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.

<table>
<thead>
<tr>
<th>DANGER</th>
</tr>
</thead>
<tbody>
<tr>
<td>indicates that death or severe personal injury will result if proper precautions are not taken.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WARNING</th>
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</thead>
<tbody>
<tr>
<td>indicates that death or severe personal injury may result if proper precautions are not taken.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>indicates that minor personal injury can result if proper precautions are not taken.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NOTICE</th>
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<tbody>
<tr>
<td>indicates that property damage can result if proper precautions are not taken.</td>
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</table>

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:

<table>
<thead>
<tr>
<th>WARNING</th>
</tr>
</thead>
</table>
| 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. |

Trademarks

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may be trademarks whose use by third parties for their own purposes could violate the rights of the owner.

Disclaimer of Liability

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

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To stay informed about product updates as they occur, sign up for a product-specific newsletter. You can find additional information on this at: http://support.automation.siemens.com.
Overview

This information has priority over statements made in other documentation. Please read these notes carefully, as they contain important information about the installation and use of AS-OS Engineering.
Notes on installation

The installation notes include important information that you need to install the AS-OS Engineering software. Please read these notes prior to installation.

3.1 Scope of Delivery
You have received the following product with this delivery:

AS-OS Engineering V8.2

3.2 Hardware Requirements
The requirements of SIMATIC STEP 7 and SIMATIC WinCC apply.

3.3 Software Requirements

Runtime environment
To operate the AS-OS Engineering, you need the following additional software on your programming device or PC:

- SIMATIC STEP 7 V5.5 incl. SP3 or higher
- SIMATIC WinCC V7.3 or higher

Memory requirements
AS-OS Engineering occupies approx. 7 MB of memory space on your hard disk.

3.4 Installation and removal

Installation of AS-OS Engineering
You can install AS-OS Engineering V8.2 over an existing installation of AS-OS Engineering.

AS-OS Engineering can only be installed when both SIMATIC STEP 7 and SIMATIC WinCC are also installed. The WinCC configuration system must be installed on the same programming device or PC as the STEP 7 package. WinCC must be installed with the subpackage "Communication: Object Manager".
AS-OS Engineering is installed with a user-guided setup that you launch with the MS Windows Explorer by double-clicking on the SETUP.EXE program. The drive on which you install your AS-OS Engineering system must be the same as the drive on which the STEP 7 package is installed. There must be adequate disk space.

AS-OS Engineering is registered in MS Windows system files. You must not move any AS-OS Engineering files and folders with MS Windows tools such as Windows Explorer. Likewise, you must not modify any AS-OS Engineering data in the MS Windows registry. Correct program execution is no longer possible after such modifications.

Uninstallation of AS-OS Engineering

Note

You have to remove software products in accordance with the MS Windows guidelines.

To do this, uninstall your software package in the Windows Control Panel. For example, in Windows 7, open Programs > Programs and Features in the Control Panel and select your software package to be uninstalled. This is the only way to uninstall the software under MS Windows.

In the case of uninstallation, files created dynamically by AS-OS Engineering may not be removed. This is detected by the Uninstall tool, and the message "Some elements could not be removed. You should manually remove items related to the application." is displayed. You can, but do not have to, delete these dynamically created files.
Notes on usage

These notes take precedence over statements made in the manuals and online help.

4.1 New features and changes as compared to previous versions

What's new in AS-OS Engineering?

V8.2

Compared with the previous version V8.1, version V8.2 includes the following enhancements or changes:

- Configuring the message system
  The properties of the message blocks and their assignment to message lists can be changed, and the properties of the message lists can be configured for the PCS 7 message system.

- In V8.2, several minor bugs were fixed and improvements were made in AS-OS Engineering.

V8.1

Version V8.1 includes the following enhancements or changes compared with the previous version V8.0:

- Creation of structure types
  The names of structure types created in WinCC are now composed of the former block type name with the S7 program name added in front.

- Configuring the PCS 7 message system
  The settings in the "Configure the PCS 7 message system" dialog can only be exported to a file and imported from there to another project.

4.2 Notes on configuring and operation

4.2.1 Changing from one AS-OS Engineering version to another

If AS-OS Engineering V8.2 is used in projects whose AS data was last transferred to WinCC with an AS-OS Engineering version < V8.1, the "Entire OS with memory reset" scope must be set at the first call of the "Compile OS" Wizard.
You can find additional information on updating to PCS 7 V8.2 can be found in the PCS 7 manuals "Software update without utilization of new functions" and "Software update with utilization of new functions".

