the Windows user group SIMATIC Report Administrators. "Administration > Configuration > Reporting > Templates" is open.
Procedure	 Select the folder you want to delete. Select "Delete". Confirm the security prompt with "Yes".
Result	The folder is deleted.
Show/hide fold	ler
Requirement	 You are a member of the Windows user group SIMATIC Report Administrators. "Administration > Configuration > Reporting > Templates" is open.
Procedure	 Select the folder you want to show/hide. Select "Show/hide".
Result	The folder is shown / hidden.

SIMATIC Information Server

Import report template

Requirement

- You are a member of the Windows user group SIMATIC Report Administrators.
- "Administration > Configuration > Reporting > Templates" is open.

Note

Importing report templates

With report templates you have created yourself or acquired externally ensure that they do no contain any free-text parameters as this can lead to security risks with regard to SQL injections.

Procedure

- 1. Select "Import".
- 2. Select a file from the local repository in the "Select file" folder.

Note

File formats

The report templates can be files in the following formats:

- .rdl for reports for SQL Server Reporting Services (.rdl = Report Definition)
- .ert for Excel reports (.ert = Excel report template)

Importing report templates with the same name

When you import a report template that already exists with the same name in the Web application, the report template in the Web application is overwritten by the imported report template without prompting.

3. Confirm the selection with "Open".

Result

The report template is imported.

Export report template

Requirement

- You are a member of the Windows user group SIMATIC Report Administrators.
- "Administration > Configuration > Reporting > Templates" is open.

SIMATIC Information Server

3.4 Functions

Procedure

- 1. Select a template that you want to export.
- 2. Select "Export".

Result

The report template is exported to the local repository folder.

Move report template

Requirement

- You are a member of the SIMATIC Report Administrators Windows user group.
- "Administration > Configuration > Reporting > Templates" is open.

Procedure

- 1. Select the template you want to move.
- 2. Select "Move".
- 3. Select the new location in the "Move template" dialog.
- 4. Confirm with "OK".

Result

The report template is moved to the new location.

Delete report template

Requirement

- You are a member of the SIMATIC Report Administrators Windows user group.
- "Administration > Configuration > Reporting > Templates" is open.

Procedure

- 1. Select the template you want to delete.
- 2. Select "Delete".
- 3. Confirm the security prompt with "Yes".

Result

The report template is deleted.

Show/hide a report template

Requirement

- You are a member of the Windows user group SIMATIC Report Administrators.
- "Administration > Configuration > Reporting > Templates" is open.

Procedure

- 1. Select the template you want to show/hide.
- 2. Select "Show/hide".

Result

The report template is shown/hidden.

Configuring storage space

Requirement

- You are a member of the Windows user group "SIMATIC Report Administrators".
- "Administration > Configuration > Reporting > Report Cleanup" is open.

Procedure

- 1. Activate the "Report Clean Up".
- 2. Specify whether the Report Cleanup is triggered by a time trigger, reaching a size limit, or both.

Trigger	Setting		
Time	Once: One-time triggering of the Report Cleanups		
	• Recurring: Configure the following for the Report Clean Up:		
	– the start		
	 optionally the end 		
	– the frequency		
Size limit of the database	Enter the maximum size in MB		

3. Select the action that is performed when initiating the trigger.

Action	Setting
Stop report generation	-
Delete reports/ Export reports	• Selected for cleanup: You can select reports and subscriptions as prioritized in Report Cleanup when they are created. This enables you to clean up re- ports by weighting.
	• All: All reports are treated the same in a Report Clean Up.

4. Specify a path to a folder to which the reports can be exported for the "Export reports" action.

Note

The folder may not be on the drive where the database is located.

5. Specify the number of days after which the reports are deleted or exported for the "Delete reports" and "Export reports" actions.

Note

Enter "0" to continually run the Report Cleanup.

6. Select "Save".

Result

The storage space settings have been configured.

E-mail settings

E-mail settings

Definition

Configure the SMTP server settings for sending Information Server reports by e-mail.

Application recommendations

Configuring e-mail settings (Page 201) Testing e-mail settings (Page 209) Resetting e-mail settings to factory defaults (Page 209)

Step-by-step instructions

Configuring e-mail settings

Requirement

- You are a member of the Windows user group "SIMATIC Report Administrators".
- "Administration > E-mail settings" is open.

Procedure

- 1. Activate e-mail transmission.
- 2. Select an e-mail provider from the list.
- 3. Enter the information required for your selection:
 - Configure generic email settings (Page 201)
 - Configure email settings for a Gmail account (Page 203)
 - Configure email settings for an Office 365 account (Page 202)
- 4. Select "Save".

Result

The e-mail settings are created.

Note

You can test your entries by pressing the "Test settings" button. A test e-mail is sent to the stored e-mail address. Use "Reset" to restore the original state and enter the settings again. Testing e-mail settings (Page 209)

Resetting e-mail settings to factory defaults (Page 209)

Configuring generic e-mail settings

Requirement

- You are a member of the Windows user group "SIMATIC Report Administrators".
- "Administration > E-mail settings" is open.
- E-mail delivery is enabled and "Generic" is selected as the e-mail provider.

Procedure

- 1. Enter the server IP address or host name of the server from which e-mails are sent.
- 2. Select a port.
- 3. Enter your user name and password
- 4. Select an e-mail address that is displayed as the sender's e-mail address to the recipients of the e-mails.
- 5. Select "Save".

Result

The e-mail settings for a generic mail account are created. Test your settings by sending a test e-mail.

Configuring email settings for an Office 365 account

Requirement

- You are a member of the Windows user group "SIMATIC Report Administrators".
- "Administration > E-mail settings" is open.
- E-mail delivery is enabled and "Office 365" is selected as the e-mail provider.
- You are registered for the "Microsoft 365 Developer Program". Developer Program (<u>https://developer.microsoft.com/en-us/microsoft-365/dev-program</u>)

Procedure

- 1. Create the application. Creating an application (Page 203)
- 2. Generate a client secret. Generating a client secret (Page 204)
- 3. Add an API permission. Adding API permissions (Page 205)
- 4. Configure the e-mail settings in the Information Server. Configuring e-mail settings in the IS (Office 365) (Page 205)

Result

The e-mail settings for an Office 365 account are created.

You can test the settings by sending a test e-mail.

Configuring email settings for a Gmail account

Requirement

- You are a member of the Windows user group "SIMATIC Report Administrators".
- "Administration > E-mail settings" is open.
- E-mail delivery is enabled and "Gmail" is selected as the e-mail provider.
- The Google APIs & Services (<u>https://console.developers.google.com/</u> <u>// XmlEditor.InternalXmlClipboard:4384213f-03bd-06e4-c704-bf7e9539203d</u>)page is open and you are logged in with an existing Gmail account.

Procedure

- 1. Enable the Gmail API terms. Enabling the Gmail API (Page 206)
- 2. Configure the "OAuth consent screen". Configuring the "OAuth consent screen" (Page 207)
- 3. Create credentials. Creating "Credentials" (Page 207)
- 4. Configure the e-mail settings in the Information Server. Configuring e-mail settings in the IS (Gmail) (Page 208)

Result

The e-mail settings for a Gmail account are created.

You can test the settings by sending a test e-mail.

Note

You can test your entries by pressing the "Test settings" button. A test e-mail is sent to the stored e-mail address. Use "Reset" to restore the original state and enter the settings again.

