Overview

SIMATIC WinCC V7/V8 SCADA system

WinCC V8.0 seamlessly continues the success story of WinCC V7.x.

On the one hand fully compatible with existing projects, on the other hand with many new functions.
From improvements in engineering to new possibilities in Runtime and WebUX, all the way to data exchange with IT and cloud systems, e.g. via the new REST Connector.

The scalable and open SCADA system for maximum plant transparency and productivity

- Efficiency:
  As a key to greater productivity, SIMATIC WinCC combines efficient engineering with high-performance archiving and maximum data security. With integrated diagnostics functions and flexible production analysis, you shorten the time-to-market and also reduce your plant standstill times.
  SIMATIC WinCC is the basis for efficient operations management and intelligent production analyses, so it offers a secure basis for deciding on optimization measures, and thus more productivity at lower cost.
- Scalability:
  With SIMATIC WinCC, it is possible to implement plants in all industrial sectors and technologies, and easily expand or modernize them by means of options or add-ons, in functional terms or sector-specifically.
  You can benefit from the redundancy concepts for enhanced availability, or decide on centralized archiving and analysis of plant information. SIMATIC WinCC offers stationary and mobile solutions to cover increasing demands.
- Innovation:
  With innovative technology, you have all the important information in view at all times. In this way, SIMATIC WinCC simplifies intuitive operation and monitoring of the production plant – even remotely. Stay informed with mobile SCADA solutions anywhere and at any time – including with existing tablet and smartphone hardware.
  The use of multi-touch gestures in the industrial environment opens the door to modern operator concepts.
- Openness:
  Since international standards and system-internal script and programming interfaces are supported, special requests can also be easily implemented.
  SIMATIC WinCC backs cross-manufacturer communication for integrating existing hardware, as well as for simple integration into the IT world. WinCC specialists are available worldwide as qualified solution providers. These certified and centrally audited partners are ready to implement your individual SCADA project even in diversified client-server architectures with redundancy, or in applications with energy data management systems.
  SIMATIC WinCC is designed to be independent of any specific technology or industrial sector, modular in structure, and easy to expand. It is used worldwide in single-user applications in mechanical engineering, as well as in complex multi-user solutions with redundant servers or Web-based client access. References from many industries prove the versatility and performance capability.

More information is available at

http://www.siemens.com/wincc-v7

Overview

SIMATIC WinCC V8

- PC-based operator control and monitoring system for visualizing and operating processes, production flows, machines and plants in all sectors – from the simple single-user station through to distributed multi-user systems with redundant servers and cross-location solutions with web clients. WinCC is the information hub for corporation-wide vertical integration.
- The basic system configuration (WinCC Basic Software) includes industry-standard functions for signaling and acknowledging events, archiving of messages and measured values, logging of all process and configuration data, user administration and visualization.
- The WinCC Basic Software forms the core of a wide range of different applications. Based on the open programming interfaces, a wide range of WinCC options (from Siemens Industry Automation) and WinCC Add-ons have been developed (by Siemens-internal and external partners).
- WinCC can be operated with every PC that meets the given HW requirements. The SIMATIC IPC product range is available in particular for the industrial use of WinCC systems. SIMATIC IPCs impress with their powerful PC technology, are designed for round-the-clock operation, and can be operated in both office areas and harsh industrial environments.

Current version:

SIMATIC WinCC V8.0

WinCC V8.0 supports the Microsoft operating systems listed below:

- Windows 11 Professional, Enterprise (64-bit)
- Windows 10 Professional, Enterprise (64-bit)
- Windows Server 2022 Standard, Datacenter (64-bit)
- Windows Server 2019 Standard, Datacenter (64-bit)

Details (e.g. information about specific Windows editions) and, if applicable, updated compatibility statements, are available at

https://support.industry.siemens.com/compatool/#/main/preselection?TopicID=WinCC_V8_0

SIMATIC SCADA and SIMATIC IPCs

Perfect interaction for optimum productivity.

- Price advantage as "Package" comprising hardware and software
- System-tested solutions reduce testing overhead
- Simple ordering and synchronized logistics

Only if ordered together with the SIMATIC IPC.

Benefits

- All-purpose
  - Solutions for all sectors
  - Multi-language for worldwide usage
  - Can be integrated into all automation solutions
- All operator control & monitoring functions on board
  - User administration
  - Operator control and monitoring
  - Reporting, acknowledging, and archiving of events
  - Collecting, consolidating and archiving measured values (including long-term backup)
  - Logging and documenting of process and configuration data
- Can be configured simply and efficiently
  - Configuration wizards let the user focus on the essentials
  - In the picture by means of cross-reference lists and screen property displays
  - Configuration of multi-language applications
  - Configuration tool for configuring bulk data
- Universally scalable
  - Expandable from single station to client-server configurations
  - Increased availability by means of redundant servers
  - Process visualization via the Web with the WinCC WebNavigator or WebUX
- Open standards for simple integration
  - Efficient real-time database MS SQL Server
  - Open for application modules with ActiveX and web controls
  - Powerful scripting for individual extensions
  - OPC, MQTT and REST for cross-vendor communication
- Process visualization with Plant Intelligence
  - Integrated evaluation functions for the online analysis (statistical process control)
  - Production optimization with the help of diverse options
- Expandable using options and add-ons
  - Options for scalable configurations
  - Options for increasing the availability
  - Options for IT & business integration
  - Options for SCADA expansions
  - Options for validation in accordance with FDA 21 CFR Part 11
  - Options for the use of telecontrol protocols
- Part of Totally Integrated Automation
  - Direct access to the tag and message configuration of the SIMATIC control system
  - Integrated diagnostic functions for increasing productivity

Application

SIMATIC WinCC is designed for visualization and operation of processes, production flows, machines and plants. With its powerful process interface, especially to the SIMATIC family, and the secure data archiving, WinCC enables highly available solutions for the process control.

