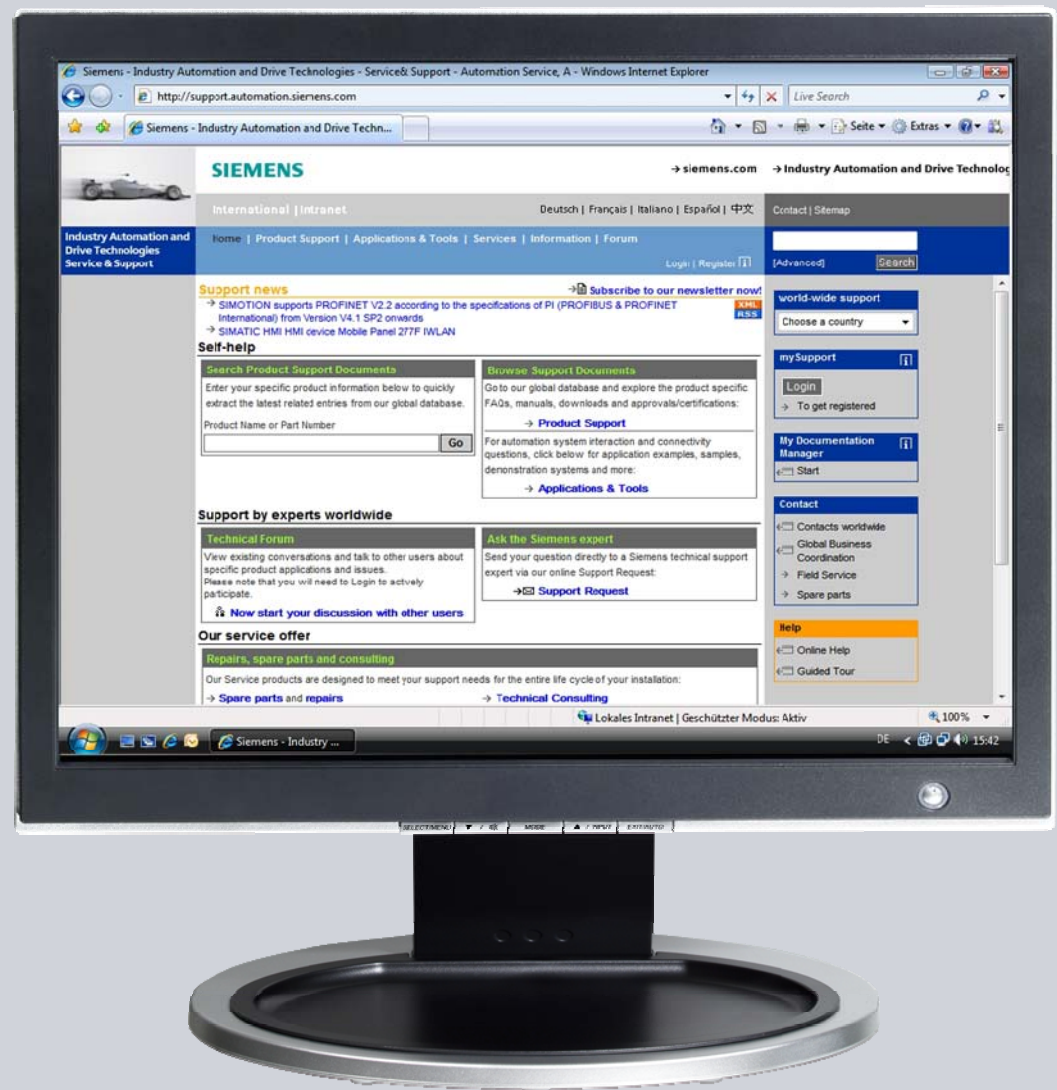


# Software update from PCS 7 V6.1 SP3 to PCS 7 V6.1 SP4

PCS 7

FAQ • October 2010



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## Question

How do you update from PCS 7 V6.1 SP3 to PCS 7 V6.1 SP4?

## Answer

This document gives a brief description of how to update from PCS 7 V6.1 SP3 to PCS 7 V6.1 SP4.

## Requirements

Please also carefully read the notes in the "PCS 7 Readme", as they contain important information about installing and using PCS 7.

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# 1 Preparation

Proceed as shown in the table below to prepare for upgrading.