Creating an application

Requirement

- You are a member of the Windows user group "SIMATIC Report Administrators".
- "Administration > E-mail settings" is open.
- E-mail delivery is enabled and "Office 365" is selected as the e-mail provider.
- You are registered for the "Microsoft 365 Developer Program". Developer Program (<u>https://developer.microsoft.com/en-us/microsoft-365/dev-program</u>)

Create application

- Open the following link to the start page of Azure. Azure home page (<u>https://portal.azure.com</u>)
- 2. Select "Azure Active Directory" in the menu.
- 3. In the "App registrations" menu, select the "Register an application" option.
- 4. Complete the fields for registration.
 - Assign a name for the application.
 - Select "Accounts in any organizational directory (any Azure AD directory-multitenant) and personal Microsoft accounts (e.g. Skype, ...)".
 - Under "Redirect URI" in the drop-down menu, select the option "Web" as the application type.
 - Copy the required address from the last line of the "Email Settings" dialog in the App administration in the Web application of the Information Server.
- 5. Confirm with "Register" for data generation.

Note

In the overview, you can find the Client ID and Tenant ID that you will need in the following steps to complete the e-mail settings in the Information Server Web application.

Result

The application is created.

Generating a client secret

Requirement

- You are a member of the Windows user group "SIMATIC Report Administrators".
- "Administration > E-mail settings" is open.
- E-mail delivery is enabled and "Office 365" is selected as the e-mail provider.
- You are registered for the "Microsoft 365 Developer Program". Developer Program (<u>https://developer.microsoft.com/en-us/microsoft-365/dev-program</u>)

Generate a client secret

- Open the application you created via "Azure Active Directory" > "Manage" > "App registration" > "Owned applications". You are in the overview of the application.
- 2. In the "Certificates & secrets" menu item, select "New client secret". The "Add a client secret" page opens.
- 3. Enter a description and select an "Expires" option.

- 4. Confirm with "Add". The created generated document appears in the overview.
- 5. Copy the value of the generated document to the e-mail settings of the Information Server.

Result

A client secret is generated.

Adding API permissions

Requirement

- You are a member of the Windows user group "SIMATIC Report Administrators".
- "Administration > E-mail settings" is open.
- E-mail delivery is enabled and "Office 365" is selected as the e-mail provider.
- You are registered for the "Microsoft 365 Developer Program". Developer Program (<u>https://developer.microsoft.com/en-us/microsoft-365/dev-program</u>)

Add API permissions

- 1. Open "Azure Active Directory" > "Manage" > "API permissions" .
- 2. Select "Add a permission".
- 3. Select "Microsoft Graph".
- 4. Select "Delegate permissions".
- 5. Add the following permissions:
 - Mail.Send: Send mail as a user
 - openid: Sign users in
 - User.Read: Sign in and read user profile

Result

The API permissions are added.

Configuring e-mail settings in the IS (Office 365)

Requirement

- You are a member of the Windows user group "SIMATIC Report Administrators".
- "Administration > E-mail settings" is open.

- E-mail delivery is enabled and "Office 365" is selected as the e-mail provider.
- You are registered for the "Microsoft 365 Developer Program". Developer Program (<u>https://developer.microsoft.com/en-us/microsoft-365/dev-program</u>)

Configure e-mail settings in the IS

- 1. Open "Administration" > "E-mail settings".
- 2. Enable the settings.
- 3. Insert the required information that you created in the previous steps with Azure.
- 4. Select "Get authorization token" .
- 5. Enter the required Microsoft credentials.
- 6. Accept the required authorizations.
- 7. Select "Save".

Result

The e-mail settings in IS are configured.

Enabling the Gmail API

Requirement

- You are a member of the Windows user group "SIMATIC Report Administrators".
- "Administration > E-mail settings" is open.
- E-mail delivery is enabled and "Gmail" is selected as the e-mail provider.
- The Google APIs & Services (<u>https://console.developers.google.com/</u> //XmlEditor.InternalXmlClipboard:4384213f-03bd-06e4-c704-bf7e9539203d)page is open and you are logged in with an existing Gmail account.

Enable the Gmail API

- 1. Select "Dashboard" in the sidebar.
- 2. Select "Create project". If a project has already been created, select the existing project. Proceed to step 4.
- 3. Enter the required data and select "Create".
- 4. Select the created project from the menu bar.
- 5. Select "Enable APIs and services".
- 6. Select "Gmail API" from the list.
- 7. Confirm the selection of the Gmail API with "Enable".

Result

The Gmail API is enabled.

Configuring the "OAuth consent screen"

Requirement

- You are a member of the Windows user group "SIMATIC Report Administrators".
- "Administration > E-mail settings" is open.
- E-mail delivery is enabled and "Gmail" is selected as the e-mail provider.
- The Google APIs & Services (<u>https://console.developers.google.com/</u> // XmlEditor.InternalXmlClipboard:4384213f-03bd-06e4-c704-bf7e9539203d)page is open and you are logged in with an existing Gmail account.

Configure the "OAuth consent screen"

- 1. Select "OAuth consent screen" in the sidebar.
- 2. Select as "User Type" > "External" and confirm with "Create".
- 3. In the following, enter the "App name" and the "User support e-mail".
- 4. Enter the e-mail address under "Developer contact information".
- 5. Confirm with "Save and continue".

Result

The created application can be seen in the overview of the "OAuth consent screen" page.

Creating "Credentials"

Requirement

- You are a member of the Windows user group "SIMATIC Report Administrators".
- "Administration > E-mail settings" is open.
- E-mail delivery is enabled and "Gmail" is selected as the e-mail provider.
- The Google APIs & Services (<u>https://console.developers.google.com/</u> // XmlEditor.InternalXmlClipboard:4384213f-03bd-06e4-c704-bf7e9539203d)page is open and you are logged in with an existing Gmail account.

Create "Credentials"

- 1. Select "Credentials" in the sidebar.
- 2. Select "Create credentials" from the menu bar and select "OAuth client ID".

- 3. Fill in the following fields:
 - Application type: Web application
 - Name
 - Authorized redirect URI: Copy from the "E-mail settings" dialog > "Redirect URI".
- 4. Confirm with "Create".

Result

The "ClientID" and "ClientSecret" client data have been created under "Credentials".

Configuring e-mail settings in the IS (Gmail)

Requirement

- You are a member of the Windows user group "SIMATIC Report Administrators".
- "Administration > E-mail settings" is open.
- E-mail delivery is enabled and "Gmail" is selected as the e-mail provider.
- The Google APIs & Services (<u>https://console.developers.google.com/</u>//XmlEditor.InternalXmlClipboard:4384213f-03bd-06e4-c704-bf7e9539203d)page is open and you are logged in with an existing Gmail account.

Configure e-mail settings in the IS

- 1. Open "Administration" > "E-mail settings".
- 2. Enable the settings.
- 3. Insert the required information that you created in the previous steps with Azure.
- 4. Select "Get authorization token" .
- 5. Enter the required Microsoft credentials.
- 6. Accept the required authorizations via "Advanced" > "Go to siemens.net (unsafe)" > "Allow".
- 7. Confirm the authorizations with "Allow".
- 8. Select "Save".

Result

The e-mail settings in IS are configured.

Testing e-mail settings

Requirement

- You are a member of the Windows user group "SIMATIC Report Administrators".
- "Administration > E-mail settings" is open.
- The e-mail settings are created.

Procedure

Select the "Test settings" button.

Result

A test e-mail is sent to the stored e-mail address.

Resetting e-mail settings to factory defaults

Requirement

- You are a member of the Windows user group "SIMATIC Report Administrators".
- "Administration > E-mail settings" is open.
- The e-mail settings have been configured.

Procedure

Select "Reset".