The sector-neutral basic system enables universal usage in all automation applications. Sector-specific solutions can, for example, be implemented using WinCC options (e.g. FDA options for the pharmaceutical industry) and sector-specific add-ons (e.g. for the water industry).

Design

SIMATIC WinCC is available as a complete package and as a runtime package with 128, 512, 2 048, 8 192, 65 536, 102 400, 153 600, 262 144 PowerTags.

PowerTags are data points that are connected to controllers or other data sources over a WinCC channel. Up to 32 alarms can be obtained from one data point. Moreover, internal tags without coupling are available for additional system performance. In addition WinCC also contains 512 archive tags. Additional archive licenses can be obtained for larger quantity structures.

Licenses for a multi-user configuration

The system software with the required number of PowerTags and additionally the option WinCC/Server must be installed on the WinCC server. In the basic configuration, one RT Client License is sufficient for the WinCC Clients [1].

An RC Client License is required to configure on clients [1]. Remote configuration is possible if WinCC Clients without their own project (Uni Client) are configured on the server project.

[1] The SQL Server Express is installed for RT / RC Clients.

Function

The powerful configuration functions of SIMATIC WinCC contribute to a reduced engineering and training overhead and lead to a more flexible use of personnel and greater operational reliability.

Anyone familiar with Microsoft Windows can also operate the WinCC Explorer, the central switching point of WinCC. Even large quantities of data can be processed intuitively and efficiently with the WinCC Configuration Studio.

In combination with other SIMATIC components, the system is also equipped with supplementary functions, such as process diagnostics and maintenance. All SIMATIC engineering tools work together in the configuration of the functions.

SIMATIC WinCC offers a complete basic functionality for process visualization and operation. To this end WinCC has a number of editors and interfaces that can be used to individually configure this functionality according to the respective application. Expansions of a WinCC station for control tasks are also possible with minimal engineering effort.

Interfaces

	Task or configurable runtime functionality
Communication channels	For communication with lower-level controllers/field devices: S7-300/400, S7-1200/1500, OPC, OPC UA, SIMATIC S5, Modbus TCP, Allen Bradley, Mitsubishi, Omron, Sinumerik, etc.
Standard interfaces	For connecting other IT applications to WinCC: OLE-DB, OPC UA, MQTT, REST, etc.
Programming interfaces	For the individual access to data and functions of WinCC and for the integration in user programs with VBA, VB Script, C-API (ODK), C-Script (ANSI-C)

Integration

Archiving and data exchange

WinCC integrates a powerful and scalable archiving feature using database technology This provides the user with a variety of options: from high-performance archiving of current process data, to long-term archiving with high data compression, through to a connection to the central information hub in the form of a company-wide Process Historian. Versatile clients and tools for evaluation, the open interfaces, and special options (Connectivity Pack, Connectivity Station, IndustrialDataBridge) provide the basis for effective IT and business integration.

WinCC offers various security mechanisms, such as encrypted communication, to ensure secure operation of the plant.
If external networks are accessed, for example, suitable protective measures (incl. IT security measures, such as network segmentation) should still also be taken.

More information is available on the topic of Industrial Security on the Internet at:

http://www.siemens.com/industrialsecurity

Integration in automation solutions

WinCC is an open process visualization system and provides the option to connect the most diverse controllers.

S7 communication software

Use communications software with the listed product versions. Corresponding SIMATIC NET upgrades are available for upgrading older versions.

Connection to third-party controllers

If a native driver is not available, OPC or OPC UA is available for connection to third-party controllers.

Current notes and information about OPC Servers from various suppliers can be found at:

http://www.opcfoundation.org

WinCC supports:

- OPC UA server for DA, A&C, and HDA
- OPC server for DA, A&E, and HDA
- OPC UA client for DA, A&C, and methods
- OPC client for DA

