SIEMENS

SIMATIC HMI

WinCC flexible 2008 SP3 Readme

System Manual

Printout of the Online Help

Legal information

Warning notice system

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

⚠ **DANGER**

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

⚠ **WARNING**

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

⚠ **CAUTION**

with a safety alert symbol, indicates that minor personal injury can result if proper precautions are not taken.

CAUTION

without a safety alert symbol, indicates that property damage can result if proper precautions are not taken.

NOTICE

indicates that an unintended result or situation can occur if the relevant information is not taken into account.

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

Qualified Personnel

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

Proper use of Siemens products

Note the following:

⚠ **WARNING**

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

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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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Security information

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Safe operation of a plant

To ensure safe operation of a plant, you have to take suitable security measures that also include IT security (e.g. network segmentation). More information on Industrial Security is available on the Internet (www.siemens.com/industrialsecurity).

NOTICE
Various passwords are set by default in WinCC. For security reasons, you should change these passwords.   • For the Sm@rtServer and for the integrated Web server, the default password is "100".   • The user password "100" is set by default for the "Administrator".

General information

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General information that could not be included in the manual or Online Help.

Starting ProTool after installing WinCC flexible

ProTool cannot be started from STEP 7 for integrated projects after the installation of WinCC flexible. This can be remedied by running ProTool from the Windows Start menu after the installation of WinCC flexible. You will then be able to start ProTool from STEP 7 again.

Microsoft Windows update

When WinCC flexible and WinCC flexible Runtime are installed, all required components of the operating system that are not present at the time of installation will be added. After having installed WinCC flexible, we highly recommend running "Microsoft Windows Update" to check for new security patches.

Display of HTML pages in Pocket Internet Explorer

The Pocket Internet Explorer of HMI panels is only released for simple HTML pages based on HTML 3.0 standard.

Using multiple screens

The operating system function used to visualize the screen content on several monitors (Control Panel > Display > Settings) has not been approved for WinCC flexible.

"Save as" in case of several WinCC flexible instances

"Save as" in the source may result in errors after copy-and-paste operation between instances.

Entries in the Windows event display by WinCC flexible

Warnings that are caused by the Microsoft SQL Server or the Automation License Manager can occur in the Windows event display. These warnings are not critical and do not impair the functionality of WinCC flexible.

Working on external media

Working on external media such as network drives or USB media can decrease performance.

We recommend that projects be edited on the local hard disk.

WinAC MP: Timeout error when printing a log

If you disable the headers and footers in a log, a timeout error may occur when the log is printed via USB.

In order to avoid the error, insert empty headers and footers.

Error message "User Instance Mode" when starting WinCC flexible

If you have installed SQL Server 2005 Express, an error message may be generated at the start of WinCC flexible indicating that "User Instance Mode" could not be started.

We recommend a restart.

Starting the Microsoft SQL Server 2005 Express Instance

The WinCC flexible instance of Microsoft SQL Server no longer starts after the PC was accessed by means of Remote Desktop. Restart the computer.

A corresponding hotfix is available from Microsoft for this error: KB896613

User data of Microsoft SQL Server 2005 Express Edition

A project could not be created or opened and an error message was output. The reason can be damaged user data of Microsoft SQL Server 2005 Express Edition.

Remedy:

1. Exit WinCC flexible 2008.

2. Closes the Start Center.

3. Open Windows Explorer and delete the following directory.
   In Windows XP:
   "%USERPROFILE%\Local Settings\Application Data\Microsoft\Microsoft SQL Server Data \WINCCFLEXEXPRESS"
   If using Windows 7:
   "%USERPROFILE%\AppData\Local\Microsoft\Microsoft SQL Server Data \WinCCFLEXEXPRESS"

Getting Started - WinCC flexible 2008

The Getting Started for WinCC flexible is based on version 2008. This means certain descriptions may not match the current version 2008 SP3. This statement is particularly true for the description of WinAC MP.

Getting Started Options

The documentation on "Getting Started Options" mentions the Microsoft SOAP Toolkit 3.0 as a prerequisite. As of version 2008 of WinCC flexible, the installation of the Microsoft SOAP Toolkit 3.0 is no longer necessary.

Turkish operating system: Folder names

If the folder name includes an "i", you may experience some problems with Turkish operating systems, such as C:\temp_i.

Data backup via USB

"Backup/Restore" in the Control Panel has been approved for use via USB for the following HMI devices:

- MP 177 - USB stick with 2 GB capacity only
- TP 177B 4" - USB stick with 2 GB capacity only
- MP 277
- Mobile Panel 277
- Mobile Panel 277 IWLAN
- Mobile Panel 277 IWLAN V2
- MP 377

See also

General Information (Page 25)

General information (Page 39)

General information (Page 47)

Installation/removal

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Contents

Information on installation not included in the manual or Online Help.

Microsoft SQL server cannot be installed

If the installation of the Microsoft SQL server is not possible, please check the "Automatic startup type" of the "Service" on your computer. "Deactivated" is not allowed to be set at the "Automatic startup type". Due to a restriction of the Microsoft setup, this service is a requirement for a successful installation.

Changing the license

In order to carry out a license change, terminate WinCC flexible Auto Start. After you have carried out the change successfully, you can re-activate WinCC flexible Auto Start.

Port activation for ALM

Port activation takes place automatically during installation of WinCC flexible. You can activate or deactivate the usage of port activation.

Release of directories and programs

Installation grants all users rights to write to the following directories under "%ALLUSERSPROFILE%\Application data":

- "SIEMENS AG\SIMATIC WinCC flexible"
- "SIEMENS AG\SIMATIC WinCC flexible 2008\Caches"

You need these directories to execute the central logs for WinCC flexible.

Installation enables the following programs in the Windows firewall:

- SIMATIC WinCC flexible 2008 Application
- SIMATIC WinCC flexible 2008 Trace Server
- Automation License Manager

Installation of SIMATIC products

Disable the "WinCC flexible Start Center" before you start installation of a SIMATIC product.

Installation Microsoft SOAP Toolkit 3.0

As of version 2008 of WinCC flexible, the installation of the Microsoft SOAP Toolkit 3.0 is no longer necessary.

WinCC flexible integrated in SIMOTION SCOUT

The following requirements have to be met to ensure trouble-free operation of WinCC flexible integrated in SIMOTION SCOUT:

● Work memory: 4 GB

● Processor: Dual Core

Review the additional information in the online help in all cases. The section "SIMOTION SCOUT project data" describes important performance features of integrated operation.

Installation sequence for integrated operation in SIMOTION SCOUT

Install the software in the following sequence.

Integrated operation will be ensured without any problems when you observe this installation sequence.

1. Step 7

2. SIMOTION SCOUT

3. WinCC flexible

Refer to the compatibility table provided with the SIMOTION SCOUT CD.

Audit Viewer

The Audit Viewer has been released

● for operating systems in the languages German, English, French, Italian and Spanish

● for an MUI operating system in one of the languages listed above

● for evaluation of an Audit Trail generated in one of the languages listed above.

The Audit Viewer V7.0.3 is located in the following directory on the WinCC flexible product DVD: /Support/Audit Viewer/Setup.

ProTool after uninstalling WinCC flexible

If you uninstall WinCC flexible, ProTool will no longer function.

Remedy:

1. Uninstall ProTool.

2. Reinstall ProTool.

3. Open Control Panel.

4. Double-click on "Software".

5. Select the "SIMATIC STEP 7" entry.

6. Click "Change".

7. In the installation dialog, select "Repair program".

Audit Trail and Log with Checksum

Before you update WinCC flexible with a new Service Pack or by a new version, you will have to exit and save the Audit Trail or the logs with checksum. After updating WinCC flexible, Audit Trail or the logs with checksum will be continued with new files.

The new version of WinCC flexible will start the logs at a defined state.

Error message during installation

You may occasionally see the error message "S7oiehsx.exe - Error in application" during installation of WinCC flexible.

Confirm the error message with "OK." The error message does not affect operation of WinCC flexible.

Installation of WinCC flexible 2008 SP3

Close all open SIMATIC applications before you start installation of WinCC flexible 2008 SP3.

Changing the installation

If you have installed WinCC flexible 2008, or WinCC flexible 2008 SP1, or WinCC flexible 2008 SP2, update your system with WinCC flexible 2008 SP3. Changes to the installed version, however, are not possible.

Proceed as follows to change the existing installation and add components, such as integration into Step7 or adding languages:

1. Open "Control Panel > Add or remove programs".

2. Select "WinCC flexible 2008 SP3."

3. Click "Change". The WinCC flexible InstallShield Wizard opens.

4. Change the installation to meet your requirements.

5. Finish the installation.

See also

24435650 (http://support.automation.siemens.com/WW/view/en/24435650)

Special features with Windows 7

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Contents

General information that could not be included in the manual or Online Help.