Result

The original state of the e-mail settings is restored and you can re-enter the settings.

Application Installer

Application Installer

Definition

The Application Installer is a wizard for updating the apps in the Web application. You are automatically forwarded to the start page of the Application Installer if you open the Web application and an app is not up-to-date.

If all apps are up to date, the overview provides information about the current versions of the apps.

Step-by-step instructions

Using the Application Installer

Requirement	
	• You are a member of the Windows user group "SIMATIC Report Administrators".
	 "Administration > Application Installer" is open.
Procedure	
	Select the "Install or update application".
Result	
	The application in the Application Installer have been installed and/or updated.
Licensing	
Licenses	

License types

The following products are available:

Products for PCS 7

The SIMATIC Information Server provides the following products for PCS 7:

Product	Order number (MLFB)
Information Server Basic Package	6ES7652-7EX68-2YB0
	6ES7652-7EX68-2YH0
Information Server (1 Client)	6ES7652-7YA00-2YB0
	6ES7652-7YA00-2YH0
Information Server (3 Clients)	6ES7652-7YB00-2YB0
	6ES7652-7YB00-2YH0
Information Server (5 Clients)	6ES7652-7YC00-2YB0
	6ES7652-7YC00-2YH0
Information Server Datasource Access (1 Source)	6ES7652-7YE00-2YB0
	6ES7652-7YE00-2YH0
Information Server Datasource Access (3 Sources)	6ES7652-7YF00-2YB0
	6ES7652-7YF00-2YH0
Upgrade Package Process Historian and Informa-	6ES7652-8AX68-2YE0
tion Server, V9.0 to V9.1	6ES7652-8AX68-2YH0

Products for WinCC

The SIMATIC Information Server provides the following products for WinCC:

Product	Order number (MLFB)
Process Historian und Information Server 2020 SP1,	6ES7652-7AX68-0YT8
Software Media Package	6ES7652-7AX68-0YH8

Note

MLFB numbers

MLFB numbers ending with 2YB0/2YE0/2YT8 are goods deliveries. MLFB numbers ending with 2YH0/0YH8 are OSD deliveries (downloads).

Products for PCS neo

The SIMATIC Information Server provides the following products for PCS neo:

Product	Order number (MLFB)	
Information Server	6DL8906-0AC10-0AB5	
Information Server Client Access	6DL8906-0BC10-0AB5	

List of clients

The clients include:

• Any browser when connected to the Information Server

License count for client access

Each active client connection of the Information Server requires a license. The number of clients depends on the number of PCs, not on the number of applications that are open on a PC. Even when multiple report clients are connected to the Information Server from a PC, only one license is required.

Assignment of a client license:

- Connection with the Information Server via Internet browser/Web application
- Use of various URLs which the server cannot identify as one source

Release of a client license:

- Logout from the Web application
- Inactivity after 20 minutes

Trial license

The setup of the Information Server also installs a trial license. The trial license can be selected in the license query.

- 14-day validity
- Start of 14 day period on the day of first use

The trial version becomes a full version when you install a full license. Reinstallation is not necessary.

Step-by-step instructions

Check licenses

Requirement

- You are a member of the Windows user group "SIMATIC Report Administrators".
- "Administration > Licensing" is open.

Procedure

Check the status in the table to see if you are using a valid Information Server license.

Result

The present licenses have been checked.

Project configuration

Project configuration

Definition

In the project configuration, you create new projects or edit existing projects that you use as data sources in Reporting and Dashboard. When you select a data source in the folder structure, you can see the metadata of the data source in the work area, for example, creation date, version or project type.

The following functions are available:

- Create new folder
- Add project
- Rename project
- Delete project

Note

Project archiving

After selecting an available project, you can see its project type, for example: PCS neo.

Assign an alias for projects with the same name to be able to assign the data sources during report creation.

Synchronization

By synchronizing, you trigger a manual transfer of the data sources stored in the Information Server database to the DataHost service. The DataHost service has an independent data archive for this data.

Synchronization is necessary, for example, if the configuration data in the Webframe database have been modified manually or the DataHost configuration file has been corrupted.

Diagnostics run

The diagnostic run provides the following information:

- DataHost: Checks if the DataHost service installed on the Information Server is working correctly. This service is used for the browsing of variables, for example.
- Trigger Service: Checks if the IS Ready Trigger Service installed on the data source is working correctly. This service is used for the creation of variable triggers.
- Update Service: Checks whether the IS Ready Update service installed on the data source is working correctly. This is responsible for detecting configuration changes in the data source that need to be communicated to the DataHost service.
- RuntimeData Service: Checks whether the IS Ready Runtime Data service installed on the data source is working correctly. This is used when querying certain runtime data in the dashboard.
- Diagnostics Service: Checks if the diagnostic service installed on the data source is working correctly. This is relevant for the evaluation and query of error states.
- Batch: Checks whether the Information Server Batch Stored Procedures required by the DataHost have been correctly installed in the HistorianStorage database.
- Organizational structure consistency: Checks if the referenced project still exists in the HistorianStorage database.
- Performance Monitor Stored Procedures: Checks if the stored procedures required by the Performance Monitor DataHost plugin have been installed correctly.

Host change

If you move a project like PH or WinCC to another computer, you have to adjust the host accordingly.

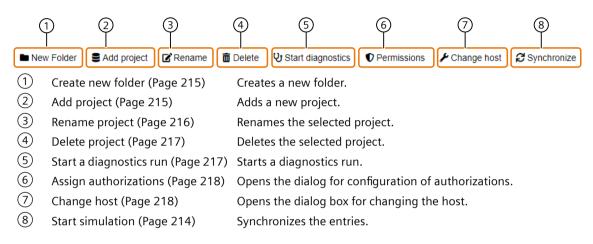
Toolbar in project configuration

Definition

The toolbar contains all functions for project configuration.

Structure

The following functions are available:



Step-by-step instructions

Start simulation

Requirement

- You have administrative permissions for the Information Server.
- "Administration > Project configuration" is open.

Procedure

Select "Synchronize".

Result

Synchronization is complete.

Create new folder

Requirement

- You are a member of the Windows user group "SIMATIC Report Administrators" or "SIMATIC Report Publishers". This enables you to connect a data source, e.g. Process Historian database.
- Users of the "SIMATIC Report Services" group must be created both on the Information Server and on the PC on which the data source is located. The user must have SIMATIC HMI rights on the PC with the data source.
- The Process Historian has been activated.
- "Administration > Project configuration" is open.

Procedure

- 1. Select "New folder".
- 2. Assign a name.
- 3. Select "Save".

Result

A new folder for the projects is created and visible in the hierarchy.

Add project

Requirement

- You have administrative permissions for the Information Server.
- "Administration > Project configuration" is open.

Procedure

- 1. Select "Add project".
- 2. Select a data source type and enter the host name.

Note

Pay attention to the correct selection of the data source type in connection with WinCC projects.

Example configuration	Data source type to be used	Server name
PCS 7/WinCC without Process Historian	SIMATIC PCS 7/WinCC	Server name of the primary OS
PCS 7/WinCC with Process His- torian	SIMATIC Process Historian	Server name of the Process His- torian

3. Select "Select project".

Data source type	
SIMATIC PCS 7/WinCC	Select the name of the data source.
Other data source types	Select the projects you want to add and enter their names.

4. Select "Add".

Result

One or more projects are added.