Ordering data	Article No.
SIMATIC WinCC system software	
V8.0	
Runtime packages on DVD	
Incl. 512 archive tags each; language/script versions: en, de, fr, it, es; with license for	
• WinCC RT Client	**6AV6381-2CA08-0AX0**
• 128 PowerTags (RT 128)	**6AV6381-2BC08-0AX0**
• 512 PowerTags (RT 512)	**6AV6381-2BD08-0AX0**
• 2 048 PowerTags (RT 2 048)	**6AV6381-2BE08-0AX0**
• 8 192 PowerTags (RT 8 192)	**6AV6381-2BH08-0AX0**
• 65 536 PowerTags (RT 65 536)	**6AV6381-2BF08-0AX0**
• 102 400 PowerTags (RT 102 400)	**6AV6381-2BJ08-0AX0**
• 153 600 PowerTags (RT 153 600)	**6AV6381-2BK08-0AX0**
• 262 144 PowerTags (RT 262 144)	**6AV6381-2BL08-0AX0**
As download	
• WinCC RT Client	**6AV6381-2CA08-0AH0**
• 128 PowerTags (RT 128)	**6AV6381-2BC08-0AH0**
• 512 PowerTags (RT 512)	**6AV6381-2BD08-0AH0**
• 2 048 PowerTags (RT 2 048)	**6AV6381-2BE08-0AH0**
• 8 192 PowerTags (RT 8 192)	**6AV6381-2BH08-0AH0**
• 65 536 PowerTags (RT 65 536)	**6AV6381-2BF08-0AH0**
• 102 400 PowerTags (RT 102 400)	**6AV6381-2BJ08-0AH0**
• 153 600 PowerTags (RT 153 600)	**6AV6381-2BK08-0AH0**
• 262 144 PowerTags (RT 262 144)	**6AV6381-2BL08-0AH0**
Complete packages on DVD	
Language versions: en, de, fr, it, es; with license for	
• WinCC RC Client	**6AV6381-2CB08-0AX0**
• 128 PowerTags (RC 128)	**6AV6381-2BM08-0AX0**
• 512 PowerTags (RC 512)	**6AV6381-2BN08-0AX0**
• 2 048 PowerTags (RC 2 048)	**6AV6381-2BP08-0AX0**
• 8 192 PowerTags (RC 8 192)	**6AV6381-2BS08-0AX0**
• 65 536 PowerTags (RC 65 536)	**6AV6381-2BQ08-0AX0**
• 102 400 PowerTags (RC 102 400)	**6AV6381-2BT08-0AX0**
• 153 600 PowerTags (RC 153 600)	**6AV6381-2BU08-0AX0**
• 262 144 PowerTags (RC 262 144)	**6AV6381-2BV08-0AX0**
As download	
• WinCC RC Client	**6AV6381-2CB08-0AH0**
• 128 PowerTags (RC 128)	**6AV6381-2BM08-0AH0**
• 512 PowerTags (RC 512)	**6AV6381-2BN08-0AH0**
• 2 048 PowerTags (RC 2 048)	**6AV6381-2BP08-0AH0**
• 8 192 PowerTags (RC 8 192)	**6AV6381-2BS08-0AH0**
• 65 536 PowerTags (RC 65 536)	**6AV6381-2BQ08-0AH0**
• 102 400 PowerTags (RC 102 400)	**6AV6381-2BT08-0AH0**
• 153 600 PowerTags (RC 153 600)	**6AV6381-2BU08-0AH0**
• 262 144 PowerTags (RC 262 144)	**6AV6381-2BV08-0AH0**

	Article No.
V8.0 ASIA	
Runtime packages on DVD	
Language/script versions: en, zh-CN, zh-TW, ko, ja; with license for	
• WinCC RT Client	**6AV6381-2CA08-0AV0**
• 128 PowerTags (RT 128)	**6AV6381-2BC08-0AV0**
• 512 PowerTags (RT 512)	**6AV6381-2BD08-0AV0**
• 2 048 PowerTags (RT 2 048)	**6AV6381-2BE08-0AV0**
• 8 192 PowerTags (RT 8 192)	**6AV6381-2BH08-0AV0**
• 65 536 PowerTags (RT 65 536)	**6AV6381-2BF08-0AV0**
• 102 400 PowerTags (RT 102 400)	**6AV6381-2BJ08-0AV0**
• 153 600 PowerTags (RT 153 600)	**6AV6381-2BK08-0AV0**
• 262 144 PowerTags (RT 262 144)	**6AV6381-2BL08-0AV0**
Complete packages on DVD	
Language versions: en, zh-CN, zh-TW, ko, ja; with license for	
• WinCC RC Client	**6AV6381-2CB08-0AV0**
• 128 PowerTags (RC 128)	**6AV6381-2BM08-0AV0**
• 512 PowerTags (RC 512)	**6AV6381-2BN08-0AV0**
• 2 048 PowerTags (RC 2 048)	**6AV6381-2BP08-0AV0**
• 8 192 PowerTags (RC 8 192)	**6AV6381-2BS08-0AV0**
• 65 536 PowerTags (RC 65 536)	**6AV6381-2BQ08-0AV0**
• 102 400 PowerTags (RC 102 400)	**6AV6381-2BT08-0AV0**
• 153 600 PowerTags (RC 153 600)	**6AV6381-2BU08-0AV0**
• 262 144 PowerTags (RC 262 144)	**6AV6381-2BV08-0AV0**
V8.0 PowerPacks	
For upgrading from:	
Runtime packages	
• 128 to 512 PowerTags	**6AV6371-2BD08-0AX0**
• 512 to 2 048 PowerTags	**6AV6371-2BG08-0AX0**
• 2 048 to 8 192 PowerTags	**6AV6371-2BM08-0AX0**
• 8 192 to 65 536 PowerTags	**6AV6371-2BN08-0AX0**
• 65 536 to 102 400 PowerTags	**6AV6371-2BP08-0AX0**
• 102 400 to 153 600 PowerTags	**6AV6371-2BQ08-0AX0**
• 153 600 to 262 144 PowerTags	**6AV6371-2BR08-0AX0**
As download	
• 128 to 512 PowerTags	**6AV6371-2BD08-0AJ0**
• 512 to 2 048 PowerTags	**6AV6371-2BG08-0AJ0**
• 2 048 to 8 192 PowerTags	**6AV6371-2BM08-0AJ0**
• 8 192 to 65 536 PowerTags	**6AV6371-2BN08-0AJ0**
• 65 536 to 102 400 PowerTags	**6AV6371-2BP08-0AJ0**
• 102 400 to 153 600 PowerTags	**6AV6371-2BQ08-0AJ0**
• 153 600 to 262 144 PowerTags	**6AV6371-2BR08-0AJ0**
Complete packages	
• 128 to 512 PowerTags	**6AV6371-2BD18-0AX0**
• 512 to 2 048 PowerTags	**6AV6371-2BG18-0AX0**
• 2 048 to 8 192 PowerTags	**6AV6371-2BM18-0AX0**
• 8 192 to 65 536 PowerTags	**6AV6371-2BN18-0AX0**
• 65 536 to 102 400 PowerTags	**6AV6371-2BP18-0AX0**
• 102 400 to 153 600 PowerTags	**6AV6371-2BQ18-0AX0**
• 153 600 to 262 144 PowerTags	**6AV6371-2BR18-0AX0**
As download	
• 128 to 512 PowerTags	**6AV6371-2BD18-0AJ0**
• 512 to 2 048 PowerTags	**6AV6371-2BG18-0AJ0**
• 2 048 to 8 192 PowerTags	**6AV6371-2BM18-0AJ0**
• 8 192 to 65 536 PowerTags	**6AV6371-2BN18-0AJ0**
• 65 536 to 102 400 PowerTags	**6AV6371-2BP18-0AJ0**
• 102 400 to 153 600 PowerTags	**6AV6371-2BQ18-0AJ0**
• 153 600 to 262 144 PowerTags	**6AV6371-2BR18-0AJ0**