Table 1-1

Step	Procedure
1.	<b>Backup</b>  It is recommended to backup the partitions of all the computers concerned before starting this task. You can use the "SIMATIC Image & Partition Creator" software for this. <a href="http://support.automation.siemens.com/WW/view/de/38400496">http://support.automation.siemens.com/WW/view/de/38400496</a>
2.	<b>Save project</b>  Save the project and own libraries before starting the update.
3.	<b>Save licenses</b>  Updating does not delete the licenses installed on the system. Save all existing licenses before making a complete reinstallation.
4.	<b>PDM data</b>  Updating does not delete the PDM devices installed on the system. You can continue to use them after the update. Save all the installation files of the PDM devices before making a complete reinstallation.
5.	<b>Disable WinCC Autostart</b>  If being used, you must disable the "WinCC Autostart" function before upgrading. <ul style="list-style-type: none"> <li>• OS client: "START &gt; SIMATIC &gt; WinCC &gt; Autostart".</li> <li>• OS server: "Start &gt; SIMATIC &gt; SIMATIC Net &gt; Set PC Station &gt; Applications &gt; Autostart".</li> </ul> After disabling the Autostart, restart the PC station.

## 2 Starting the PCS 7 Update Installation

**WARNING**

Before you install PCS 7 V6.1 SP4, read the instructions concerning system and software requirements in the PCS 7 Readme.

When updating SIMATIC BATCH, the installation might be blocked. Therefore you should set the SIMATIC BATCH Start Coordinator beforehand to "Manual Start of SIMATIC BATCH" or close it.

**Note**

You can find more information on updating PCS 7 in the following manuals:

- "PCS 7 – Software Updates With Utilization Of New Functions"
- "PCS 7 – Software Updates Without Utilization Of New Functions"

Table 2-1

Step	Procedure
1.	<b>Install the PCS 7 update</b>  Start the basic setup of PCS 7 V6.1 SP4. Select the "Update" option for the setup type.

## 3 Updating the Project

### 3.1 Updating Blocks

#### With Master Data Library

Proceed as follows.

Table 3-1

Step	Procedure
1.	<b>Copy blocks</b>  Copy all the blocks used in the project from the new libraries (e.g. PCS 7 Library V61; BATCH Library, RC Library) into the master data library. The blocks are overwritten. If you have made changes to the original blocks, then you must change the new blocks accordingly.
2.	<b>Update block types</b>  Select the block folder in the master data library of the multiproject and then select the menu command "Options > Charts > Update block types". In the dialog that opens you can select or deselect all the programs (and sample solutions). Click on the "Continue" button. All the block types are displayed for selection/deselection. Select the blocks for system updating from the "List of changed system blocks". Click on the "Finish" button.

This procedure replaces all the block types in the block containers of the project and does a block type import in all the chart containers of the project.

#### Without Master Data Library

Proceed as follows for each library used.

Table 3-2

Step	Procedure
1.	<b>Open the library</b>  Open the library from which you use blocks in your projects.
2.	<b>Update block types</b>  Select the blocks used and then select the menu command "Options > Charts > Update block types". In the dialog that opens you can select or deselect all the programs (and sample solutions). Click on the "Continue" button. All the block types are displayed for selection/deselection. Select the blocks for system updating from the "List of changed system blocks". Click on the "Finish" button.

This procedure replaces all the block types in the block containers of the project and does a block type import in all the chart containers of the project.

## 3.2 Compiling Charts of the S7 Programs

Proceed as follows.

Table 3-3

Step	Procedure
1.	<b>Compile S7 program</b>  Compile the program of each AS with these settings: <ul style="list-style-type: none"><li>• Entire program</li><li>• Generate module drivers</li></ul>

### 3.3 Updating OS Projects

Open the projects of all the OS servers and OS clients one after the other and proceed as follows.