Rename project

Requirement

- You are a member of the Windows user group "SIMATIC Report Administrators" or "SIMATIC Report Publishers". This enables you to connect a data source, e.g. Process Historian database.
- Users of the "SIMATIC Report Services" group must be created both on the Information Server and on the PC on which the data source is located. The user must have SIMATIC HMI rights on the PC with the data source.
- The Process Historian has been activated.
- "Administration > Project configuration" is open.

Procedure

- 1. Select the project you want to rename.
- 2. Select "Rename".
- 3. Assign a new name.
- 4. Save your input.

Result

The project is renamed.

Delete project

Requirement

- You are a member of the Windows user group "SIMATIC Report Administrators" or "SIMATIC Report Publishers". This enables you to connect a data source, e.g. Process Historian database.
- Users of the "SIMATIC Report Services" group must be created both on the Information Server and on the PC on which the data source is located. The user must have SIMATIC HMI rights on the PC with the data source.
- The Process Historian has been activated.
- "Administration > Project configuration" is open.

Procedure

- 1. Select the project you want to delete.
- 2. Select "Delete project".
- 3. Confirm your selection.

Result

The selected project is deleted.

Starting a diagnostic run

Requirement

- You have administrative permissions for the Information Server.
- "Administration > Project configuration" is open.

Procedure

- 1. Select a project.
- 2. Select "Start diagnostics".

Note

You can save the log files of the diagnostic run locally using "Download log files".

Result

A table with the results of the diagnostic run opens. The table provides an overview of the features and their status.

The diagnostic run is completed.

Assigning authorizations

Requirement

- You are a member of the Windows user group SIMATIC Report Administrators.
- "Administration > Project configuration" is open.

Procedure

- 1. Select a project.
- 2. Select "Authorizations".
- 3. Select the user to whom you want to assign authorizations for this project in the form of roles. By clicking in the text field, a drop-down menu opens in which all users are stored.
- 4. Select the roles you want to assign to the selected user from the list. By clicking in the text field, a drop-down menu opens with all the roles you can assign.

Note

If you want to revoke authorizations from the user, remove the corresponding check marks from the role.

5. Select "Save".

Result

The authorizations for the user are assigned.

Changing the host

Requirement

- You have administrative permissions for the Information Server.
- "Administration > Project configuration" is open.

Procedure

- 1. Select the project for changing the host.
- 2. Select "Change host"
- 3. Enter a host name in the field "hostname".
- 4. Select "OK".

Result

The host has been adjusted.

You can view the changed metadata in the overview of the selected project.

User configuration

User configuration

Definition

You use user management to define the properties of the users and groups. You can see the following information in the overview for the created users:

- Stored e-mail addresses
- Language settings
- Associated Windows user groups

The following functions are available:

- Create new users
- Edit new users
- Configure group authorizations for the Windows user groups.

Note

To manage users and assign them to Windows user groups, use Windows Computer Management.

The Information Server uses the following local Windows user groups:

Windows user group	Rights
SIMATIC Report Services	This group should only be assigned to the user under which the Information Server services run:
	Information Server Scheduler
	• Datahost
	IIS Worker Process.
SIMATIC Report Administrators	Unrestricted access to all functions of the Information Server
SIMATIC Report Users	Create and configure reports and dashboards
SIMATIC Report Publishers	Create and load reports and dashboards
SIMATIC Report Viewers	Read access to reports and dashboards

Note

If you are a member of the "SIMATIC Report Services" Windows user group, assign yourself to another user group to use the Information Server.

Mapping of UMC and Windows groups in PCS neo

User groups of the Information Server in PCS neo

The following description applies to the scenario of the initial login to the Information Server via PCS neo.

During this step, the UMC groups which the UMC user is assigned to are once mapped to the corresponding groups in the IS. A "SIMATIC PCS neo Runtime Management Engineer" thus becomes a "SIMATIC Reporting User". If there are multiple UMC groups that apply, the IS groups are assigned additively. This process makes it possible for the user to be assigned to any number of groups, whereby the highest-level permissions apply.

Note

The "SIMATIC Report ..." groups do not exist initially. These groups must be created by the administrator.

All information and related links on the topic of user administration are available in the following section:

Project administration > User administration > Working with the user administration

Mapping of groups

When the user is a member of one of the following UMC groups, the user is applied to the corresponding IS groups.

UMC group	Corresponding IS group	Description
SIMATIC PCS neo System Adminis- trators	SIMATIC Report Administra- tors	Predefined UMC group
SIMATIC PCS neo Device Integration Engineers	SIMATIC Report Users	Predefined UMC group
SIMATIC PCS neo Project Manage- ment Engineers	SIMATIC Report Administra- tors	Predefined UMC group
SIMATIC PCS neo Runtime Manage- ment Engineers	SIMATIC Report Users	Predefined UMC group
SIMATIC Report Administrators	SIMATIC Report Administra- tors	The group must be created by the UMC administrator.
SIMATIC Report Publishers	SIMATIC Report Publishers	The group must be created by the UMC administrator.

SIMATIC Report Users	SIMATIC Report Users	The group must be created by the UMC administrator.
SIMATIC Report Viewers	SIMATIC Report Viewers	The group must be created by the UMC administrator.

Toolbar in user configuration

Definition

The toolbar contains all functions for user configuration.

Structure

The following functions are available:

	1 2	3 4				
	create users	Jser 🛇 Enable/disable user 🖓 Manage groups				
1	Create user (Page 221)	Creates a user.				
2	Edit user (Page 222)	Opens the edit mode of the selected user.				
3	Delete user (Page 223)	Deletes the selected user.				
4	Manage groups	Opens the dialog for group management:				
		Create user groups (Page 224)				
		• Edit user groups (Page 224)				
		Delete user groups (Page 225)				

Step-by-step instructions

Create user

Requirement

- You are a member of the Windows user group SIMATIC Report Administrators.
- "Administration" > "User configuration" is open.

Procedure

- 1. Select "Create user".
- 2. Select the user you want to create.
- 3. Select "Save".

Note

Alternatively, you can create a user by adding the user to a SIMATIC Report group on your computer. When users log on for the first time, they are created as Information Server users. Users can then be assigned to other groups in the Web application.

Result

The user is created and appears in the overview.

Edit user

Requirement

- You are a member of the Windows user group SIMATIC Report Administrators.
- "Administration" > "User configuration" is open.

Procedure

- 1. Select the user whose settings you want to edit.
- 2. Make the required settings for the user:

Tab	Settings
General	• Display name
	E-mail address
	• Language
	• Locked
	Delete all status data of the application
Notifications	Select notifications
Groups/Permissions	• Groups
	Additional permissions
Effective permissions	Overview of permissions

3. Select "Save".

Result

The user is edited.

Activate / deactivate user

Requirement	
	• You are member of a Windows user group or registered as local user in the domain.
	 "Administration" > "User configuration" is open.
Procedure	
	1. Select the user you want to activate / deactivate.
	2. Select "Activate / deactivate user".
	3. Confirm the selection with "Continue".
Result	
	The user is activated / deactivated.
Delete user	
Requirement	
	• You are a member of the Windows user group SIMATIC Report Administrators.
	 "Administration" > "User configuration" is open.
	At least one user has been created.
Procedure	
	1. Select the user you want to delete.
	2. Select "Delete user".
	3. Select "Save".
Result	
	The user has been marked as deleted in the database, but not completely removed.
	This results in the user no longer appearing in the overview.
	Note Restore user
	 If the user was not deactivated before deletion, he can restore his account by logging in again. An administrator can manually restore the account via "Create user".

Creating a user group

Requirement

- You are a member of the Windows user group SIMATIC Report Administrators.
- "Administration" > "User configuration" is open.