SIMATIC WinCC V7/V8 basic software

Ordering data	Article No.
V8.0 Archive	
• 1 500 archive tags (countable)	**6AV6371-1DQ10-0AX0**
• 5 000 archive tags (countable)	**6AV6371-1DQ10-0BX0**
• 10 000 archive tags (countable)	**6AV6371-1DQ10-0CX0**
• 30 000 archive tags (countable)	**6AV6371-1DQ10-0EX0**
As download	
• 1 500 archive tags (countable)	**6AV6371-1HQ10-0AX0**
• 5 000 archive tags (countable)	**6AV6371-1HQ10-0BX0**
• 10 000 archive tags (countable)	**6AV6371-1HQ10-0CX0**
• 30 000 archive tags (countable)	**6AV6371-1HQ10-0EX0**
SIMATIC WinCC software packages for IPC	
SIMATIC WinCC V8.0 Runtime	
• WinCC RT Client	**6AV6382-2AA08-0AX0**
• 128 PowerTags	**6AV6382-2CA08-0AX0**
• 512 PowerTags	**6AV6382-2DA08-0AX0**
• 2048 PowerTags	**6AV6382-2EA08-0AX0**
• 8192 PowerTags	**6AV6382-2HA08-0AX0**
• 65536 PowerTags	**6AV6382-2FA08-0AX0**
SIMATIC WinCC V8.0 Runtime ASIA	
• WinCC RT Client	**6AV6382-2AA08-0AV0**
• 128 PowerTags	**6AV6382-2CA08-0AV0**
• 512 PowerTags	**6AV6382-2DA08-0AV0**
• 2048 PowerTags	**6AV6382-2EA08-0AV0**
• 8192 PowerTags	**6AV6382-2HA08-0AV0**
• 65536 PowerTags	**6AV6382-2FA08-0AV0**
SIMATIC WinCC Upgrades/ Software Update Service	
SIMATIC WinCC V8.0 Upgrade [1] [2]	
For upgrading the RT version	
• From V7.5 to V8.0	**6AV6381-2AA08-0AX4**
• From V7.3/V7.4 to V8.0	**6AV6381-2AA08-0AX3**
As download	
• From V7.5 to V8.0	**6AV6381-2AA08-0AK4**
• From V7.3/V7.4 to V8.0	**6AV6381-2AA08-0AK3**
For upgrading the RC version	
• From V7.5 to V8.0	**6AV6381-2AB08-0AX4**
• From V7.3/V7.4 to V8.0	**6AV6381-2AB08-0AX3**
As download	
• From V7.5 to V8.0	**6AV6381-2AB08-0AK4**
• From V7.3/V7.4 to V8.0	**6AV6381-2AB08-0AK3**
For upgrading the Client RT version	
• From V7.5 to V8.0	**6AV6381-2CA08-0AX4**
• From V7.3/V7.4 to V8.0	**6AV6381-2CA08-0AX3**
As download	
• From V7.5 to V8.0	**6AV6381-2CA08-0AK4**
• From V7.3/V7.4 to V8.0	**6AV6381-2CA08-0AK3**
For upgrading the Client RC version	
• From V7.5 to V8.0	**6AV6381-2CB08-0AX4**
• From V7.3/V7.4 to V8.0	**6AV6381-2CB08-0AX3**
As download	
• From V7.5 to V8.0	**6AV6381-2CB08-0AK4**
• From V7.3/V7.4 to V8.0	**6AV6381-2CB08-0AK3**
SIMATIC WinCC Software Update Service (SUS) [3] [4]	
SIMATIC WinCC V8 Update	
Software Update Service for WinCC basic software and options:	
• 1 license	**6AV6381-1AA00-0AX5**
• 3 licenses	**6AV6381-1AA00-0BX5**
• 10 licenses	**6AV6381-1AA00-0CX5**
As download	
• 1 license	**6AV6381-1KA00-0AX5**
• 3 licenses	**6AV6381-1KA00-0BX5**
• 10 licenses	**6AV6381-1KA00-0CX5**

[1] According to licensing provisions, 1 upgrade package must be ordered for each WinCC station

[2] The upgrade from V7.X RT/RC ASIA to V8.0 ASIA is performed via the "standard package"

[3] The Software Update Service is valid for 1 year. The contract is automatically extended by 1 more year unless canceled 3 months prior to expiration. In accordance with the license conditions, 1 Software Update Service each must be ordered per WinCC station.