Permitted characters

WinCC flexible supports the full ASCII character set. We advise users, however, to refrain from using localized special characters. You should in particular refrain from using these special characters in the names of objects used in scripts.

New entries in the Windows Start menu

Under Windows 7, the entries of the SIMATIC product group are available under:

"Start > All Programs > Siemens Automation".

Slow response of screen keyboard and SmartServer

The following programs start and respond rather slowly under Windows 7:

- Screen keyboard Microsoft OSK and HMI TouchInputPC
- SmartServer: Key combination <Ctrl+Alt+Del> during logon

The delay is caused by the Internet certification check with callback.

Remedy:

The following files are available in the Support\Windows7\CRL_Check directory on your product DVD:

- DisableCRLCheck_LocalSystem.cmd
- DisableCRLCheck_CurrentUser.cmd

NOTICE
The certificate check on callback will be disabled for all users or computers. To restore the default settings, run the following files from the product DVD: \Support\Windows7\CRL_Check   Files: • RestoreDefaults_LocalSystem.cmd   • RestoreDefaults_CurrentUser.cmd

1. Execute the file "DisableCRLCheck__LocalSystem.cmd" with administrator rights. To do so, enter the command "Run as administrator" in the shortcut menu of the file.

2. Restart the computer.

Proceed as follows if the problem persists:

1. Execute the file "DisableCRLCheck__CurrentUser.cmd" with user rights. Double-click the file.

2. Restart the computer.

PC Runtime: Communication drivers under Windows 7 operating system

The following communication drivers for PC Runtime are not supported under Windows 7:

- SIMATIC S5 DP
- SIMATIC 500/505 DP

S7DOS V8: Missing write permissions in the registry

To set up a connection to the PLC with WinCC flexible Runtime, it may be necessary that Runtime changes the connection settings in the registry. Any user of WinCC flexible Runtime without write permission for the registry receives a system message. For write permission to the registry, users must be members of the group "Siemens TIA Engineer" created by S7DOS.

System function "SetDaylightSaving"

The system function "SetDaylightSaving" is not supported for PC-based HMI devices under Windows 7.

Creating a new graphic object as OLE object

The entry "Bitmap Image" is no longer available under Windows 7. Use "Paintbrush Picture" instead.

Logs and recipe data on a server with Windows 7

The following HMI devices are not suitable for storing logs and recipe data on a server with Windows 7:

- OP 77B
- TP 170B, OP 170B
- TP 177B, OP 177B
- TP 270, OP 270
- TP 277, OP 277
- MP 270
- MP 370

- Mobile Panel 170
- Mobile Panel 177

Stopping the Sm@rtServer

Sm@rtServer always runs as a service in Windows 7. This means you cannot stop the Sm@rtServer in Runtime with the Notification Area in the taskbar. You have the following options to stop the Sm@rtServer:

- Exit the system function "ControlSmartServer"
  Configure the system function "ControlSmartServer" to a button, for example. At the system function select the "Stop" mode. Stop the Sm@rtServer by clicking the button in Runtime.

- Stopping the Sm@rtServers with the Control Panel:
  Open the "WinCC flexible Internet Settings" in the Control Panel and activate the "Remote" tab. Click "Stop". The Sm@rtServer will be stopped.

- Stopping the Sm@rtServer with Runtime:
  Open the "WinCC flexible Internet Settings" in the Control Panel and activate the "Remote" tab. Activate the option "Close with Runtime". The Sm@rtServer will be stopped when Runtime is stopped.

Working with standard user rights

If you work with standard user rights under Windows 7, do not disable the "User Account Control" (UAC).

The "User Account Control" is enabled by default under Windows 7.

You can find additional information about "User Account Control" in Windows 7 Help.

Serial OS update with an MP 377

If you run a serial update with an MP 377, you may sporadically encounter a connection abort when using Windows 7.

If the connection aborts, run the "Reset to factory settings" function.

Use Ethernet or USB for the connection when updating the OS.

Printing project data

When you print project data, WinCC flexible may sometimes crash under Windows 7. Contact Customer Support if this problem occurs.

Set PG/PC interface

To set up modules with the application "Set PG/PC interface", you need additional rights under Windows7.

The administrator will have to add each user who is permitted to make changes to the SIMATIC configuration to the user group "Siemens TIA Engineer".

Teleservice in Windows 7

Teleservice for Windows 7 is not approved.

Special features for languages

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Contents

Special features not covered in the manual or Online Help.

Display of Asian fonts in Runtime

If you use fonts that are not the standard fonts of WinCC flexible for the project configuration, display problems may occur at some HMI devices.

Use only the standard fonts or extend the collection of fonts on the HMI device to include those fonts used in the project.

Error during import in WinCC flexible of national letters and special characters from ProAgent

If you have imported ProAgent data or ALARM-S alarms with national letters and special characters from WinCC flexible 2007 Hotfix 5 or earlier into an integrated project and migrated to WinCC flexible 2008 with this project, errors may occur when importing the national letters and special characters.

Remedy:

1. Disable the connections to the respective S7 programs with national letters and special characters for ProAgent data or ALARM-S alarms.

2. Select the "Delete Temporary Files" command from the "Tools" menu.

3. Reactivate the connections you have deactivated in step 1.

4. Select the desired ProAgent units in the "ProAgent" editor.

Migration

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The migration of projects is not supported in WinCC flexible 2008 SP3.

WinCC flexible 2008 SP3 Micro

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Contents

Specific information on WinCC flexible 2008 SP3 Micro that could not be included in the online help or manual.

Engineering System 8

8.1 General Information

Contents

General information on WinCC flexible that could not be included in the manual or online help.

Logging on network drives

We do not recommend that you log alarms, tags, and Audit Trail directly on a network drive. Power supply can be interrupted at any time. This means there is no guarantee for a reliable operation of logs and audit trails.

We recommend you save the logs and audit trails on your local hard drive or a local storage card. Use the system function "ArchiveLogFile" to save the logs or the audit trail long-term on a network drive. This step ensures reliable operation.

Security updates

When WinCC flexible is installed, all required components of the operating system that are not available yet are installed. After you have installed WinCC flexible, run "Microsoft Windows Update" to check for new security patches.

Importing project texts

The > < ' and & characters may not be used in an import file.

Project Wizard

When a new project is created using the Project Wizard, it is possible to have a header created in the screen template. The header is not supported by OP 73micro, TP 177micro, OP 73, OP 77A and TP 177A HMI devices.

Differences in the visualization of screen elements on the HMI device

The representation of screen elements (symbol library, images or texts) on the configuration computer can deviate from the representation on the HMI device. The deviation can be caused by:

- The display technology
- Differences in the resolution at the configuration computer and the HMI device

You should always check the final layout on the HMI device.

Changing the online help language

If the online help system crashes when the language is changed, check the version of the "hhctrl.ocx" file in the "system32" subdirectory of the installation directory of the operating system. If the file version is older than V5.2.3735.0, download a newer version from http://msdn.microsoft.com/library/default.asp?url=/library/en-us/htmlhelp/html/hwMicrosoftHTMLHelpDownloads.asp.

User dictionaries

User dictionaries are read-only if you open multiple instances of WinCC flexible.

Replacing HMI devices with DP configuration

The configuration for direct keys is not altered when you replace an HMI device with DP configuration. The HMI device cannot be operated in Runtime if the direct-key configuration is incorrect, for example, when using an incompatible DP slave. Always check the direct-key configuration and the existence of appropriate DP modules in HW Config when you replace an HMI device.

Graphics are not displayed correctly when 277 devices are used:

You have configured several HMI devices in WinCC flexible. One of these HMI devices is one of the new 277 devices. The different depths of color can cause an error in the screens they contain.

The error causes the following situations:

1. Graphics with 16-bit color depth are transferred for the HMI device with 8-bit color depth. The cactus screen is represented as the default screen, rather than the actual graphic.

2. Graphics with 8-bit color depth are transferred for the HMI device with 16-bit color depth. The actual graphic appears rather fuzzy.

Workaround:

As a workaround, you can correct the incorrectly transferred HMI device by switching the device.

You can then switch back to the original HMI device.

Generate the project for the HMI device once more and transfer this to the panel.

You may have to repeat this step for every HMI device that is not displaying the graphics correctly.

Project texts: Fields in the function "Automatic Compilation"

Contrary to statements made in the online help, the function "Automatic Compilation" is available even if the text for compilation includes tags or text lists. If the fields have a different format in the source language, then the fields will be displayed first in the target language followed by the texts separated by spaces.

Starting the simulator

If a simulation is already running in the background, you may not be able to always start another instance of the simulator correctly.

Printing reports

If you want to print a report, you should first set the online language to the logging language.