Table 3-4

Step	Procedure
1.	<p><b>Generate header</b></p> <p>Open the Global Script C editor and select the "Tools &gt; Regenerate Header" menu command.</p>
2.	<p><b>Start the OS project editor</b></p> <p>New system messages have been added in the new version. This is why it is necessary to run the OS project editor with the "Complete Configuration" option.</p> <ul style="list-style-type: none"> <li>Start the OS project editor with the option "Complete Configuration (loss of support for online delta loading capability)". You select this option in the "General" tab.</li> </ul> <p><b>Note:</b> Updating PCS 7 also updates WinCC. When you start the OS project editor, all the standard screens and faceplates are updated and new functions are integrated into the project.</p>
3.	<p><b>Picture conversion</b></p> <p>WinCC pictures that contain Trend Control objects must be converted. When you convert, these controls are replaced by a new version.</p> <ul style="list-style-type: none"> <li>Select the "Convert Pictures" function in the Graphics Designer pop-up menu.</li> <li>Acknowledge with OK the warning dialog that refers you to the replacement of the ActiveX-Controls.</li> </ul> <p><b>Note:</b> If scripts are configured on the alarms or trend controls, they must be reconfigured after conversion.</p>



### 3.4 Modification Compiling of the OS Server

Proceed as follows.

Table 3-5

Step	Procedure
1.	<b>Compile the OS server</b>  Start compilation for all OS servers with these options: <ul style="list-style-type: none"><li>• Amendments</li><li>• Tags and messages</li><li>• Picture Tree</li></ul>

### 3.5 Loading Target Systems

Update the PCS 7 software on the PC stations concerned before uploading the OS servers/OS clients.

Perform loading in the following order.

Table 3-6

Step	Procedure
1.	<b>OS servers</b>  Start overall loading of all OS servers.
2.	<b>OS clients</b>  Start overall loading of all OS clients.
3.	<b>AS program</b>  Start delta loading of the S7 programs of all ASs.

#### Note

Sequencers of SFC charts are not stopped during the software update as long as no changes have been made in the sequencers concerned.

### 3.6 Updating Trends Configured Online

If you have user-defined trends or trend groups stored on the RT systems (OS server, OS client), you open them in the Runtime user interface after updating. When you close, the trends are updated to the new version.

## 4 Updating Redundant Systems in Runtime

Proceed as follows to update redundant systems.

Table 4-1

Step	Procedure
1.	Update the standby servers and all clients.
2.	Do a complete download of the OS projects to the standby servers and the clients.
3.	Start the standby servers and clients. -> Wait for the redundancy calibration.
4.	Download the control program into the AS.
5.	Update the master servers.
6.	Do a complete download of the OS projects to the master servers.
7.	Start the master servers. -> Wait for the redundancy calibration.

**Note**

More information on updating redundant systems is available in the manual "Fault-tolerant Process Control Systems", in the section entitled "Instructions for updating a redundant OS in runtime".

## 5 Options

Table 5-1

Option	Description
<b>Route Control</b>	Start the "Route Control Wizard" in projects with Route Control. Then run through the "Todos" displayed in the log files of the "Route Control Wizard".
<b>SIMATIC BATCH</b>	There is no need for manual intervention in SIMATIC BATCH projects. If the BATCH server does not start, follow the instructions in the entry below: <a href="http://support.automation.siemens.com/WW/view/de/41923410">http://support.automation.siemens.com/WW/view/de/41923410</a>
<b>Web option</b>	Web servers are to be seen as OS clients. You must also start the "Web View Publisher" and the "Web Configurator". When you restart the Internet Explorer on the Web clients, you are prompted to install an update of the web client. You can fetch the installation files from the web server.
<b>CAS</b>	The CAS (Central Archive Server) is the first computer taken from the computer network and the last to be put back into operation. The CAS failure time must not exceed the shortest circular log time of the OS servers. The same procedure applies for CAS as for OS servers. Refer also to the information on "Updating archive servers" in the PCS 7 readme.

## 6 List of Changed Blocks

The table below lists all the changed system blocks compared with PCS 7 V6.1 SP3.

Table 6-1

Library	Block no.	Block name	Supports delta loading
PCS 7 Library V61	FB51	PT1_P	✓
	FB62	DIG_MON	✓
	FB91	MOD_1	✓
	FB92	MOD_2	✓
	FB93	MOD_D1	✓
	FB94	MOD_D2	✓
	FB95	MOD_3	✓
	FB96	MOD_MS	✓
	FB98	MOD_CP	✓
	FB106	SUBNET	✓
	FB119	MOD_4	✓

Table 6-2

Library	Block no.	Block name	Supports delta loading
SFC Library	FB247	SFC_TYPE	✓