

SIMATIC

PCS 7

SIMATIC PCS 7 - What's New (V10.0 SP1)

Readme

Legal information

Warning notice system

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

DANGER

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

WARNING

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

CAUTION

indicates that minor personal injury can result if proper precautions are not taken.

NOTICE

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

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

Qualified Personnel

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

Proper use of Siemens products

Note the following:

WARNING

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

Trademarks

All names identified by ® are registered trademarks of Siemens Aktiengesellschaft. The remaining trademarks in this publication may be trademarks whose use by third parties for their own purposes could violate the rights of the owner.

Disclaimer of Liability

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

Table of contents

1	Cybersecurity information.....	5
2	What's new in SIMATIC PCS 7 V10.0 SP1?	7

Cybersecurity information

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

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

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

For additional information on industrial cybersecurity measures that may be implemented, please visit
<https://www.siemens.com/cybersecurity-industry>.

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

To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under
<https://new.siemens.com/cert>.

What's new in SIMATIC PCS 7 V10.0 SP1?

This document provides you an overview of the key enhancements within SIMATIC PCS 7 V10.0 SP1.

General

Support Microsoft Office 2024 (64bit) for the following Microsoft Operating Systems:

- Windows 10 Enterprise LTSC 2021 (IoT)
- Windows Server 2022 Standard Edition / Datacenter (IoT)

Security

- Supports encrypted SQL Server communication (TLS).
- Trellix Application Control V8.4.2 has been released for PCS 7 V10.0 SP1.
- Overview of ports and protocols supported by SIMATIC PCS 7 is as per the FAQ (<https://support.industry.siemens.com/cs/document/109963934>).

For more information, refer to Compendium F (<https://support.industry.siemens.com/cs/document/109978740>).

SIMATIC PCS 7 Engineering Station

- In V10.0 SP1, several minor corrections and improvements were made to make it robust.
- The SFC commands in ES online mode which could affect plant production are logged in runtime audit trail event.
- Checking the time synchronization on ES during CFC/SFC download.
- HW Config CPU download in STOP, CiR und HCiR download logged in runtime audit trail event.
- Following commands of SFC online mode are also logged in runtime audit trail:
 - Command Output
 - Cyclic operation
 - Time monitoring
 - Auto
- As a part of GMP, applying a new configuration of RC Server is recorded in the Runtime Audit Trail.
- Audit trail event is available for PH Object deletion.

SIMATIC PCS 7 Operator Station

- Support individual configurable alarm hiding time.

SIMATIC BATCH

Enhanced Search Function for Master Recipes - The existing search function is used to detect potentially blocking structures within a master recipe. A new option, "Transition after Synchronization" has been added to facilitate searching at different levels of the tree in master recipes.

SIMATIC Route Control

- Settings for redundant Route Control servers (Serial connection or LAN connection):
 - In the case of configurations with a pure Route Control server setup without PCS7 OS/BATCH, you have the option to choose either a serial or LAN connection.
 - In the case of configurations with SIMATIC BATCH/PCS7 OS, you must configure a LAN connection.
- The number of supported RC clients per RC Server is increased from 32 to 40
- Support for block RC_ResPosV5 has been discontinued in SIMATIC Route Control, and therefore, the related information has been removed from the manual.

SIMATIC Management Console (SMMC)

- Some improvements have been made in menus and dialogue boxes.
- During the installation of SIMATIC software or Microsoft updates on a target computer via SMMC, user login on the target computer is blocked.
- User with administrator rights can reset the status and unlock the selected computer using unlock computer option during software installation or Microsoft updates.
- The Microsoft Software update installation notification can be disabled and Microsoft Software update will start immediately.

PCS 7 Logic Matrix

The following enhancements are made in the Logic Matrix V10.0 SP1:

- The display of warning symbol for the selected incorrect Cause function has been improved.
- The OS authorization level for Matrix and individual Cause or Effect has been improved to resolve the user authorizations conflict.
- The changed display name of the OS gets updated in the runtime preview and in the WinCC runtime for an already configured Cause or Effect.
- The process of reading back parameters has been improved so that the unchanged parameters are now not displayed as changed parameters.
- Usability improvements have been made for operations performed in "Read back parameters" dialog box.

For more information, refer to the *SIMATIC Process Control System; PCS 7 Logic Matrix V10.0 SP1* manual.

Process Historian/Information Server

- New PH OPC UA server (replacing the previous one).
- Significant performance improvements for reading data from the PH database.

SIMATIC Logon

- Quality of the software is enhanced in the following aspects:
 - Update to the new OpenSSL version.
 - Improved logon procedure for WinCC.
 - Minor corrections for SIMATIC Logon Eventlog Viewer in STEP 7.
 - Minor corrections for the update of the SIMATIC Logon symbol during the WinCC upgrade.
 - Corrections for SIMATIC Logon Eventlog Viewer.
 - Corrections for Trial License validity.