4.2 Notes on configuring and operation

4.2.2 General information

Please observe the following notes:

- If you assign multiple OSs in the multiproject to an area in the area-oriented OS compilation or if you assign multiple OSs to an S7 program in the AS-oriented compilation, the compiling of changes only functions correctly if these changes are compiled on all assigned OSs before new changes are made.

- If the names used to form tag names contain illegal characters, these characters are replaced with $. Illegal characters are % . ' \ ? * : as well as the space character.

- The origin of signaling blocks is automatically entered in the WinCC messages if the default setting $$AKZ$$ is kept or nothing is entered in the "Origin" field during PCS 7 message configuration. The plant hierarchy path (only folders that contribute to the name), the chart name and the block name are entered as the origin. If no plant hierarchy is configured, the program name, the chart name and the block name are entered.

- The area names are automatically entered in the WinCC block list and in the WinCC messages if they have been configured in the plant hierarchy and if the default setting $$AREA$$ is kept or nothing is entered in the "OS area" field during PCS 7 message configuration. This agreement is required for the "Open picture via process tags", area-specific filtering of messages, area-specific user administration, and "Assemble curves online" functions.

- The AS-OS Engineering creates containers with the area names in the WinCC Picture Tree Manager if you have selected the "Derive picture hierarchy from the plant hierarchy" option in the plant hierarchy settings (SIMATIC Manager: Options > Plant Hierarchy > Settings...) and the "Picture Tree" option in the "Select the data you want to compile and the scope of the compilation" dialog of the "Compile OS" Wizard. All configuration data of the Picture Tree Manager is deleted before the Picture Tree data is created.

- For message-type blocks, the block comment configured by the user for the block instance, and not the default block comment for the block type, is automatically entered as the event text in the WinCC messages if the default $$BlockComment$$ remains unchanged in the "Event" field during PCS 7 message configuration.

- If keyword $$CpuName$$ is configured in "Text1" or "Text2" for a STEP 7 message, the name of the CPU is entered in the WinCC message at the appropriate location.
• Please ensure that the S7 program names in your project (or multiproject) are unique, because this is checked before the OS is compiled. The check also applies to program names that are not assigned to a CPU.

• If you are using symbols for which operator control and monitoring is possible in your project, you should ensure that these symbols have unique names. Furthermore, when the plant hierarchy is used, you should ensure that the assigned CFC and SFC charts have unique names within the project, if the hierarchy folders are not name-forming. Likewise, you should ensure that a CFC chart does not contain any blocks with the same name that differ only with respect to upper/lower case. All of these cases cause the compilation to be aborted because tags with the same name cannot be created in the OS. To facilitate analysis of non-unique names, the AS-OS Engineering documents these names in the compilation log.

• If you use symbolic names for block types for whose instances operator control and monitoring is possible and global data blocks for which operator control and monitoring is possible, these symbolic names must not exceed 16 characters.

4.3 Notes on the Documentation

The most important information for working with AS-OS Engineering can be found in the online help, which you can access after installation of AS-OS Engineering from the "Help" menu or as context-sensitive help via the F1 key or the "question mark" button.

4.4 Amendments to the documentation

Section "Select Network Connection" Dialog Box"

The "Select Network Connection" dialog box is described in this section.

There is also the following information:

Section "Additional information"

• "Send/receive raw data block": displays whether the "Send/receive raw data block" option is activated/deactivated.
  For configuration, the "Connection resource" dialog box can be opened by double-clicking on this column.

• "Connection resource": shows the configured connection resource.
  If the check box "Send/receive raw data block" is not selected, then the connection resource cannot be edited and has the value "02".
  For configuration, the "Connection resource" dialog box can be opened by double-clicking on this column.

Section "Working in the Dialog Box"
Step 1 is replaced by the following information:

1. Check the list of network connections and the information displayed.
   If you do not want to make any changes, you can confirm this setting by double-clicking on the required network connection and continuing with step 2.
   If several network connections are available, select in the list the network connection over which the operator station assigned to the selected S7 program communicates with the CPU.
   In the row of the required network connection, check the settings in the columns "Send/receive raw data block" and "Connection resource". Change this if necessary.
   Click "OK" to confirm the selection.