Procedure

- 1. Select "Manage groups".
- 2. Select "Add".
- 3. Enter a name and a description for the group.
- 4. Activate the permissions for the group.
- 5. Select "Save".

Result

The user group has been created and appears in the overview.

Editing a user group

Requirement

- You are a member of the Windows user group SIMATIC Report Administrators.
- "Administration" > "User configuration" is open.

Procedure

- 1. Select "Manage groups".
- 2. Select a group.
- 3. Select "Edit".
- 4. Edit the name and description of the group.
- 5. Activate or deactivate permissions for the selected group.
- 6. Select "Save".

Result

The user group is edited.

Deleting user groups

Requirement

- You are a member of the Windows user group SIMATIC Report Administrators.
- "Administration" > "User configuration" is open.

Procedure

- 1. Select "Manage groups".
- 2. Select a group.
- 3. Select "Delete".
- 4. Select "Save".

Result

The user group is deleted.

3.4.3 Office add-in

3.4.3.1 Excel Office add-in

Definition

Within the Excel Office add-in, you can insert, create and edit reports.

Structure

			2	3											
File	Home Insert Page Layou		Data Review	w View	Help	nformation	Server 🤇	Tell me v	what you war					∕4 Sh	are
Create	ে ে নিয় বিশ্ব বিশ্	Open Save	Server	About											
Reports	Excel Workbook	Configuratio	н	lelp											
G11	• : 🗙 🗸 fx														~
	А	E		С	D	E	F	G	н	1	J	к	L	M	1 🖻
1 Time		Value [kg	1											_	
2	Di, 28 Apr 2020 13:01:28,108		-4983,00												
3	Di, 28 Apr 2020 13:01:28,608		-4983,00												
5	Di, 28 Apr 2020 13:01:29,108		-4983,00 -4983,00												
6	Di, 28 Apr 2020 13:01:29,608 Di, 28 Apr 2020 13:01:30,108		8532,00											-	
7	Di, 28 Apr 2020 13:01:30,608		8532,00										_		
8	Di, 28 Apr 2020 13:01:31,108		8532,00												
9	Di, 28 Apr 2020 13:01:31,608		8532,00											-	
10	Di, 28 Apr 2020 13:01:32,108		7344,00												
11	Di, 28 Apr 2020 13:01:32,608	3	7344,00												
12	Di, 28 Apr 2020 13:01:33,108	3	7344,00												
13	Di, 28 Apr 2020 13:01:33,608	3	7344,00												
14	Di, 28 Apr 2020 13:01:34,108		-6848,00											_	
15	Di, 28 Apr 2020 13:01:34,608		-6848,00												
16	Di, 28 Apr 2020 13:01:35,108		-6848,00												
17 18	Di, 28 Apr 2020 13:01:35,608		-6848,00									_	-		
10	Di, 28 Apr 2020 13:01:36,108 Di, 28 Apr 2020 13:01:36,608		8362,00 8362,00												
20	Di, 28 Apr 2020 13:01:30,008		8362,00												
21	Di, 28 Apr 2020 13:01:37,608		8362,00												
22	Di, 28 Apr 2020 13:01:38,108		-7362,00												-
$\mathbb{R}^{n} \to \mathbb{R}^{n}$	Sheet1 +														Þ
Connected	to https://phis2020:443/							_g D	isplay Settings			<u> </u>	- 1	- + 10	00 %
1	Toolbar F (Page 228)	Provides	access	to the	e featu	res of	the E	xcel O	ffice a	dd-in					
2	Footer 9 (Page 255)	Shows tł	ne conn	ectior	n statu	is of tl	he Off	ice ad	d-in.						

The Excel Office add-in consists of the following areas:

③ Work area Shows the added reports, messages and tags.

3.4.3.2 Report types in the Office add-in

Definition

There are two types of reports in the Office add-in:

• Report template

You can create a report on the Information Server and insert it as a graphic in an Excel file. Report generation corresponds to the procedure in the Web application of the Information Server.

• Excel report templates You can create report templates for Excel. Process values or messages are inserted into the cells of an Excel worksheet. When relative times are used, you can update the cell contents. You use the Excel functions to process the data. For example, you can use the Excel graphics function to visualize process value trends.

3.4.3.3 Subscriptions for report templates in Excel

Definition

You can subscribe to reports from report templates created with Excel and stored on the Information Server. The formulas and diagrams contained in the reports are automatically updated.

The difference between the templates you create in Excel and the templates from the Web application is that the Excel templates in the Information Server are generated either by MS Excel or via Open XML, while the Web application templates are generated via the MS Report Server.

Note

To support the automatic update of formulas and charts, MS Excel must be installed on the server. The Information Server attempts to generate Excel reports via MS Excel. If Excel is not available on the server, the reports are generated via Open XML and some formulas and diagrams may not be automatically updated.

3.4.3.4 Step-by-step instructions

Open Office add-in

Requirements

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- A connection to the Information Server is established.

Procedure

- 1. Open the Office add-in.
- 2. Navigate to the "Information Server" tab.

Result

The Office add-in is opened.

3.4.3.5 Toolbar in Excel

Definition

The toolbar gives you access to the functions of the Office add-in.

Layout

The toolbar consists of the following areas:

	2	3	4	5	6	7	8	
	C					Ŷ	🚺 About	
Create	Tags	Messages	Run	Open	Save	Server		
Reports	E	kcel Workbo	ık	c	nfigurati	n	Help	
\frown	 2 Tags Create tags Configure tags 							
3 Mes	 Delete tags G Messages Create messages Configure messages Delete messages 							
(4) Upd	ate (Page	e 244)		te the Exce	-	ook.		
⑤ Ope	n		• 0	Open locally saved Excel reports				
6 Save	 Open Excel reports from the Information Server Save Save Excel report templates locally Save Excel report templates to the Information Server 							
⑦ Serv	ver (Page	245)	Open	the serve	r settings			
8 Abo	About / Help Open the information about the Information Server add-in						rver add-in.	

Step-by-step instructions

Creating a report in Excel

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- The Information Server tab is open in Microsoft Excel.
- A connection to the Information Server is established.

Procedure

- 1. Select "Create" in the "Reports" section.
- 2. In the "Create report" dialog, navigate to "Report templates > Templates" in the folder tree.
- 3. Select the report template that you use to create the report.
- 4. Configure the report template or apply a saved parameter default under "Parameter defaults", if available.

Note

Creating, applying or deleting parameter defaults

Here, you can accept parameter presets that you have already created in the Web application, create new parameter presets with the "+" button or delete existing ones.

You can find information about creating parameter presets in Excel under: Parameter defaults in Excel (Page 253)

You can find information about creating parameter presets in the Web application under: Creating parameter preset (Page 162)

5. Select "Create report".

Note

Display of queries with multiple-page results

For queries with multiple-page results, only the first page is displayed.

Result

A report has been created.

Opening locally saved Excel reports

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- The Information Server tab is open in Microsoft Excel.
- A connection to the Information Server is established.

Procedure

- 1. Select "Select the local file" in the "Configuration" area.
- 2. Select a report in the local repository and confirm the dialog.

Note

File format

The following file format is required for the import: .ert

Create folder

You can create a new order in the hierarchy using the keyboard shortcut "Ctrl+N" or the shortcut menu.

Delete folder

You can delete a selected folder in the hierarchy using the "Del" key or the shortcut menu.

The folder must be empty to perform the operation successfully.

Result

A report template is open.

Open Excel reports from the Information Server

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- A connection to the Information Server is established.
- The Information Server tab is open in Microsoft Excel.