For more information, refer to the *SIMATIC Process Control System; PCS 7 SIMATIC Logon Readme V2.0 Update 2 (online)*.

SIMATIC Advanced Process Library and Faceplates

- Release for Maintenance function is implemented for blocks **OpAnL**, **OpAnS**, **OpDi01**, **OpDi03**, **OpDi08** and **OpTrig**
- In channel block **FbEnMe**, with `Feature.Bit5=1`, several user data variants of the module can be read in parallel. The selection of the variants can be done via input parameter `UserDataVariants`.
- For Block **TimerP**, New Mode "Clock Generator" has been introduced.
- New Digital Logic blocks **And32**, **Or32** is added.
- AOTC: Dynamic trend type adaptation based on the tag data type.

For more information, refer to the *SIMATIC Process Control System; PCS 7 Advanced Process Library and Faceplates (V10.0 SP1)* online readme and manual.

SIMATIC PCS 7 Basis Library

- Support of CPU410 FW V8.3 including read out and provide communication counter information with enhanced function block **CPU_RT**
- Support of ET 200SP HA modules
 - Interface Module V1.3 (6DL1 155-6AU00-0PM0)
 - F-DI NAMUR HA module (6DL1 136-6TH00-0PH1)
 - DQ 8x 24 VDC/2A HA module (6DL1132-6BF20-0PK0)
 - DI 16x24VDC NPN HA module (6DL1131-6BH60-0PH0)

- Support of Network Components (Profinet main family 13) with more than 32 and up to 64 ports by new function block **OB_DIAG_NC_64**
- Support of PN PA V4.02 devices with the new function blocks **DIAG_PAPN**, **MOD_PA32** and **MOD_PA256**

For more information, refer to the *SIMATIC Process Control System; PCS 7 Basis Library (V10.0 SP1)* manual.

SIMATIC PCS 7 Maintenance Station / PDM Maintenance Station

- In performance view for AS objects and package units, the communication load details are displayed in frames per interval (second).
- Support of Scalance Switches with up to 64 ports.
- Update of PDM MS V5.0 SP1 to latest components used by PCS 7 V10.0 SP1.
- Support of PA Profile V4.02 in the Maintenance Stations.

For more information, refer to the *SIMATIC Process Control System; PCS 7 Maintenance Station (V10.0 SP1)* manual.

SIMATIC PDM

- Help file in ".PDF" format is supported.
- Multiselection to reassign device online is included in parallel to offline device reassignment.
- The print document now highlights invalid values for the parameter table.
- A new set of EDD packages covering PA Profile V4.02 for PROFINET are now available in the PDM Devices Catalog 01_2025.
- Support of the PA Profile function with IdentCheck and Device Detect functionality.
- Support of PA Profile V4.02 for PROFIBUS.
- Support of PA Profile V4.02 for PROFINET via Service Bridge or for integrated packages into Device DVD 01_2025.

For more information, refer to the *SIMATIC Process Control System; Help for SIMATIC PDM V9.3 SP1* manual.

SIMATIC Industry PCs

- Update of Process Control System IPC547J, IPC647E, IPC847E with PCS 7 V10.0 SP1 pre-installation
 - ES/OS Single Station and OS Client = Windows 10 IoT Enterprise LTSC 2021
 - OS Server = Windows Server IoT 2022 Standard Edition
 - Web Server, Central ES and Process Historian / Information Server (only IPC647E and IPC847E) = Windows Server IoT 2022 Standard Edition
- Update of Process Control System IPC 227G/277G with PCS 7 V10.0 SP1 pre-installation
 - OS Client = Windows 10 IoT Enterprise LTSC 2021

Hardware support

- Support of CPU 410 firmware version 8.3
- Supports the following modules of ET 200SP HA

Abbreviation	MLFB	IM Firmware version
Interface Module	6DL1155-6AU00-0PM0	V1.3
F-DI NAMUR HA module	6DL1136-6TH00-0PH1	
DQ 8x 24 VDC/2A HA module	6DL1132-6BF20-0PK0	
DI 16x24VDC NPN HA module	6DL1131-6BH60-0PH0	

- Support of Terminal Modules Push-In for ET 200iSP

Abbreviation	MLFB
TERMINAL MODULE, TM-EM/EM60P	6ES7193-7CA11-0AA0
TERMINAL MODULE, TM-IM/EM60P	6ES7193-7AA11-0AA0

- Support of Scalance XC300 switches with firmware V1.2
- Support of Scalance XC/XF/XP-200 series with firmware V4.5
- Support of Scalance XR300 switches (article number 6GK5 334-x) with firmware V1.2

For additional information, refer

SIMATIC Process Control System; PCS 7 Released Modules V10.0 SP1.

- Support from SIMIT V11.2 SP1 or V11.3