Report: Printing the Audit Trail

If you want to print an Audit Trail in Runtime, Audit logging must be stopped. No operations related to the FDA-conform process can be active as long as an Audit Trail is being printed.

Audit Trail

Prior to commissioning check that the printout of the Audit Trail is complete with the selected print settings using the configured font and size.

In particular check the first line of an Audit Trail entry consisting of "Data record ID", "Time stamp", "DeltaZuUTC" and "UserID".

Moving tags for address multiplexing

You have created the tags Tag_1 and Tag_2 for address multiplexing. Tag_2 is the address of the tag Tag_2.

Create a folder to organize the tags. Move Tag_2 to this folder. To refresh the display in the "Tags" editor, close and reopen the editor.

Modicon MODBUS TCP/IP: Number of elements per array

For a tag with "Modicon MODBUS TCP/IP" connection, the maximum number of elements per array is 50.

See also

Integration in STEP 7 (Page 54)

8.2 Projects

Contents

Information on working with projects which is no longer included in the manual or the online help.

Managing projects in Windows Explorer

WinCC flexible creates a project database on the hard disk when you save a project. The project database is stored in the Windows file manager with the extension *.hmi. A log file (*_log.ldf) is stored for each project database. Consistency of data cannot be guaranteed without this log file.

The project database can be moved, copied and deleted together with the corresponding log file in the Windows Explorer, as you are used to with other files. However, ensure that the database and the log file are not separated from each other during copying and moving.

For further information, refer to Working with Projects in section "Managing projects in the Windows Explorer."

Opening integrated projects

When a WinCC flexible project originating from an older version is opened for the first time with WinCC flexible 2008, conversion starts by default. The conversion may require some time and, in the case of very large projects, may also require some hours.

If the project was opened directly from the SIMATIC Manager, the conversion progress is shown by means of a display. In the case of very large progress, this does not show the actual course. In this case the CPU utilization of the computer indicates that conversion is still running.

The conversion process should not be aborted.

Access problems at project files

If configuration files cannot be copied/moved or "Save As" is not possible or other access problems occur, the following solution can be tried:

Open and close the project and then carry out the failed action again - if appropriate in connection with a previous rebooting of the computer.

"Save as" to external USB media

If you save a project to external media with the "Save as" command, it may take a few minutes.

We recommend saving the project locally and then copying it to an external data storage device using the Windows Explorer.

Incorrect display of symbolic IO fields after conversion

When a project is converted to a later version of WinCC flexible, any symbolic IO fields included in the project will be displayed incompletely.

Delete the incorrect symbolic IO field and reconfigure the symbolic IO field.

8.3 Recipes

Contents

Information on working with recipes which is no longer included in the manual or the Online Help.

OP 77A, TP 177A and Basic Panels: Reaction of the buttons to page changes

The "Save" dialog with its "Yes", "No" and "Cancel" buttons is displayed if you edit a recipe data record and trigger a page change without having saved the recipe data record. The "No" and "Cancel" buttons trigger the same reaction: The changes you have made to the recipe data record will not be saved.

OP 77A, TP 177A and Basic Panels: Overwriting changed values

If you change the values of a recipe data record in the recipe view while transferring a recipe data record between PLC and the HMI device, the altered values will be overwritten in the recipe view.

Disabling synchronization of tags in the process picture

Clear the "Synchronize tags" option in an extended recipe view. This means the recipe data record values cannot be changed outside the recipe view in the configured I/O fields.

The following system functions have no effect if you have cleared the "Synchronize tags" option.

- LoadDataRecord
- SaveDataRecord
- SetDataRecordTagsToPLC
- GetDataRecordTagsFromPLC

8.4   Screens and Screen Objects

Contents

Screen and screen object configuring information which could not be included in the manual or Online Help.

OLE server

Note

We recommend you use "Create new graphic from file" to create graphics. Use "Create new graphic from OLE object" only for those file formats that are not supported.

OLE servers released for use in WinCC flexible:

	Windows XP	Windows 7
Adobe Photoshop CS3	Yes [1]	No
AutoSketch 9	No	No
Corel Designer 12	Yes	Yes
Corel Draw X3	Yes	Yes
Corel Photo Paint X3	Yes	Yes
Corel Paint Shop Pro Photo X2	No	No
Microsoft Office 2007	Yes	Yes
Microsoft Paint 5.1	Yes	No
Microsoft Paint 6.0	No	Yes
Visio 2003	Yes	No
Visio 2007	Yes [2]	Yes [2]
Paint Shop Pro 9	Yes [3]	No

[1]	"Create new graphic from OLE file" - "Create from file" not available
[2]	"Create new graphic from OLE file" - "Create from file" not available Proceed as follows instead: 1. Start the graphics program. 2. Create the graphic with the graphics program and save the graphic on your data carrier. 3. Create a graphic display in WinCC flexible. 4. In WinCC flexible, click the "General" group in the Properties window of the Graphic view. 5. Click "Create New Graphic from OLE Object". 6. From the "Insert object" dialog box, select "Create from file." Click "Browse..." Use the dialog to help you navigate to the folder in which the graphic is saved.
[3]	The error message "Server overload" may be displayed at initial start. Remedy: Open and close the graphics program standalone. Repeat insertion of graphic in WinCC flexible.

Special considerations regarding OLE graphics

If you edit an OLE graphic with Microsoft Paint, you may not change the file format with the "Save as" command before returning the OLE graphic to WinCC flexible.

The entry "Bitmap Image" is no longer available under Windows 7. Use "Paintbrush Picture" instead.

Inserting OLE object

When you create a new graphic from an OLE object, the dialog "OLE-Graphic edit process" will open in the background.

The dialog will remain active in the background as long as the dialog "Insert object" stays open.

The dialog "OLE-Graphic edit process" will shut down automatically under Windows XP as soon as you close the dialog "Insert object."

It may occur under Windows 7 that the dialog "OLE-Graphic edit process" does not close automatically.

Click Back in WinCC flexible to close the dialog, to return to WinCC flexible and to shut down the OLE server.

OLE object under Windows 7

Do not use an OLE object of the type "Package" under Microsoft Windows 7.

GIF graphics with transparent components from WinCC flexible 2005 SP1

GIF graphics with transparent components that were configured in a WinCC flexible project 2005 SP1 or SP1 HF1, may be displayed differently when they have been opened in the current version.

Remedy: Integrate the original graphics again into the current project.

Error message "Server is fully utilized" for Paint Shop Pro 9 object

The action will be aborted when you configure an OLE graphic from Paint Shop Pro 9 in WinCC flexible ("Create new graphic from OLE object" --> "New").

Remedy: Open and close "Paint Shop Pro 9" standalone. Repeat this step.

Array elements of faceplates

Do not assign any array element or multiplex tag connected to an array to the property of a screen object if the following conditions apply:

- The property is configured as system function parameter in a faceplate.

- You have configured system functions or scripts for events of the property in a faceplate.

Text lists with variables in faceplates

Configure text lists with variables in a faceplate. If you supply the variables with values via a dynamic interface, you may not interconnect them with an array element.

Rotation of faceplate instances

The rotation of faceplate instances will not be supported if you configure the faceplate type to "fixed size" or "same aspect ratio."

Flipping of faceplate instances

Flipping of faceplate instances is not supported.

Key-operated switch as direct key

If the direct key tag is connected to a process and communication is up, the actual value is transferred from the PLC to the tag. The tag that contains the current position of the key is overwritten by this process. It may happen that the key switch tag no longer reflects the current value of the key-operated switch, for example, if the Mobile Panel is switched off while the key is being turned.

8.5 Alarm system

Contents

Information on alarm programming not included in the manual or Online Help.

8.6 User Administration

Contents

Information on user administration not included in the manual or Online Help.

Simulation with export of user data

During a simulation you can also test the exporting of user data. After a completed simulation, delete the export file with the password list on the PC. This setup ensures that nobody has unauthorized access to the passwords.

Importing password lists

When password lists are imported, the passwords are not checked for conformity to the rules set up in the Engineering System.

If the users are exported from a project where passwords rules are not set, they can be imported into a project that has password rules. It is therefore possible to have users without special characters in their password in a project that requires special characters.

"Login using password exclusively" option

The option is activated as default for new projects in the following HMI devices:

- OP 77A
- OP 77B
- TP 177B 4"color PN/DP
- KTP400 Basic mono PN
- KTP400 Basic mono PN Portrait

The default setting for the option "Login using password exclusively" is deactivated for all other HMI devices. When you migrate existing projects to WinCC flexible 2008, the option is always deactivated even for the HMI devices listed above.

Deleting users with active "group number hierarchy"

The active "Group number hierarchy" check box allows administrators to manage only the users assigned a group number which is less than or equal to that of the administrator.