Procedure

- 1. Select "Open" in the "Configuration" area.
- 2. In the Information Server repository, select the report to be imported and confirm the dialog.

Note

File format

The following file format is required for the import: .ert

Create folder

You can create a new order in the hierarchy using the keyboard shortcut "Ctrl+N" or the shortcut menu.

Delete folder

You can delete a selected folder in the hierarchy using the "Del" key or the shortcut menu.

The folder must be empty to perform the operation successfully.

Result

A report template is imported.

Saving Excel report templates locally

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- A connection to the Information Server is established.
- A report template is configured.

Procedure

- 1. In the "Configuration" area, select the option to save locally.
- 2. Select a storage location for the report and confirm the dialog for saving.

Note

Create folder

You can create a new order in the hierarchy using the keyboard shortcut "Ctrl+N" or the shortcut menu.

Delete folder

You can delete a selected folder in the hierarchy using the "Del" key or the shortcut menu.

The folder must be empty to perform the operation successfully.

Result

A report template is saved.

Save Excel report templates to the Information Server

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- A connection to the Information Server is established.
- A report template is configured.

Procedure

- 1. Select "Save" in the "Configuration" area.
- 2. Select a location on the Information Server for the report and confirm the dialog.

Note

Create folder

You can create a new order in the hierarchy using the keyboard shortcut "Ctrl+N" or the shortcut menu.

Delete folder

You can delete a selected folder in the hierarchy using the "Del" key or the shortcut menu.

The folder must be empty to perform the operation successfully.

Result

A report template is exported.

Creating a subscription in Excel

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- A connection to the Information Server is established.
- The Information Server tab is open in Microsoft Excel.

Procedure

- 1. Select "Save".
- 2. Select a folder to which to save the template in the "Save" dialog.
- 3. Name the template.
- 4. Enter a description for the template.
- 5. Select "Save".
- 6. Open the Web application of the Information Server.
- 7. In Reporting, navigate to the selected template location.
- 8. Open the Edit mode for the Excel report template.
- 9. Configure the Excel report template.

10. Select "Create subscription".

Note

These subscriptions only generate reports in Microsoft Excel format. The generated reports appear in the "Reports" overview of the created template in Reporting.

Details on configuration of subscriptions:

Creating a subscription (Page 175)

11. Save your entries.

Result

A subscription is created.

Create tag

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- A connection to the Information Server is established.
- The Information Server tab is open in Microsoft Excel.

Procedure

- 1. Select "Tags" in the "Excel Workbook" area.
- 2. In the "Add or edit tags" dialog, select a project.

Note

Project selection

The last selected project is automatically selected the next time the dialog is opened.

Select the "Update" button to update the selection of projects in the drop-down list.

3. Navigate to an archive and add one or more tags to the "Selected tags" overview by doubleclicking or using drag-and-drop.

Note

Displaying newly added tags

If you have added new tags to the selection and want to edit them, close the Excel worksheet and reopen the dialog to create or edit the tags.

4. Confirm the input with "OK".

Result

The tag is created.

Configuring tag

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- A connection to the Information Server is established.
- The Information Server tab is open in Microsoft Excel.

Procedure

- 1. Select "Tags" in the "Excel Workbook" area.
- 2. In the "Add or edit tags" dialog, select a project.

Note

Project selection

The last selected project is automatically selected the next time the dialog is opened.

Select the "Update" button to update the selection of projects in the drop-down list. Tags

The last configured tags are displayed in the table.

3. Select the tag you want to edit in the "Selected tags" overview.

Note

Displaying newly added tags

If you have added new tags to the selection and want to edit them, close the Excel worksheet and reopen the dialog to create or edit the tags.

 You configure the following standard parameters independently of the mode selected in the line of the tag: Editing standard parameters of the tag (Page 236)

- In the "Mode" column, select one of the configuration modes and make the settings for the selected mode.
 Setting the configuration mode for tags (Page 237)
- 6. Confirm the input with "OK".

Note

Enable maximum number

If the maximum number of values is set, values are output from the beginning of the time interval up to the maximum number. If the maximum number is greater than the number of values present in the time interval, the "Max. number" setting is ignored.

Result

The tag is configured.

See also

Time information (Page 157)

Configuring the standard parameters of the tag

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- A connection to the Information Server is established.
- The Information Server tab is open in Microsoft Excel.
- The tag you want to edit is selected in the "Selected tags" overview.

Procedure

Configure the following standard parameters directly in the line of the tag:

Parameter	Description
Start	Select a start date for the tag.
	You can enter absolute and relative times here. The released time information and examples can be found in the section "Time information" (Page 157).
End	Select an end date for the tag.
	You can enter absolute and relative times here. The released time information and examples can be found in the section "Time information" (Page 157).

Parameter	Description
Cell reference	Select the target cell for the tag in the Excel worksheet. You can click on the button in the "Cell reference" row. The dialog collapses so that you can directly select a cell and the value is applied. Alternatively, enter the value of a cell directly.
Sheet orientation	Select the orientation of the form.
	Horizontal
	• Vertical
Labeling	Specify whether and which labels the cells have in the Excel worksheet. The labeling position depends on the sheet orientation (horizontal/vertical).
	No label
	• Above (vertical): The names of the columns are above the values.
	• Below (vertical): The names of the columns are below the values.
	• Right (horizontal): The names of the columns are to the right of the values.
	• Left (horizontal): The names of the columns are to the left of the values.
Time stamp	Specify whether the values have a time stamp.
	No label
	• Left: The time stamp is located to the left of the values.
	• Right: The time stamp is located to the right of the values.
Quality Code	Select the position of the quality identifier.

Result

The default parameters of the tags are configured.

Setting the configuration mode for tags

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- A connection to the Information Server is established.
- The Information Server tab is open in Microsoft Excel and the "Add or edit tags" dialog is displayed.

Procedure

In the "Mode" column, select one of the following configuration modes and make the settings for the selected mode.

- Single value: A tag value is displayed according to the selected mode.
- Time series: The tag values are displayed unchanged or interpolated in a time series.

Configuration mode	Value mode	Description
Single value	Original	"Back" limit mode: "Back" mode searches backwards for the first incoming single value from the specified point in time. The specified time must be specified to the nearest millisecond. The function searches the last 30 minutes from the specified time. If there is no value in this time interval, an empty line is output.
		"Next" limit mode: "Next" mode searches forward for the first incoming single value from the specified point in time. The function searches a maximum of 30 minutes from the specified time. If there is no value in this time interval, an empty line is output.
	Interpolated	"Interpolated" mode calculates the value from the previous and the following value at the selected point in time. If there is a value at the selected time, there is no need to select the mode.
	Current	The "Current" mode updates the fixed value in the table for the specified cycle (unit seconds).
		If the value is set to "0", update the value via "Run".
Time series	Original	"Inside" limit mode: Contains the values in the specified time interval.
		"Outside" limit mode: Contains the last value before the time interval begins and the next value after the end of the time interval.
		"Back" limit mode: "Back" mode searches backwards for the first incoming single value from the specified point in time. The specified time must be specified to the nearest millisecond. The function searches the last 30 minutes from the specified time. If there is no value in this time interval, an empty line is output.
		"Next" limit mode: "Next" mode searches forward for the first incoming single value from the specified point in time. The function searches a maximum of 30 minutes from the specified time. If there is no value in this time interval, an empty line is output.
	Interpolated	"Interpolated" mode calculates the value from the previous and the following value at the selected point in time. If there is a value at the selected time, there is no need to select this mode. For example, The time interval is one minute, the time interval for interpolation is ten seconds, i.e. six interpolated values, one value per ten seconds.
	Calculated	"Max" calculation method: Determines the maximum value per interval. Select one of the modes under "Time stamp": Start of the interval min/max time stamp.
		"Min" calculation method: Determines the minimum value per interval. Select one of the modes under "Time stamp": Start of the interval min/max time stamp.
		"Mean value" calculation method: forms the arithmetic mean
		"Integral (linear)" calculation method: Forms the integral via the linear interpola- tion function of the tag
		"Integral (Sample-and-Hold)" calculation method: Forms the integral via the sam- ple-and-hold interpolation function of the tag
		"Sum" calculation method: Calculates the sum of all tag values per interval.