[4] Requires the current software version

Ordering data	Article No.
SIMATIC WinCC V8.0 communication via Industrial Ethernet/PROFIBUS	
SOFTNET-IE S7 Version 18 Software for S7 and S5-compatible communication incl. OPC server, PG/OP communication and NCM PC, up to 64 connections; single license for one installation of runtime software, software and electronic manual on CD-ROM, license key on USB flash drive, Class A; for CP 1612 A2; English/German	
• Single license for 1 installation	**6GK1704-1CW18-0AA0**
• Upgrade package for SIMATIC NET Edition 2006 or higher	**6GK1704-1CW00-3AE0**
SOFTNET-IE S7 Lean Version 18 (license included in scope of supply of WinCC V8.0) Software for S7 and S5-compatible communication including OPC Server, PG/OP communication and NCM PC; up to 8 connections; single license for one installation of Runtime software, software and electronic manual on CD-ROM, license key on USB flash drive, Class A For CP 1612 A2, English/German	
• Single license for 1 installation	**6GK1704-1LW18-0AA0**
CP 1623 PCI Express X1 card (32-bit) for connection of PG/PC to Industrial Ethernet (communications software must be ordered separately)	**6GK1162-3AA00**
HARDNET-IE S7 V18 Software for S7 and S5-compatible communication incl. OPC Server, PG/OP communication and NCM PC, single license for one installation of Runtime software, software and electronic manual on CD-ROM, license key on USB flash drive, Class A for CP 1613 A2, CP 1623, CP 1628; English/German	
• Single license for 1 installation	**6GK1716-1CB18-0AA0**
• Upgrade package for SIMATIC NET Edition 2006 or higher	**6GK1716-1CB00-3AE0**

	Article No.
Communication via PROFIBUS	
CP 5612 PCI card (32-bit) for connecting a PG/PC to PROFIBUS (communications software included in WinCC basic package)	**6GK1561-2AA00**
CP 5622 PCI Express X1 card (32-bit) for connecting a PG/PC to PROFIBUS (communications software included in WinCC basic package)	**6GK1562-2AA00**
CP 5711 USB adapter for connecting a PG/PC to PROFIBUS or MPI (communications software included in WinCC basic package)	**6GK1571-1AA00**
CP 5613 A3 PCI card (32-bit) for connecting a PC to PROFIBUS (communications software must be ordered separately)	**6GK1561-3AA02**
CP 5614 A3 PCI card (32-bit) for connecting a PC to PROFIBUS (communications software must be ordered separately)	**6GK1561-4AA02**
CP 5623 PCI Express X1 card (32-bit) for connection of PG/PC to Industrial Ethernet (communications software must be ordered separately)	**6GK1562-3AA00**
HARDNET-PB S7 Software for S7 communication incl. PG/OP communication, FDL, OPC Server, Runtime software, software and electronic manual on CD-ROM, license key on USB flash drive, Class A for CP 5613 A3, CP 5614 A3, CP 5623 English/German	
• Single license for 1 installation	**6GK1713-5CB18-0AA0**
• Upgrade package for SIMATIC NET Edition 2006 or higher	**6GK1713-5CB00-3AE0**
HARDNET-PB DP Software for DP protocol incl. PG/OP communication, FDL, DP OPC Server, Runtime software, software and electronic manual on CD-ROM, license key on USB flash drive, Class A, for CP 5613 A3, CP 5614 A3, CP 5623; English/German	
• Single license for 1 installation	**6GK1713-5DB18-0AA0**
• Upgrade package for SIMATIC NET Edition 2006 or higher	**6GK1713-5DB00-3AE0**

3

Ordering data	Article No.
SIMATIC WinCC system software	
V7.5 SP2	
Runtime packages on DVD	
Incl. 512 archive tags each; language/script versions: en, de, fr, it, es; with license for	
• WinCC RT Client	**6AV6381-2CA07-5AX0**
• 128 PowerTags (RT 128)	**6AV6381-2BC07-5AX0**
• 512 PowerTags (RT 512)	**6AV6381-2BD07-5AX0**
• 2 048 PowerTags (RT 2 048)	**6AV6381-2BE07-5AX0**
• 8 192 PowerTags (RT 8 192)	**6AV6381-2BH07-5AX0**
• 65 536 PowerTags (RT 65 536)	**6AV6381-2BF07-5AX0**
• 102 400 PowerTags (RT 102 400)	**6AV6381-2BJ07-5AX0**
• 153 600 PowerTags (RT 153 600)	**6AV6381-2BK07-5AX0**
• 262 144 PowerTags (RT 262 144)	**6AV6381-2BL07-5AX0**
As download	
• WinCC RT Client	**6AV6381-2CA07-5AH0**
• 128 PowerTags (RT 128)	**6AV6381-2BC07-5AH0**
• 512 PowerTags (RT 512)	**6AV6381-2BD07-5AH0**
• 2 048 PowerTags (RT 2 048)	**6AV6381-2BE07-5AH0**
• 8 192 PowerTags (RT 8 192)	**6AV6381-2BH07-5AH0**
• 65 536 PowerTags (RT 65 536)	**6AV6381-2BF07-5AH0**
• 102 400 PowerTags (RT 102 400)	**6AV6381-2BJ07-5AH0**
• 153 600 PowerTags (RT 153 600)	**6AV6381-2BK07-5AH0**
• 262 144 PowerTags (RT 262 144)	**6AV6381-2BL07-5AH0**
Complete packages on DVD	
Language versions: en, de, fr, it, es; with license for	
• WinCC RC Client	**6AV6381-2CB07-5AX0**
• 128 PowerTags (RC 128)	**6AV6381-2BM07-5AX0**
• 512 PowerTags (RC 512)	**6AV6381-2BN07-5AX0**
• 2 048 PowerTags (RC 2 048)	**6AV6381-2BP07-5AX0**
• 8 192 PowerTags (RC 8 192)	**6AV6381-2BS07-5AX0**
• 65 536 PowerTags (RC 65 536)	**6AV6381-2BQ07-5AX0**
• 102 400 PowerTags (RC 102 400)	**6AV6381-2BT07-5AX0**
• 153 600 PowerTags (RC 153 600)	**6AV6381-2BU07-5AX0**
• 262 144 PowerTags (RC 262 144)	**6AV6381-2BV07-5AX0**
As download	
• WinCC RC Client	**6AV6381-2CB07-5AH0**
• 128 PowerTags (RC 128)	**6AV6381-2BM07-5AH0**
• 512 PowerTags (RC 512)	**6AV6381-2BN07-5AH0**
• 2 048 PowerTags (RC 2 048)	**6AV6381-2BP07-5AH0**
• 8 192 PowerTags (RC 8 192)	**6AV6381-2BS07-5AH0**
• 65 536 PowerTags (RC 65 536)	**6AV6381-2BQ07-5AH0**
• 102 400 PowerTags (RC 102 400)	**6AV6381-2BT07-5AH0**
• 153 600 PowerTags (RC 153 600)	**6AV6381-2BU07-5AH0**
• 262 144 PowerTags (RC 262 144)	**6AV6381-2BV07-5AH0**