If WinCC flexible does not assign the highest group number for the default "Admin" user, then you will no longer be able to manage user groups in Runtime.

Example:

- user configured with administrator rights of group 20

- user configured with user rights of group 10

- default "admin" user created by WinCC flexible of group 9

If you delete the user with group 20, you can no longer edit the user of group 10. You will no longer be able to assign users to groups 10 and 20.

The reason is the lower group number. The remaining user with "administrator rights" of group 9 is ranked lower than the user with "user rights" of group 10.

SIMATIC Logon

If you use SIMATIC Logon, make sure that the names of the Windows user groups and users do not contain the '/' and '\' characters.

8.7 System Functions and Scripting

Contents

Information on script programming not included in the manual or Online Help.

"NotifyUserAction" system function

FDA guidelines stipulate that the tags for the following parameters must always contain a value in Runtime:

- Category
- Object name
- Description

System function "AdjustContrast"

The system function "AdjustContrast" is only supported by Basic Panel KTP 600 Basic Mono PN and KTP 400 Basic Mono PN.

"CallText" system function in faceplates

The system function "CallText" is not supported in faceplates.

System function "ClearDataRecordMemory"

The "ClearDataRecordMemory" system function can only be used to delete recipe data records. It cannot be used to delete recipes.

8.8 Import and export

Contents

Information on import and export functions not included in the manual or Online Help.

Importing and exporting SIMOTION tags

SIMOTION tags can neither be imported nor exported. WinCC flexible does not support imports and exports with symbolic addressing. SIMOTION only allows symbolic addressing.

Communication

<div align="right">9</div>

9.1 General information

Contents

Information on communication drivers not included in the manual or Online Help.

⚠ CAUTION
Ethernet communication
In Ethernet-based communication, such as PROFINET IO, HTTP, Sm@rtAccess, Sm@rtService and OPC, it is the end user who is responsible for the security of his data network. The proper functioning of the device cannot be guaranteed in all circumstances; targeted attacks, for example, can lead to an overloading of the device.

Connecting cable order numbers not up-to-date

The online help contains order numbers for connecting cables that have been discontinued.

For detailed information, refer to Siemens Online Support under comment number: 26556941 (http://support.automation.siemens.com/WW/view/en/23486974)

You will find the order numbers for connecting cables in the catalog under "HMI accessories".

Diagnostic Repeaters on PROFIBUS

Communication at OP 73micro, TP 177micro, OP 73, OP 77A and TP 177A HMI devices may be disrupted when a diagnostic repeater and an HMI device are operated on the same PROFIBUS network, and the diagnostic repeater is used for line diagnostics.

Changing the CPU type in STEP 7

If you change the CPU type in STEP 7, the connection between symbols and this CPU is disconnected in WinCC flexible.

Select "Reconnect" in order to reconnect the symbols to the CPU.

Modification of the baud rate at MPI/DP networks

Applies for the following devices:

- MP 277
- Mobile Panel 277
- MP 377

If you modify the baud rate in the MPI/DP network, the HMI device has to be rebooted.

PC adapter MPI/PROFIBUS aborts the connection at MP 377

The PC adapter MPI/PROFIBUS (6ES7-972-0CA23-0XA0) is not approved for the transfer of images or projects to an MP 377.

PROFINET IO direct keys

You must always use the new GSDML file in HW Config of the STEP 7 project if you are using the current image for the HMI devices. You can change the version of the GSDML file accordingly by editing the properties of the HMI device in HW Config.

The new features in PROFINET IO (e.g. the topology editor) require an IO controller (S7CPU) of a more recent design. HW Config informs you of whether or not your IO controller supports the new features by generating a corresponding alarm once you have assigned the HMI device to the IO controller. You need to upgrade your IO controller in this case.

Communication via OPC

OPC Material is used in OPC XML Gateway. OPC Foundation homepage www.opcfoundation.org

An OPC Server is installed on an HMI device and is used to communicate with a PLC.

If you are using a tag of "String" data type to access an OPC Server tag of "String" data type and the string length in the PLC exceeds the tag "Length", the "Value change" event configured at this tag is triggered persistently in Runtime, regardless of whether or not the string in the PLC has changed.

In this case, you should carefully check the string length in the PLC and configure a tag of "String" data type and appropriate "Length".

OPC: Using the HMI device under Windows 7

HMI device	Data exchange over	Operating system	OPC server	OPC client
PC, Panel PC	DCOM	Windows XP Windows 7	OPC DA server	OPC DA client

OPC: OPC Item Browser quantity structure

You should not configure more than 1000 tags in the OPC Item Browser.

OP 73micro, OP 73, OP 77A, TP 177A, TP 177micro and Basic Panels: Updating of tags

Tags with a configured cycle time of 100 ms will usually be updated after 120 ms.

OP 77A, TP 177A and Basic Panels: Drivers for non-Siemens PLCs

Arrays with more than 100 data words will not be supported for connections to "Modicon Modbus" and "Allen-Bradley DF1."

Use of PROFINET IO with Panel HMI devices

When you use PROFINET IO to connect the direct keys and LEDs of HMI devices with the PLC, you can set an offset for the address range of the inputs and outputs during configuration in HW Config.

The following restriction applies when you use a PROFINET IO capable CPU of the 400 series in connection with one of the HMI devices listed below:

The offset for the start of the address range of the inputs may not exceed the offset for the start of the address range of the outputs.

The limitation applies to the following HMI devices:

- OP 177B
- OP 277
- Mobile Panel 177

To configure the address parameters, open the PLC with the CPU of the 400 series in HW Config. Select the HMI device connected with PROFINET IO in the station window of HW Config. The lower area of the station window shows a table in detailed view with the properties of the HMI device. Select the table row with the addresses of the HMI device and open the object properties with the shortcut menu.

Select the "Addresses" tab in the "Object Properties" dialog. Configure the offset for the inputs under "Inputs > Start." Configure the offset for the outputs under "Outputs > Start."

Simulation with process connection

Simulation with process connection is not possible with SIMATIC Manager V5.3 for the following HMI devices:

- TP 177A
- KTP1000 Basic DP
- KTP600 Basic color DP

Communication problems with PC/PPI cable and STEP 7-Micro/WIN

If you install WinCC flexible and STEP 7-Micro/WIN, problems with the communication via the PC/PPI cable may occur, irrespective of the sequence of installation.

If you want to establish communication using the PC/PPI cable, proceed as follows:

Removing the PC/PPI cable driver

1. Select the "Set PG/PC interface" command in the "Start > Settings > Control Panel" menu.

2. In the "Interface" area, click "Select".

3. In the "Installed" area, select "PC/PPI cable".

4. Click "Remove".
   The driver is now removed.

5. Install the "PC/PPI cable" again.

PC adapter MPI/PROFIBUS for PCs with dual-core processors

The PC adapter MPI/PROFIBUS (6ES7-972-0CA23-0XA0) is not approved for communication of PCs with dual-core processors.

TS Adapter IE and TS Adapter II in MP 370 and MP 377

An OS update via "TS Adapter II" and "TS Adapter IE" has not been released for the following HMI devices:

- MP 370

- MP 377

Special features of a connection with the Mitsubishi PG protocol and protocol 4

There are different limits for the address ranges for the CPUs of different series. Refer to the Mitsubishi Computer Link manuals to determine the appropriate limits. In the Q series, it is only possible to address up to 8191 in the M and D area.

OP 73micro, OP 73 and OP 77A, TP 177 micro, TP 177 A and Basic Panels: Parallel communication for projects integrated in STEP 7

Note the following for projects integrated in STEP 7:

- Parallel communication via MPI/DP and Ethernet is not permitted.

- Only one connection is permitted.

Allen-Bradley: Communication via DH485 protocol

Different from the description in the Online Help, you may set up the following protocol parameters:

- Data bits:"8 bits"

- Parity: "even"

- Stop bits:1 bit

WinAC RTX

WinCC flexible Runtime is installed. It is possibly necessary to manually reinsert a CP that was configured for WinAC RTX as IF module before you run WinAC RTX.

9.2 OPC

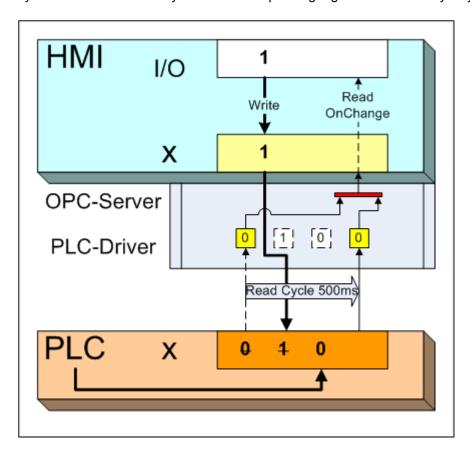### Special features of OPC communication

Requirements: An OPC Server is installed on an HMI device and is used to communicate with a PLC.