Result

Configuration mode is set.

Deleting a tag

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- A connection to the Information Server is established.
- The Information Server tab is open in Microsoft Excel.
- A report template is open and contains a tag.

Procedure

- 1. Select "Tags". The "Add or edit tags" dialog opens.
- 2. Select the tag you want to delete from the "Selected tags" overview.
- 3. Select the "Remove" button.

Result

The tag is deleted.

Create message

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- A connection to the Information Server is established.
- The Information Server tab is open in Microsoft Excel.

Procedure

- 1. In the "Excel Workbook" area, select the "Messages" option.
- 2. Select a project in the "Add or edit messages" dialog.

Note

Project selection

The last selected project is automatically selected the next time the dialog is opened.

Select the "Update" button to update the selection of projects in the drop-down list.

3. To create a default filter for a message, select the "Add message configuration" button.

Note

The filter for the message appears in the "Message configurations" list. One output per filter appears in the Excel worksheet. If you select a filter for a message in the "Message configurations" overview, you can configure the filter directly in the line.

- 4. Repeat the procedure from step 3 until you have inserted all the desired filters for the messages.
- 5. Confirm the dialog with "OK".

Note

When you move the mouse pointer over the text field for values in the Excel worksheet, a tooltip informs you of the name of the message block.

Result

The message is created.

Configuring a message

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- A connection to the Information Server is established.
- The Information Server tab is open in Microsoft Excel.

Procedure

- 1. In the "Excel Workbook" area, select the "Messages" option.
- 2. Select a project in the "Add or edit messages" dialog.

Note

Project selection

The last selected project is automatically selected the next time the dialog is opened.

Select the "Update" button to update the selection of projects in the drop-down list.

Messages

The last configured messages are displayed in the table.

- 3. From the "Message configuration" overview, select the filter for the message that you want to edit.
- 4. You configure the following standard parameters independent of the mode selected in the message line:

Configuring the standard parameters of the message (Page 242)

5. Select one or more attributes for the message in the "Selected attributes" column.

Note

The attributes are project-dependent. The order of the attributes in the table is referenced by the order of the selection. If you change the order, remove the entire selection and enable it again in the desired order.

6. Use the message filter to select additional filter criteria for the message attributes. Configuring a message filter (Page 246)

Note

You can use the message filter to define additional criteria for the attributes of the messages. The criteria limit the number of messages displayed.

You have the possibility to configure any number of filters. Select the attribute, operand, and value for one filter per line. You can also use the selection box to define the dependencies between the individual filters.

7. If needed, enable the "Maximum number" option and enter a number.

Note

If the maximum number of values is set, values are output from the beginning of the time interval up to the maximum number. If the maximum number is greater than the number of values present in the time interval, the "Max. number" setting is ignored.

8. Repeat the procedure from step 5 until you have inserted all the desired filters for the messages.

Note

When you move the mouse pointer over the text field for values in the Excel worksheet, a tooltip informs you of the name of the message block.

9. Confirm your changes with "OK".

Result

The message is configured.

See also

Time information (Page 157)

Configuring the standard parameters of the message

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- A connection to the Information Server is established.
- The Information Server tab is open in Microsoft Excel.
- The message that you want to edit is selected in the "Message configuration" overview.

Procedure

Edit the following standard parameters directly in the line of the message:

Parameter	Description
Name	Name of the message configuration
Start	Select a start date for the message.
	You can enter absolute and relative times here. The released time information and examples can be found in the section "Time information" (Page 157).
End	Select an end date for the notification.
	You can enter absolute and relative times here. The released time information and examples can be found in the section "Time information" (Page 157).
Cell reference	Select the target cell for the message in the Excel worksheet. You can click on the button in the "Cell reference" row. The dialog collapses so that you can directly select a cell and the value is applied. Alternatively, enter the value of a cell directly.

Parameter	Description				
Sheet orientation	Select the orientation of the form.				
	• Horizontal				
	Vertical				
Labeling	 Specify whether and which labels the cells have in the Excel worksheet. The labeling position depends on the sheet orientation (horizontal/vertical). No label 				
	• Above (vertical): The names of the columns are above the values.				
	• Below (vertical): The names of the columns are below the values.				
	• Right (horizontal): The names of the columns are to the right of the value				
	• Left (horizontal): The names of the columns are to the left of the values.				

Result

The standard parameters of the messages are edited.

Delete message

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- A connection to the Information Server is established.
- The Information Server tab is open in Microsoft Excel.

Procedure

- 1. Select "Messages". The "Add or edit messages" dialog opens.
- 2. In the "Add or edit messages" dialog, select the message you want to delete from the "Selected messages" overview.
- 3. Select the "Remove" button in the "Selected messages" overview.

Result

The message is deleted.

Updating an Excel workbook

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- A connection to the Information Server is established.
- The Information Server tab is open in Microsoft Excel.
- A tag or message is inserted in the Excel worksheet.

Procedure

In the "Excel Workbook" area, select the "Run" option to retrieve archive data.

Result

For the configured tags and/or messages, data from the connected data sources are retrieved and displayed.

Display process values graphically

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- A connection to the Information Server is established.
- The Information Server tab is open in Microsoft Excel.
- An Excel worksheet is opened in which process values are available.

Procedure

- 1. Select the process values and the corresponding time stamps that you want to evaluate graphically.
- 2. Navigate to the "Insert" tab.

- 3. In the "Charts" area, select the chart type with which you want to graphically display the process values.
- 4. Place the inserted chart at the desired position.

Note

If you have selected relative time data, choose "Run" and the process values in the chart are updated.

Result

The process values are displayed graphically.

Configuring server settings

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- The Information Server tab is open.

Procedure

- 1. Select the "Server" option in the "Configuration" area.
- 2. Enter the Information Server name or IP address.
- 3. Select "Save".

Result

The server settings are configured.

3.4.3.6 Message filters

Message filters

Definition

The selection of messages from the defined time range can be further limited by message filters. These can be created through message configuration using the "Add" button in the "Message filter" column. In the following dialog, filters can be specified for individual message attributes; a comparison operator and a comparison value is stored for each of these attributes.

Logic operations

By default, these filters are linked with a logical "AND". Alternatively, a logical "OR" can be selected by adapting the type of link between two filters in the "And/Or" column.

Grouping

You have the option of logically grouping sequences of filters. To do this, place a check mark in the first column for the required filters and then press the button labeled "{=" in the column heading.

Note

The grouping is only possible for filters which are directly above one another.

The grouping can be canceled by pressing the "X" button in the colored group marker.

Step-by-step instructions for message filters

Configuring a message filter

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- A connection to the Information Server is established.
- The Information Server tab is open in Microsoft Excel.
- The "Add or edit messages" dialog is opened and a message is created.

Procedure

- 1. Open the dialog in the Message filter column.
- 2. In the "Attribute" column, select an attribute as filter criterion.
- 3. Make the desired entries in the "Operator" and "Value" columns.
- 4. Link several attributes with operands.