	Article No.
V7.5 SP2 ASIA	
Runtime packages on DVD	
Language/script versions: en, zh-CN, zh-TW, ko, ja; with license for	
• WinCC RT Client	**6AV6381-2CA07-5AV0**
• 128 PowerTags (RT 128)	**6AV6381-2BC07-5AV0**
• 512 PowerTags (RT 512)	**6AV6381-2BD07-5AV0**
• 2 048 PowerTags (RT 2 048)	**6AV6381-2BE07-5AV0**
• 8 192 PowerTags (RT 8 192)	**6AV6381-2BH07-5AV0**
• 65 536 PowerTags (RT 65 536)	**6AV6381-2BF07-5AV0**
• 102 400 PowerTags (RT 102 400)	**6AV6381-2BJ07-5AV0**
• 153 600 PowerTags (RT 153 600)	**6AV6381-2BK07-5AV0**
• 262 144 PowerTags (RT 262 144)	**6AV6381-2BL07-5AV0**
Complete packages on DVD	
Language versions: en, zh-CN, zh-TW, ko, ja; with license for	
• WinCC RC Client	**6AV6381-2CB07-5AV0**
• 128 PowerTags (RC 128)	**6AV6381-2BM07-5AV0**
• 512 PowerTags (RC 512)	**6AV6381-2BN07-5AV0**
• 2 048 PowerTags (RC 2 048)	**6AV6381-2BP07-5AV0**
• 8 192 PowerTags (RC 8 192)	**6AV6381-2BS07-5AV0**
• 65 536 PowerTags (RC 65 536)	**6AV6381-2BQ07-5AV0**
• 102 400 PowerTags (RC 102 400)	**6AV6381-2BT07-5AV0**
• 153 600 PowerTags (RC 153 600)	**6AV6381-2BU07-5AV0**
• 262 144 PowerTags (RC 262 144)	**6AV6381-2BV07-5AV0**
V7.5 SP2 PowerPacks	
For upgrading from:	
Runtime packages	
• 128 to 512 PowerTags	**6AV6371-2BD07-5AX0**
• 512 to 2 048 PowerTags	**6AV6371-2BG07-5AX0**
• 2 048 to 8 192 PowerTags	**6AV6371-2BM07-5AX0**
• 8 192 to 65 536 PowerTags	**6AV6371-2BN07-5AX0**
• 65 536 to 102 400 PowerTags	**6AV6371-2BP07-5AX0**
• 102 400 to 153 600 PowerTags	**6AV6371-2BQ07-5AX0**
• 153 600 to 262 144 PowerTags	**6AV6371-2BR07-5AX0**
As download	
• 128 to 512 PowerTags	**6AV6371-2BD07-5AJ0**
• 512 to 2 048 PowerTags	**6AV6371-2BG07-5AJ0**
• 2 048 to 8 192 PowerTags	**6AV6371-2BM07-5AJ0**
• 8 192 to 65 536 PowerTags	**6AV6371-2BN07-5AJ0**
• 65 536 to 102 400 PowerTags	**6AV6371-2BP07-5AJ0**
• 102 400 to 153 600 PowerTags	**6AV6371-2BQ07-5AJ0**
• 153 600 to 262 144 PowerTags	**6AV6371-2BR07-5AJ0**
Complete packages	
• 128 to 512 PowerTags	**6AV6371-2BD17-5AX0**
• 512 to 2 048 PowerTags	**6AV6371-2BG17-5AX0**
• 2 048 to 8 192 PowerTags	**6AV6371-2BM17-5AX0**
• 8 192 to 65 536 PowerTags	**6AV6371-2BN17-5AX0**
• 65 536 to 102 400 PowerTags	**6AV6371-2BP17-5AX0**
• 102 400 to 153 600 PowerTags	**6AV6371-2BQ17-5AX0**
• 153 600 to 262 144 PowerTags	**6AV6371-2BR17-5AX0**
As download	
• 128 to 512 PowerTags	**6AV6371-2BD17-5AJ0**
• 512 to 2 048 PowerTags	**6AV6371-2BG17-5AJ0**
• 2 048 to 8 192 PowerTags	**6AV6371-2BM17-5AJ0**
• 8 192 to 65 536 PowerTags	**6AV6371-2BN17-5AJ0**
• 65 536 to 102 400 PowerTags	**6AV6371-2BP17-5AJ0**
• 102 400 to 153 600 PowerTags	**6AV6371-2BQ17-5AJ0**
• 153 600 to 262 144 PowerTags	**6AV6371-2BR17-5AJ0**