When using a tag of the data type "String" to access an OPC Server tag of data type "String" and the string length in the PLC exceeds the tag "Length", the Runtime program continually triggers the "Value change" event configured at this tag, regardless of whether or not the string in the PLC has changed.

In this case, you should carefully check the string length in the PLC and configure a tag of "String" data type and appropriate "Length".

Inconsistent OPC tag values in the PLC and HMI device

Requirements: A tag "x" is configured in an I/O field on the HMI device, for example, and is synchronized automatically with the corresponding tag "x" on the PLC by way of OPC server.

After an operator has entered a new value in the I/O field, e.g."1", the value of tag "x" in the PLC is synchronized by changing it from "0" to "1" (Write), for example. In reverse direction, the HMI device reads the tag value from the PLC (Read) in asynchronous mode (e.g., at intervals of 500 ms, as configured in the tag.) However, the HMI device is only updated after the value has changed (Read OnChange).

A value change is not made available to the OPC server if the PLC or a different HMI device now reset the value of tag "x" to its old "0" value within the read cycle, i.e. "0 -> 1- > 0". The value of tag "x" is now set to "1"on the HMI device and to "0" on the PLC.

⚠️ **CAUTION**

Inconsistent OPC tag values in the PLC and the HMI device:

To avoid concurrent write access of other communication nodes and of the PLC itself to the same configured tag in the PLC, e.g., set up separate read and write tags on the HMI device.
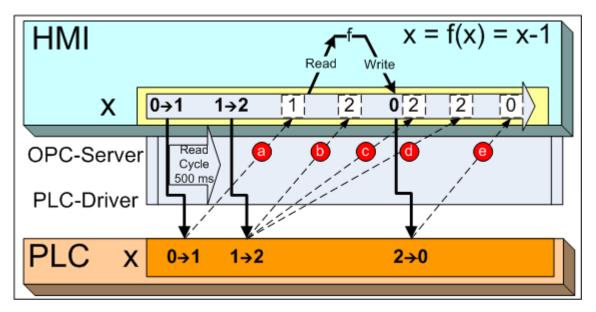

Rapid successive changes of an OPC tag value on the HMI device will generate incorrect values on the PLC:

A tag "x" is configured on the HMI device and is synchronized automatically with the corresponding tag "x" on the PLC by way of OPC server.

The following example illustrates the issue. Tag "x" is read by a system function (Read); "f" is changed and the result is written to the tag (Write).

Example of system functions "f":

IncrementValue(), SetBitWhileKeyPressed() etc.

Events that may trigger inconsistent values on the PLC:

- Tag "x" is changed twice in rapid succession on the HMI device, e.g. by means of system function "IncrementValue()" 0 -> 1 -> 2.

- Following these transitions, the "DecrementValue()" f(x) =x - 1 system function is called immediately on the HMI device.

- The HMI device receives the value changes "1" and "2" with delay.

If the value change "1" is received before Read (a), the system function decrements the incorrect value "1" to "0" and writes it back to the PLC. The value "2" was already saved to the

PLC. The system function returns an effect other than expected by the operator.
Examples:

- A value is decremented twice.

- A bit is no longer reset.

- A value is not incremented.

- Situations in which the value change to "2" is possibly ignored (possible alternatives):

- The system function has already read the incorrect value "1" (b).

- The HMI device discards the changed value "2" because the write operation is currently active (c).

- The changed value "2" is overwritten again with the incorrectly changed value "0" on completion of the write operation (d).

CAUTION

Avoid rapid successive changes to an OPC tag value. Scenarios which may result in the problem described above:

• Jogging mode by pressing a control element several times, for example, by means of rapid successive execution of the "IncrementValue" function as shown earlier in the example.

• Function list in which the same tag was changed several times.

• Script for 1 to 10 x = x + 1, for example

• Combination derived from the three scenarios

Avoid the problem described earlier by setting up an interval between rapid successive changes of the tag value of at least twice the duration of the read cycle of this tag. This minimum value also depends on the OPC server implementation and on server load.

Runtime

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</div>

10.1 General information

Contents

General information that could not be included in the manual or Online Help.

⚠ CAUTION
Ethernet communication
In Ethernet-based communication, such as PROFINET IO, HTTP, Sm@rtAccess, Sm@rtService and OPC, it is the end user who is responsible for the security of his data network. The proper functioning of the device cannot be guaranteed in all circumstances; targeted attacks, for example, can lead to an overloading of the device.

Internal flash memory on Windows CE devices

Cyclic write access to internal flash memory is not allowed, because this reduces the useful life of flash memory and of the HMI device.

You should preferably use external memory cards, in order to prolong the useful life of your device, and to benefit from their higher performance in saving data records and data logging.

Maximum number of files in the root directory of memory cards or internal flash

The capacity of the root directory on a memory card or internal flash memory is limited to 256 files. This limit does not apply to subdirectories.

Data loss in archives

In order to prevent loss of data, always terminate the Runtime software before switching off the voltage supply. Close the project by using the control element to which the "StopRuntime" function was assigned in your configuration.

Alternatively, you use the uninterruptible power supply (UPS) to ensure a controlled shutdown of the HMI device.

Communication via OPC

OPC Material is used in WinCC flexible Runtime. OPC Foundation homepage

www.opcfoundation.org

Integrated firewall of the antivirus tools

Authorize access to the following locations in the firewall to work without problems in WinCC flexible Runtime:

- [Installation directory of the Automation License Manager] almapp\almappx.exe

- %CommonProgramFiles%\Siemens\SWS\almsrv\almsrvx.exe

High CPU load

For fault-free operation, disable the "Norton Auto Protect" option in the "PC Norton Protection Center". The "Norton Auto Protect" option may result in a high CPU load. The high CPU load may block execution of other processes.

Backup

Runtime must be terminated before you run a backup.

Windows 7: Changing system time in Runtime

A Windows user who wishes to set the system time of the PC via Runtime, for example, by means of a date/time field or a controller job, needs to have the corresponding access rights.

You assign these rights in the "Security Configuration Manager".

The user must be entered under "Security Settings > Local policies > User rights > Change the system time". Alternatively, the user is a member of the "Siemens TIA Engineer" user group.

Transfer

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Contents

Notes on transfer that could not be included in the manual or online help.

NOTICE
Automatic termination of Runtime
If the automatic transfer has been activated on the HMI device and a transfer is initiated on the configuration PC, the currently active project is terminated automatically. The HMI device then automatically switches to "Transfer" mode. After the commissioning phase, deactivate the automatic transfer so that the HMI device cannot be inadvertently switched to transfer mode. The transfer mode may trigger unwanted responses in the system. To restrict access to the transfer settings and prevent unauthorized modification, assign a password in the Control Panel.

Serial transfer via RS-485 interface

When an HMI device is communicating with the PLC via the RS-485 interface and MPI or PROFIBUS, the "Remote Control" box must be cleared (disabled) for serial transfer.

Clear the "Remote Control" check box under "Channel" tab in the "Transfer Settings" dialog.

Manually select serial transfer.

Remote transfer via serial interface

Remote transfer of the project is not possible if you have not configured a connection to a PLC in the WinCC flexible project. The following options are available in order to carry out the transfer:

- Create a connection via MPI or DP interface in the WinCC flexible project and switch to "Online: Off". Remote transfer is possible with this setting.

- Alternatively stop Runtime on the HMI device and start the transfer manually.

Transfer via Ethernet connection with router

Ensure that the internal transfer buffer of the router exceeds 1 Kbyte if an Ethernet connection with a router is used for transferring. In the case of routers with a transfer buffer < 1 Kbyte message splitting can result in message corruption and thus in the transfer being aborted.

Execute a "Rebuild all" before transferring data to the HMI device

Recompile the entire project by executing the "Rebuild all" command before releasing your project to the production process.

It is also advisable to execute a "Rebuild all..." command at suitable intervals to reduce the time required for compiling delta data in current engineering sessions.

Execute a full compilation by selecting the "Project > Compiler > Rebuild all..." menu command.

If you have configured several HMI devices, the "Select HMI devices for generation" dialog will open after you have executed the "Rebuild all" command.

Select the HMI devices to be generated from this dialog. Multiple selection is possible.

Transfer canceled by user

It may take up to 5 minutes to cancel a transfer. No other transfer is possible during this period. You will receive the following message in this case: "A transfer is already in progress. Please wait until the first transfer has finished.".

Transfer can be continued as usual after expiration of this waiting period.

Transfer to an HMI device with WinAC MP

If you transfer a project to an HMI device operating with the WinAC MP PLC, then use the "Ethernet" channel instead of "S7/Ethernet".