Note

You use conditions to restrict the attributes that are output.

5. Select "Apply" to apply the filter settings for the message block.

Result

The message filter is configured.

🔀 Message filter editor					—		\times	
(= And/Or	Attribute	C	Operator	Value				
$+$ \times \Box	Status	Ŷ	= ``	,				
$+$ \times \Box And \sim		Ŷ		3				
$+$ \times \Box And \sim	Process value: 1	~	= `	- 50				
+ Add new clause								
Filter preview:								
Statustext = " AND PValue1 = 50								
					Apply	Can	cel	

3.4.3.7 Simplified operation

Simplified operation

Definition

The following tips to make operation more simple apply to the tables in the dialogs "Add or edit tags" and "Add or edit messages".

Filters for the "Message configurations" and "Selected tags" tables

You have the option to filter the tables by name, cell reference or project.

Filter table (Page 248)

Replace tag

The previously added tag in the list is replaced by the selected tag from the overview. Replace tag (Page 249)

Select multiple messages / tags

There are several ways to select multiple messages and tags at the same time.

Select multiple messages/tags (Page 253)

Transfer parameters for several fields in the table

You can match up the parameters for several messages / tags in one step.

Apply parameters (Page 249)

Layout of the buttons for simplified operations

The buttons in the dialogs "Add or edit tags" and "Add or edit messages" are located below the tables and are structured as follows:



1 Copy (Page 250) The message / tag or its configuration is deleted.

- 2 Paste (Page 251) The completely copied message / tag is inserted.
- (3) Transfer configuration (Page 251) The configuration of the copied message / tag is transferred to the selected message / tag. The name of the message / tag is retained.
- (4) Delete (Page 252) The message / tag is deleted. You can select several lines by holding down the Shift key and delete them all at one time.

Step-by-step instructions for simplified operation

Filter table

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- The Information Server tab is open in Microsoft Excel.
- A connection to the Information Server is established.
- Several messages / tags are created in the "Add or edit tags" or "Add or edit messages" dialogs.

Procedure

Enter the term you want to filter by in the row:

- Name
- Cell reference
- Project

Result

The filtered results are displayed in the table.

Replace tag

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- The Information Server tab is open in Microsoft Excel.
- A connection to the Information Server is established.
- At least one tag is created in the "Add or edit tags" dialog.

Procedure

- 1. Select a tag from the list of tags that have already been added.
- 2. In the overview, select a new tag that you want to use to replace the selected tag in the list.
- 3. Click "Replace".

Result

The previously added tag in the list is replaced by the selected tag from the overview.

Apply parameters

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- The Information Server tab is open in Microsoft Excel.
- A connection to the Information Server is established.
- Several messages / tags are created in the "Add or edit tags" or "Add or edit messages" dialogs.

Procedure

- 1. Select the row in the table for which you want to adapt the parameters.
- 2. Change a parameter of the message/tags and draw a blue frame in the lower right corner around the field for all fields that adopt the same value.

Result

The input value is copied for the selected fields.

Copy message/tag or its configuration

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- The Information Server tab is open in Microsoft Excel.
- A connection to the Information Server is established.
- Several messages / tags are created in the "Add or edit tags" or "Add or edit messages" dialogs.

Procedure

1. Select a message / tag.

Note Multiselection You can select several lines for this action by holding down the Shift key.

2. Select the "Copy" button.

Result

The message / tag or its configuration is copied.

Insert copied message/tag

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- The Information Server tab is open in Microsoft Excel.
- A connection to the Information Server is established.
- Several messages / tags are created in the "Add or edit tags" or "Add or edit messages" dialogs.

Procedure

1. Select a message / tag.

Note Multiselection

You can select several lines for this action by holding down the Shift key.

2. Select the "Paste" button.

Result

The completely copied message / tag is inserted.

Transfer configuration of the copied message/tag

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- The Information Server tab is open in Microsoft Excel.
- A connection to the Information Server is established.
- Several messages / tags are created in the "Add or edit tags" or "Add or edit messages" dialogs.

Procedure

1. Select a message / tag.

Multiselection

Note

You can select several lines for this action by holding down the Shift key.

2. Select the "Insert content" button.

Result

The configuration of the copied message / tag is transferred to the selected message / tag. The name of the message / tag is retained.

Delete message/tag

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- The Information Server tab is open in Microsoft Excel.
- A connection to the Information Server is established.
- Several messages / tags are created in the "Add or edit tags" or "Add or edit messages" dialogs.

Procedure

1. Select a message / tag.

Note

Multiselection

You can select several lines for this action by holding down the Shift key.

2. Select the "Delete" button.

Result

The message / tag is deleted.

Select multiple messages/tags

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- The Information Server tab is open in Microsoft Excel.
- A connection to the Information Server is established.
- Several messages / tags are created in the "Add or edit tags" or "Add or edit messages" dialogs.

Procedure

You can select multiple messages / tags at the same time:

- Hold the Shift key to select multiple rows at once.
- Mark the rows using the rubber band selection with the mouse.

Result

The messages / tags are selected.

3.4.3.8 Parameter defaults in Excel

Parameter defaults in Excel

Definition

You have the following options:

- Accept parameter defaults that are already created in the Web application
- Create new parameter presets with the "+" button
- Delete existing parameter presets

Application recommendations

The following functions are available:

Creating parameter presets in Excel (Page 254)

Reusing parameter presets in Excel (Page 254)

You can find information about creating parameter presets in the Web application under:

Parameter presets (Page 161)

Step-by-step instructions for parameter presets in Excel

Creating parameter presets in Excel

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- The Information Server tab is open in Microsoft Excel.
- A connection to the Information Server is established.

Procedure

- 1. In the "Create report" dialog, navigate to "Report templates > Templates" in the folder tree.
- 2. Select the report template for which you want to create the parameter preset.
- 3. Configure the report.
- 4. Select "Add".
- 5. Select a name.
- 6. Select "OK".

Result

The parameter preset has been created.

Reusing parameter presets in Excel

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators
- The Information Server tab is open in Microsoft Excel.
- A connection to the Information Server is established.
- A default parameter setting has already been created for the report.

Procedure

- 1. In the "Create report" dialog, navigate to "Report templates > Templates" in the folder tree.
- 2. Select the report template for which you want to copy the parameter settings.
- 3. From the drop-down list next to "Parameter presets", select the preset.
- 4. Confirm your selection.

Result

The parameter preset is included in Excel.

3.4.3.9 Footer in Excel

Connection status

The footer shows the connection status of the Office add-in. There are three different states:

- Connecting: The connection is being established.
- Connected: The connection is established.
- Connection failed: The connection has failed.

Footer in Excel

Definition

The footer shows the connection status of the Office add-in. There are three different states:

- Connecting: The connection is being established.
- Connected: The connection is established.
- Connection failed: The connection has failed.

Layout

Check the connection status at the left of the footer.

Connected to https://phis2020:443/

Checking the connection status (Page 256)

Step-by-step instructions

Checking the connection status

Requirement

- You are a member of one of the following Windows user groups:
 - SIMATIC Report Publishers
 - SIMATIC Report Users
 - SIMATIC Report Administrators

Procedure

Check the connection status in the footer.

- Connecting: The connection is being established.
- Connected: The connection is established.
- Connection failed: The connection has failed.

Note

No connection to the Information Server

If there is no connection to the Information Server, check if an appropriate license is available or if there are network problems. If necessary, repeat the connection procedure.

If there is no connection to the Information Server, the commands in the multifunction toolbar are not activated.

Result

The connection status is checked.