Ordering data	Article No.
V7.5 SP2 archives	
• 1 500 archive tags (countable)	**6AV6371-1DQ17-5AX0**
• 5 000 archive tags (countable)	**6AV6371-1DQ17-5BX0**
• 10 000 archive tags (countable)	**6AV6371-1DQ17-5CX0**
• 30 000 archive tags (countable)	**6AV6371-1DQ17-5EX0**
As download	
• 1 500 archive tags (countable)	**6AV6371-1HQ17-5AX0**
• 5 000 archive tags (countable)	**6AV6371-1HQ17-5BX0**
• 10 000 archive tags (countable)	**6AV6371-1HQ17-5CX0**
• 30 000 archive tags (countable)	**6AV6371-1HQ17-5EX0**
SIMATIC WinCC software packages for IPC	
SIMATIC WinCC V7.5 SP2 Runtime	
• WinCC RT Client	**6AV6382-2AA07-5AX0**
• 128 PowerTags	**6AV6382-2CA07-5AX0**
• 512 PowerTags	**6AV6382-2DA07-5AX0**
• 2 048 PowerTags	**6AV6382-2EA07-5AX0**
• 8 192 PowerTags	**6AV6382-2HA07-5AX0**
• 65 536 PowerTags	**6AV6382-2FA07-5AX0**
SIMATIC WinCC V7.5 SP2 Runtime ASIA	
• WinCC RT Client	**6AV6382-2AA07-5AV0**
• 128 PowerTags	**6AV6382-2CA07-5AV0**
• 512 PowerTags	**6AV6382-2DA07-5AV0**
• 2 048 PowerTags	**6AV6382-2EA07-5AV0**
• 8 192 PowerTags	**6AV6382-2HA07-5AV0**
• 65 536 PowerTags	**6AV6382-2FA07-5AV0**

	Article No.
SIMATIC WinCC Upgrades/ Software Update Service	
SIMATIC WinCC V7.5 SP2 Upgrade [1]	
For upgrading the RT version	
• From V7.2/7.3 to V7.5 SP2	**6AV6381-2AA07-5AX3**
• From V7.4 to V7.5 SP2	**6AV6381-2AA07-5AX4**
• From V7.2/7.3 ASIA to V7.5 SP2 ASIA [2]	**6AV6381-2AA07-5AV3**
• From V7.4 ASIA to V7.5 SP2 ASIA [2]	**6AV6381-2AA07-5AV4**
As download	
• From V7.2/7.3 to V7.5 SP2	**6AV6381-2AA07-5AK3**
• From V7.4 to V7.5 SP2	**6AV6381-2AA07-5AK4**
For upgrading the RC version	
• From V7.2/7.3 to V7.5 SP2	**6AV6381-2AB07-5AX3**
• From V7.4 to V7.5 SP2	**6AV6381-2AB07-5AX4**
• From V7.2/7.3 ASIA to V7.5 SP2 ASIA [2]	**6AV6381-2AB07-5AV3**
• From V7.4 ASIA to V7.5 SP2 ASIA [2]	**6AV6381-2AB07-5AV4**
As download	
• From V7.2/7.3 to V7.5 SP2	**6AV6381-2AB07-5AK3**
• From V7.4 to V7.5 SP2	**6AV6381-2AB07-5AK4**
For upgrading the Client RT version	
• From V7.2/7.3 to V7.5 SP2	**6AV6381-2CA07-5AX3**
• From V7.4 to V7.5 SP2	**6AV6381-2CA07-5AX4**
• From V7.2/7.3 ASIA to V7.5 SP2 ASIA	**6AV6381-2CA07-5AV3**
• From V7.5 ASIA to V7.5 SP2 ASIA	**6AV6381-2CA07-5AV4**
As download	
• From V7.2/7.3 to V7.5 SP2	**6AV6381-2CA07-5AK3**
• From V7.4 to V7.5 SP2	**6AV6381-2CA07-5AK4**
For upgrading the Client RC version	
• From V7.2/7.3 to V7.4 SP2	**6AV6381-2CB07-5AX3**
• From V7.4 to V7.5 SP2	**6AV6381-2CB07-5AX4**
• From V7.2/7.3 ASIA to V7.5 SP2 ASIA	**6AV6381-2CB07-5AV3**
• From V7.4 ASIA to V7.5 SP2 ASIA	**6AV6381-2CB07-5AV4**
As download	
• From V7.2/7.3 to V7.4 SP2	**6AV6381-2CB07-5AK3**
• From V7.2/7.3 to V7.5 SP2	**6AV6381-2CB07-5AK3**
• From V7.4 to V7.5 SP2	**6AV6381-2CB07-5AK4**
SIMATIC WinCC Software Update Service (SUS) [3] [4] [5]	
SIMATIC WinCC V7 Update	
Software Update Service for WinCC basic software and options:	
• 1 license	**6AV6381-1AA00-0AX5**
• 3 licenses	**6AV6381-1AA00-0BX5**
• 10 licenses	**6AV6381-1AA00-0CX5**
As download	
• 1 license	**6AV6381-1KA00-0AX5**
• 3 licenses	**6AV6381-1KA00-0BX5**
• 10 licenses	**6AV6381-1KA00-0CX5**

1) According to licensing provisions, 1 upgrade package must be ordered for each WinCC station

2) Upgrading from V7.X RT/RC ASIA to V7.5 ASIA is carried out using the "respective non-Asia Package"

3) The Software Update Service is valid for 1 year. The contract is automatically extended by 1 more year unless canceled 3 months prior to expiration. According to licensing provisions, 1 Software Update Service must be ordered for each WinCC station.