Project transfer using the Ethernet ISO profile

The ISO profile of the Ethernet protocol is not supported for the project transfer.

Indirect transfer of a project: Recipes

If you transfer a project with recipes, you may see the following error message in some rare cases.

"Error upon accessing file (Host): File '<Pack&Go_Folder>\PDATA.recipe.zip' not found!"

Remedy:

1. Reboot the HMI device.

2. Copy the following files from "<Pack&Go_Folder>\Transfer\" to "<Pack&Go_Folder>\Extern\VersionStore\".
   mfc71.dll
   mfc71u.dll
   msvcp71.dll
   msvcr71.dll

3. Repeat the transfer.

HMI device with PROFINET: Communication error during connection establishment

Note the following specifications to avoid a communication error during establishment of connection between HMI device and configuration PC:

- The subnet mask of the configuration PC and the HMI device must be the same.

- The IP network address range must match the used subnet mask.

- The network address of the configuration PC and the HMI device must be the same. They need to have a unique host address, such as 192.168.0.1 and 192.168.0.2.

- A default gateway is required if the network address is different, such as 192.168.x.y and 192.160.x.y.

Routing via SIMOTION CPU 4.1.2

The transfer of the configuration via S7 Ethernet does not work in case of routing via SIMOTION CPU 4.1.2.

MPI / DP download is not functioning:

If CP 5603 is directly in the WinLC RTX EC and is plugged into IF2, no PROFIBUS transfer is possible. In this case, the CP belongs solely to the CPU.

If CP 5613 A2 is configured directly on an index in the station editor, PROFIBUS transfer to WinCC flexible RT is possible. Remote transfer is not possible in this case, because the remote functionality of the RT loader has no connection to the Softbus interface of the station editor. The RT loader must be manually switched to transfer mode.

If the CP is not plugged in the station editor and is also not assigned to WinLC, PROFIBUS transfer to WinCC flexible RT is possible. The access point must be provided via the PG/PC interface in this case.

For remote transfer, it is important to ensure that the project also has a valid PROFIBUS connection because the RT will overwrite the parameters of the PG/PC interface at startup.

If no connection is configured, PROFIBUS and remote access are inactive.

WinCC flexible integrated

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12.1 Integration in SIMOTION

Contents

information on integrated operation in SIMOTION not included in the manual or Online Help.

Enabling the integration of WinCC flexible in SIMOTION SCOUT

Integration of WinCC flexible 2008 has been approved for the following versions of SIMOTION SCOUT.

● Windows XP (32-bit):
  WinCC flexible 2008 SP3 with STEP7 5.4 SP5 and SIMOTION Scout 4.1 SP5

● Windows XP and Windows 7 (32-bit):
  WinCC flexible 2008 SP3 with STEP7 5.5 SP1 and SIMOTION Scout 4.2 SP1

● Windows XP (32-bit) and Windows 7 (32-bit and 64-bit):
  WinCC flexible 2008 SP3 with STEP7 5.5 SP2 and SIMOTION Scout 4.3

Proceed as follows to enable the integration of WinCC flexible in SIMOTION SCOUT:

1. Select "Settings" from the "Options" menu.

2. Click the "WinCC flexible" tab.

3. Enable the option "Use and display WinCC flexible component."

AxisMotor screen

There is no length information in the "ShowAxisMotor" screen for "Backlash compensation".

Assign start value 1 for the created tag (Tag\C230\Axis_1\AxisMode).

12.2 Integration in STEP 7

Contents

Information on integrated operation in STEP 7 not included in the manual or Online Help.

Interconnecting STEP 7 symbols in new STEP 7 projects

The interconnection of STEP 7 symbols with WinCC flexible tags will cause problems, if the corresponding STEP 7 project was created while another WinCC flexible project was still open.

Close all WinCC flexible projects before you create a new STEP 7 project.

Symbol server

Extensive changes in your STEP 7 project may cause problems at the symbol server. Close all WinCC flexible projects before you make any substantial changes in your STEP 7 project.

This is valid in particular:

- If changes are to be made to station names, CPU names or S7 program names.

- If one or more S7 stations are to be copied to a S7 project in SIMATIC Manager -stations or deleted from an S7 project.

Wrongly labeled S7 symbols on tags

If all S7 symbols on tags are labeled as faulty (orange marking of the "Symbol" cell) after a HMI project integrated in STEP 7 has been opened, it can be helpful to save the entire S7 project under a different name in the SIMATIC Manager with the help of "Save as" (with reorganization option enabled).

Multiple sessions with integrated projects

Multiple WinCC°flexible sessions for STEP°7 projects may cause problems in the synchronization of data between STEP 7 and WinCC flexible, for example, when setting online data, or saving data. To avoid such problems, make sure you run a WinCC flexible session only for one STEP 7 project.

Also avoid opening several WinCC flexible instances from STEP 7.

SIMATIC Manager: "PLC > Compile and Download Objects"

The use of the "PLC > Compile and Download Objects" function of SIMATIC Manager may cause problems. If you encounter problems, activate only one SIMATIC HMI station in the selection table each time you compile.

Copying integrated connections

If you copy integrated connections by using copy-and-paste, the "Station", "Partner" and "Node" columns remain empty. Drag the columns across manually.

Deleting an HMI device

By deleting an HMI device in WinCC flexible (except WinCC flexible Runtime), you remove the entire HMI station from SIMATIC Manager, including all of its sublevel components such as WinAC MP.

Integrated project with CFC components and ALARM_S alarms

The following requirements have to be met to process a project that includes CFC-specific components and ALARM_S alarms:

● The engineering tool "CFC" has to be installed

or

● STEP7 V5.4 SP4 has been installed

Incorrect representation of (HMI) PC stations

The following options are available for restoring a (HMI) PC station that can no longer be correctly compiled in HW Config:

Backup copy of the configuration is available

1. Delete the corrupt (HMI) PC station in the SIMATIC Manager.

2. Copy the backup station data to the SIMATIC Manager.

Backup copy of the configuration is not available

1. Close HW Config.

2. If an error has occurred, you will see two WinCC flexible Runtimes on the target station in the SIMATIC Manager. Delete the lower WinCC flexible Runtime in the SIMATIC Manager.

3. Create a new (HMI) PC station corresponding to the old target station in the SIMATIC Manager.

4. A WinCC flexible Runtime is created by default when a new HMI PC station (such as PC 877) is created. Delete this WinCC flexible Runtime.

5. In HW Config, open the new and the corrupt (HMI) PC station.

6. Copy the corrupt station in HW Config. This includes: WinCC flexible Runtime, CPU, software components and interface cards.

7. Compile the newly created and completely configured (HMI) PC station in HW Config.

8. Close HW Config.

9. Delete the corrupt station in the SIMATIC Manager.

10. Reconnect the previously used network connection for the (HMI) PC station via NetPro or WinCC flexible 2008.

Language settings when creating an HMI station

If problems occur when creating an HMI station from SIMATIC Manager, check the following:

The language selected under "Language for programs that do not support Unicode" must match the selected user interface language.

"Language for programs that do not support Unicode" can be found under:

Start > Settings > Control Panel > Regional and Language Options > Advanced.

Configure an HMI device as a DP slave without address

If you have configured an HMI device as DP slave in a DP master system, ensure that this HMI device is located in an HMI station. Otherwise, you will not be able to assign an address.

See also

General Information (Page 25)

Options

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13.1   Sm@rtAccess, Sm@rtService

Contents

Notes on the Sm@rtAccess and Sm@rtService options not included in the manual or Online Help.

> ⚠ **CAUTION**
>
> **Ethernet communication**
>
> The end user is himself responsible for the security of his data network; the proper functioning of the data network cannot be guaranteed in all circumstances, for example in the case of target attacks leading to an overloading of the device.

Operation via Sm@rtClient for key devices after an update to WinCC flexible 2005 SP1

Due to the harmonization of key codes, the current HMI device versions of OP 170B and OP 177B before WinCC flexible 2005 SP1 are no longer compatible with previous versions of these devices as of WinCC flexible 2005 SP1. If you use one of these devices as a Sm@rtServer and want to carry out keyboard operations at a connected Sm@rtClient, you have to check whether the correct keyboard commands are transmitted. If the keyboard commands are incorrect, update the HMI-device version of the HMI devices involved.

Transferring of key codes of F-keys and K-keys using Sm@rtClient to PC-based key devices

The F and K key codes are only transferred reliably via Sm@rtClient to the Sm@rtServer if the WinCC hotkey function is activated. Open the "SIMATIC Key Tools" via "START > Settings > Control Panel" and activate the WinCC Hotkey function by clicking the "Start" button.

WinAC RTX and Sm@rtServer on a Panel PC 477B

When operating a WinAC RTX and the WinCC flexible Sm@rtServer on a Panel PC 477B at the same time, only two simultaneously connected Sm@rtClients are permitted.

Sm@rtServer and Sm@rtClient in conjunction with a Panel PC

If you access a Multi Panel as Sm@rtServer with a Panel PC as Sm@rtClient, you will have to disable the function "WinCC hotkey" in the KeyTools.

Simultaneous access via Sm@rtClient and RDP

You have the following options for access to an S7-mEC with WinCC flexible Runtime or a PC with WinCC flexible Runtime:

- Using Virtual Network Computing (VNC) on the Sm@rtServer

- Using the Remote Desktop Protocol (RDP) from Microsoft

Due to system restrictions, simultaneous access with VNC and RDP is not possible.

Scenario:

An S7-mEC is used as Sm@rtServer. Three Sm@rtClients access the Sm@rtServer. As soon as a PC accesses the S7-mEC using RDP, the connections to the Sm@rtClients are terminated.

Default pages for the Integrated Web Server

The default pages for the Integrated Web Server of PC Runtime are available in "C:\Documents and Settings\All Users\Application Data\Siemens\HmiRTm\MiniWeb1.3.2\WebContent".

Automatic scaling

No automatic scaling takes place with some relationships of server resolutions to client resolutions. As an alternative, disable automatic scaling or change the resolution of server or client.

Settings on the HMI device

The "Blank screen on client connection" setting is not available in the "Server" tab of the "Sm@rtServer: Current User Properties" dialog.

Listening mode of the Sm@rtClient application

The port must be enabled in the firewall to use the "Listening mode" function.

E-mail notification

For e-mail notification, you can configure a sender name that will be specified in the e-mail. Delete the entry if the function is not supported by the SMTP server. For more information contact your service provider.

Deleting the sender name:

- In the WinCC flexible project: Editor "Device Settings " > Name of the sender

- On the HMI device: Control Panel > WinCC Internet Settings > "Email" tab > Name of sender

On-screen keyboard

- The on-screen keyboard on the client is only available if the on-screen keyboard is also enabled on the server.

Sending e-mails

- You may only send 50 e-mails at one time.

No S7-MEC connection via Sm@rtAccess

You need an EM PC module if using Sm@rtAccess on on EC31. Use the Remote Desktop Protocol (RDP) as an alternative.

13.2 ProAgent

Contents

Information on the operation of ProAgent not included in the manual or Online Help.

ProAgent upon faulty installation of STEP 7"

If ProAgent is installed on a PC on which no STEP 7 is installed, the "Diagnostics" entry is not available in the project tree. It is therefore not possible to select units.

The ProAgent views can be configured on this PC. When the project is generated, however the following message appears "Warning: Internal WARNING (Detail: screen element ... was created by GeneratorHmiScreen ... - Object type: SCREEN_ITEM)". In Runtime, no ProAgent views appear on this PC.

Using the "Compile and Download Objects" function

If you carry out a change in PDiag, S7-Graph or S7-HighGraph, it may be necessary to carry out a consistency check in the existing WinCC flexible projects, in order to ensure that the change has been transferred correctly to the HMI devices by means of the "Compile and Download Objects" function.

Number of devices in the project

It is advisable to manage only one device per HMI project when using ProAgent.

Step sequence screen

Each step sequence screen can handle a maximum of 128 steps and 128 transition.

Asian languages

The ProAgent option has not been released for Asian languages.

13.3 ChangeControl

Contents

Information on ChangeControl option that could not be included in the manual or Online Help.

Editors of the ChangeControl option

The WinCC flexible option WinCC flexible /ChangeControl is used for versioning of configuration data and to track changes in the configuration. The respective editors "Project versions" and "Change log" are located in the project window under version management.

Project versions on network drives

Project version management is not currently supported on network drives.

HMI devices

<div style="text-align: right; font-size: 3em;">14</div>

14.1   General information

Contents

Information on special features of the HMI devices not included in the manual or Online Help.

Multi-key operation

Multi-key operation may initiate unwanted actions:

- Do not press more than two function keys simultaneously when using a keyboard device.

- Do not press more than one button at any given time when using touch devices, standard PCs or a panel PCs.

Connection between Windows CE and Windows XP

If you want to use a HMI device with Windows CE operating system to access a computer running Windows XP operating system, for example: to print via Windows XP or to open a folder there, you have to disable simple file sharing in Windows XP. To deactivate simple file sharing, open the Windows Explorer under Windows XP. In the menu bar, select "Tools > Folder Options". The "Folder Options" dialog box opens. Click the "View" tab and clear the "Simple File Sharing" check box in the "Advanced Settings" window. Click the "OK" button to accept the settings.

Converting daylight savings time and standard (winter) time

The HMI device does not automatically convert from daylight savings time to standard (winter) time. Use the in Control Panel to define whether daylight savings time or standard time is currently in effect. In order to convert from winter to summer time, activate the "Daylight savings time currently in effect" check box in the "Date/Time Properties" dialog box. The clock is converted to daylight saving time after you confirmed the change and closed the dialog. Deactivate this check box if you want to change to standard (winter) time.

You can set daylight saving time with the system function "SetDaylightSaving."

SIMATIC Panel PC 477, PC 577, PC 677, PC 877: Distorted display of icons

If you open projects in WinCC flexible that were created with a version of WinCC flexible 2005 SP1, the icons may be displayed distorted. The icon size of the HMI devices listed above has been adapted in WinCC flexible 2007. Remedy: Open the "Device Settings" editor and adjust the size of the icons manually to the value of WinCC flexible 2005 SP1 under "User-defined icon size". The values are listed in the following table.

HMI device	Icon size (X~Y)
PC x77 12" key	80~66
PC x77 15" key	101~85

Restrictions for logon with access to HTML pages

If you are using the underscore character "_" as part of the HMI device name, logon attempts with access to HTML pages of the HMI device may fail.

Do not use the underscore character "_" in the name of HMI devices.

HMI devices with PROFINET IO direct keys

Set up the network configuration of HMI devices which support PROFINET IO direct keys both in the Control Panel on the HMI device and in the HW Config editor. The network settings in the Control Panel must conform to the settings in HW Config. The "Automatic" mode is set as default in both editors. PROFINET IO is only available in "Automatic" or "100 Mbps full duplex" mode.

Updating the operating system

It may take up to one minute after you have completed an operating system update to recover communication functions using the restored network settings. The PC cannot go online to the HMI device via Ethernet until this time has expired. The "Activating connection to restore device settings" message is displayed.

SecureMode

Use SecureMode to protect the Control Panel, the task bar and the desktop of the following HMI devices against unauthorized access:

- Mobile Panel 277

- MP 177 6" Touch, MP 277, MP 377

- TP 177B 4"

Enter a password in the "Password Properties" dialog in the Control Panel of the HMI device to activate SecureMode. The "secure mode" label is displayed on the desktop.

Enter the set password to enable the operation of the Control Panel, task bar or desktop. The label "secure mode" will be hidden.

To reactivate SecureMode, double-click the symbol on the desktop . To deactivate SecureMode completely, delete the set password.

Transfer via Teleservice

Transfer via Teleservice must not be interrupted during the data transmission to an HMI device. This type of connection is not suited for the transfer of large data volumes, as its transmission quality and the stability of the telecommunication line may be insufficient.

Use Teleservice only to transfer the project to the HMI device. Modem connections are not suited for handling return transfers, operating system updates or backup of large data volumes.

"Activate" event: System function with external tag is not executed

HMI devices concerned: Basic Panels, OP73, OP77A, TP177A

The system function is not executed with the following constellation:

- A system function with external tag was configured for the "Activate" event of an object.
- The object as configured as first element in the tab order of the start screen.

The system function is not executed after the start of Runtime because the connection to the controller is not yet set up.

Link between panels and enabled Windows network drives

AP01165962, V1.3 SP3

If you are using a panel that is based on Windows CE 5, observe the following rule:

You cannot link panels to enabled Windows network drives if the time difference between the PC and the panel is greater than 1 to 2 days.

14.2 Panels

Contents

Information on special features of the panels which could not be included in the manual or online help.

OP 73: Pack&Go with Image version 1.0.0.0

It is not possible to use Pack&Go for an operating system update of the HMI device OP 73 from Image version 1.0.0.0 to a later version.

Restore process at the OP 177 DP mono

A superfluous dialog message can occur during the restore process on the OP 177 DP mono.

Title: "Abort Restore"

Text: "Storage Card couldn't be detected. Try restore again? Insert storage card and Press 'OK' or abort restore with 'CANCEL'."

Confirm the dialog message with "OK" so that the restore process can be terminated reliably.

OP 277: Adjusting the brightness

It is not possible to adjust the brightness at the OP 277 HMI device. This results in an incompatibility to the predecessor model OP 270 or TP 270.

Simulation in integrated mode with Basic Panels

PLCSIM is not supported for simulation of the Basic Panels with PN interface.

TP 270: Updating the operating system

After updating the operating system, only the device settings for on-board interfaces will be restored. If you are, for example, using an Ethernet CF card for the TP 270, the IP address of the corresponding interface may not be restored.

Buttons for Basic Panels, TP 177A and TP 177micro

The buttons are not reset on the TP177A, TP177-micro and Basic Panel HMI devices if you assign the Touch Calibration or Clean Screen function to their "Pressed" event.

OP 73, OP 73micro, OP 77A, TP 177A, TP 177micro and Basic Panels: "ShiftAndMask" system function

You can only execute the "ShiftAndMask" function on the HMI devices OP73, OP73micro, OP77A, TP177A, TP177micro, and Basic Panels if the input tag and the output tag are of the same data type.

The "SimulateSystemKey" system function

When the "SimulateSystemKey" function is executed at an input field on Basic Panels, no more operation events are processed on the touch screen until input mode is closed with a simulated "Enter" or "Esc" key.

Example:

When you delete the input field with "SimulateSystemKey", you need to enter the "Del key" followed by the "Enter key" in the corresponding function list of the function key.

OP 77A, TP 177A and Basic Panels: Communication partner OMRON

The connection of an HMI device to an OMRON CPU of the OMRON SYSMAC CP1L, CP1H and CJ1M series using the Hostlink/Multilink protocol over RS232 has been system tested and released by Siemens AG.

A multipoint connection to up to 4 OMRON controllers in an RS422 four-wire multidrop configuration can be implemented with communication adapters.

OP 73micro, OP 73 and OP 77A, TP 177 micro, TP 177 A and Basic Panels: System limits

The following system limits refer to the maximum number per screen:

- User view: 1
- Trend view: 4
- Alarm view: 20
- Recipe view: 5

14.3 Multi Panels

Contents

Information on special features of the Multi Panels which could not be included in the manual or Online Help.

MP 277: Using USB memory sticks

Only one USB memory stick may be active for saving logs or recipes on the MP 277 HMI device.

MP 377 as Smart Server

There may be noticeable reductions in performance when you use the MP377 as Smart Server while using the Media Player or Microsoft Viewer on the panel. We highly recommend that you do not make use of such a combination.

PROFINET IO with MP 377

With MP 377, PROFINET IO is activated by default in WinCC flexible 2008 SP1.

If you use PROFIBUS direct keys, deactivate PROFINET IO in the Control Panel.

14.4 Mobile Panels

Contents

Information on special features of the Mobile Panels which could not be included in the manual or online help.

Mobile Panel 177 / 277, with optional backup battery package

Configure the area "Project ID" area pointer in order to exclude improper operation by means of Mobile Panel of a plant which was not configured appropriately.

The system checks at the start of Runtime whether the project ID in the device settings of the project matches the value saved to the controller. Runtime is stopped if the value does not match.

However, the project ID is not updated if you plug a Mobile Panel with optional battery backup package into another terminal box while Runtime is active. Compatibility of the Panel configuration with the various control programs can no longer be guaranteed in such a situation.

- Runtime is not stopped.

- Execution of the direct keys DP and PN-IO is not prevented.

- No system event is output to the HMI device.

> ⚠ **WARNING**
>
> **Unforeseeable machine reaction to incompatible Panel configuration**
>
> Assign all plants which contain one or several terminal boxes for a Mobile Panel different, intersystem node and IP addresses at the communication partners, for example, PLCs. This prevents access to the wrong communication partner with the same address.

Mobile Panel 277: Using USB memory sticks

Only one USB memory stick may be active for saving logs or recipes on the Mobile Panel 277.

Mobile Panel 277 IWLAN, Mobile Panel 277F IWLAN: Zone evaluation

The value of the variable zone ID may have the value 0 immediately after the start of Runtime. Change the zone (enter or exit) in this case.

Mobile Panel 277 IWLAN, Mobile Panel 277F IWLAN: Topology Detection of STEP 7

The topology detection of Step 7 cannot provide values in the online view, since the required LLDP service has not yet been specified for wireless in the PROFInet standard.

Using the direct keys of the Mobile Panel 277:

When using the WinCC flexible 2008 SP1 operating system images for Mobile Panel 277 and Mobile Panel 277 IWLAN, you will have to use a new GSDML file in the STEP 7 project in HW Config.

You will have to delete the configured Mobile Panels from HW Config and reinsert them from the new HW catalog.

Discrepancy error in HW diagnostics

The Mobile Panel 277 versions with MLFB 6AV6 645-0CB01-0AX0 and 6AV6 645-0CA01-0AX0 cause a discrepancy error in the HW diagnostics of an integrated project. You can avoid this error by configuring the device with MLFB 6AV6 645-0CC01-0AX0 instead.

14.5   HMI devices with Windows XPe

Contents

Information on special features of the HMI devices not included in the manual or Online Help.

SIMATIC Panel PC 477 / Microbox 420 with Windows XP embedded (XPe)

Transferring a project

When transferring, you can transfer the compressed source data file along with the compiled project file to the HMI device. Sufficient space has to be available on drive D: for the storage of the compressed source data. If there is insufficient space available, the transfer is terminated with a message that the process was successful. However, the compiled project file is not transferred completely so that the Runtime starts with the error message "No configuration available. Please initiate transfer".

Before you restart the transfer, check whether drive D: sufficient space is available.

Printer driver not found

If Windows XP embedded does not have the required driver, use the provided XP Professional driver CD or CD2. Further information on installation is provided on the CD.

Restrictions

The following restrictions apply for the SIMATIC Panel PC 477 / Microbox 420 with Windows XPe:

- The Allen-Bradley DH485 control driver is not authorized.

- The "Microsoft Script Debugger" and the "Microsoft Script Editor" that is supplied with Microsoft Office XP are not authorized and may not be installed.
  Use a standard PC to debug your scripts. Further information on debugging can be found in the online help under "Working with WinCC flexible > System functions and Runtime Scripting > Debugging".

- No logging to the "System" database
  If you want to configure logs on Microbox 420, you may not use the "Database / System" setting, because the SQL server that is required cannot be run together with the activated EWF.

Enhanced Write Filter (EWF)

Enhanced Write Filter (EWF) can be used to write-protect the system partition, for example in order to increase the lifetime of the CF card. For additional information, refer to the operating instructions.

Special points for the use of Enhanced Write Filters (EWF)

- When Enhanced Write Filter is activated

  – Only the unlimited Single License and Floating License function.

  – The Trial licenses do not function.
    If you want to use Trial licenses, you have to deactivate the Enhanced Write Filter.

  – License keys cannot be transferred to the HMI device.
    In order to transfer license keys to the HMI device, proceed as follows:

1. In the Start menu, carry out the "Run..." command. Enter cmd and click the "OK" button. The command prompt opens.

2. Enter "ewfmgr c: -commitanddisable" at the command prompt. The write protection for C: is switched off and accepts the modified data.

3. Reboot the system in order to accept the changes.

4. Transfer the required license keys to the HMI device.

5. In the Start menu, carry out the "Run..." command. Enter cmd and click the "OK" button.

6. Enter "ewfmgr c: -enable" at the command prompt. The write protection for C: is switched on.

7. Reboot the system in order to accept the changes.

Other information

15

Contents

Further information that could not be included in the manual or Online Help.

WinCC flexible /Archive and WinCC flexible / Audit

The checksums for Log and Audit Trail files were expanded as part of WinCC flexible 2008 SP2.

S7 routing via Ethernet

S7 routing via Ethernet is not possible with WinCC flexible Runtime.

Updating the operating system

It is not possible to update the operating system via routed connections.

Transferring licenses to a panel on 64-bit operating systems

If you are running a 64-bit operating system and the "Edit > Connect target systems > Connect HMI device" menu command is not available in Automation License Manager, open command line input and run the following command with administrator rights:

"%WINDIR%\system32\RegSvr32.exe" "%CommonProgramFiles%\siemens\AlmPanelPlugin \ALMPanelParam.dll"

Use of the mouse wheel in Runtime

The use of the mouse wheel in Runtime is not supported on all panels.

Transfer via Teleservice

We do not recommend transfer via GPRS, UMTS or GSM, as breakdowns in communication may occur.

Chinese characters in Simulation

If you output Chinese strings in a project, it may occur that Chinese characters are shown in the script output fields in Simulation, even if the Runtime language "Chinese" is not activated. This problem only occurs in Simulation.

Fast change of wireless networks over SSID

The WLAN Selection Tool (WST) enables fast changing between prepared WLAN configurations. If you use several separate WLAN areas in your plant, you can save a configuration for each wireless network and change between wireless networks with the WST.

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