4) Requires the current software version

5) SUS is available as download

3

Ordering data	Article No.
Communication via Industrial Ethernet/PROFIBUS	
SOFTNET-IE S7 Version 16 Software for S7 and S5-compatible communication incl. OPC Server, PG/OP communication and NCM PC; up to 64 connections; single license for one installation of Runtime software, software and electronic manual on CD-ROM; license key on USB flash drive, Class A For CP 1612 A2 English/German	
• Single license for 1 installation	**6GK1704-1CW16-0AA0**
• Upgrade package for SIMATIC NET Edition 2006 or higher	**6GK1704-1CW00-3AE0**
• Upgrade package for SIMATIC NET V6.0, V6.1, V6.2 and Edition 2005	**6GK1704-1CW00-3AE1**
SOFTNET-IE S7 Lean Version 16 (license included in scope of supply of WinCC V7.5 SP2) Software for S7 and S5-compatible communication including OPC Server, PG/OP communication and NCM PC; up to 8 connections; single license for one installation of Runtime software, software and electronic manual on CD-ROM, license key on USB flash drive, Class A For CP 1612 A2, English/German	
• Single license for 1 installation	**6GK1704-1LW16-0AA0**
• Upgrade package for SIMATIC NET Edition 2006 or higher	**6GK1704-1LW00-3AE0**
• Upgrade package for SIMATIC NET V6.0, V6.1, V6.2 and Edition 2005	**6GK1704-1LW00-3AE1**
CP 1623 PCI Express X1 card (32-bit) for connection of PG/PC to Industrial Ethernet (communications software must be ordered separately)	**6GK1162-3AA00**
HARDNET-IE S7 V16 Software for S7 and S5-compatible communication incl. OPC Server, PG/OP communication and NCM PC, single license for one installation of Runtime software, software and electronic manual on CD-ROM, license key on USB flash drive, Class A for CP 1613 A2, CP 1623, CP 1628; English/German	
• Single license for 1 installation	**6GK1716-1CB16-0AA0**
• Upgrade package for SIMATIC NET Edition 2006 or higher	**6GK1716-1CB00-3AE0**
• Upgrade package for SIMATIC NET V6.0, V6.1, V6.2 and Edition 2005	**6GK1716-1CB00-3AE1**

Ordering data	Article No.
Communication via PROFIBUS	
CP 5612 PCI card (32-bit) for connecting a PG/PC to PROFIBUS (communications software included in WinCC basic package)	**6GK1561-2AA00**
CP 5622 PCI Express X1 card (32-bit) for connecting a PG/PC to PROFIBUS (communications software included in WinCC basic package)	**6GK1562-2AA00**
CP 5711 USB adapter for connecting a PG/PC to PROFIBUS or MPI (communications software included in WinCC basic package)	**6GK1571-1AA00**
CP 5613 A3 PCI card (32-bit) for connecting a PC to PROFIBUS (communications software must be ordered separately)	**6GK1561-3AA02**
CP 5614 A3 PCI card (32-bit) for connecting a PC to PROFIBUS (communications software must be ordered separately)	**6GK1561-4AA02**
CP 5623 PCI Express X1 card (32-bit) for connection of PG/PC to Industrial Ethernet (communications software must be ordered separately)	**6GK1562-3AA00**
HARDNET-PB S7 Software for S7 communication incl. PG/OP communication, FDL, OPC Server, Runtime software, software and electronic manual on CD-ROM, license key on USB flash drive, Class A for CP 5613 A3, CP 5614 A3, CP 5623 English/German	
• Single license for 1 installation	**6GK1713-5CB16-0AA0**
• Upgrade package for SIMATIC NET Edition 2006 or higher	**6GK1713-5CB00-3AE0**
• Upgrade package for SIMATIC NET V6.0, V6.1, V6.2 and Edition 2005	**6GK1713-5CB00-3AE1**
HARDNET-PB DP Software for DP protocol incl. PG/OP communication, FDL, DP OPC Server, Runtime software, software and electronic manual on CD-ROM, license key on USB flash drive, Class A, for CP 5613 A3, CP 5614 A3, CP 5623; English/German	
• Single license for 1 installation	**6GK1713-5DB16-0AA0**
• Upgrade package for SIMATIC NET Edition 2006 or higher	**6GK1713-5DB00-3AE0**
• Upgrade package for SIMATIC NET V6.0, V6.1, V6.2 and Edition 2005	**6GK1713-5DB00-3AE1**

Technical specifications

Type	SIMATIC WinCC V8.0
PC hardware requirements	
Processor type	
• Minimum	Single-user station/server: Dual-core; 2.5 GHz
	Client: Dual-core; 2.5 GHz
• Recommended	Single-user station/server: Multi-core; 3.5 GHz
	Client: Multi-core; 3 GHz [2)]
Work memory RAM	
• Minimum	Windows 10 (64-bit) • Single-user station/server: 4 GB • Client: 2 GB
	Windows Server 2019 / Windows Server 2022 Server: 4 GB
• Recommended	Windows 10 (64-bit) • Single-user station/server: 4 GB • Client: 4 GB
	Windows Server 2019 / Windows Server 2022 Server: 8 GB
Graphics resolution	
• Minimum	1 024 x 768
• Recommended	1 920 x 1 080
Hard disk	
• Minimum	Single-user station/server: 80 GB
	Client: 20 GB
	WebClient/DataMonitor Client: 5 GB
• Recommended	Single-user station/server: 160 GB
	Client: 40 GB
	WebClient/DataMonitor Client: 10 GB
DVD-ROM/USB interface	For software installation and license transfer

More information

WinCC language versions

SIMATIC WinCC is also offered in simplified Chinese, traditional Chinese, Korean and Japanese especially for Asian markets. These WinCC versions are intended for machine manufacturers, plant constructors and exporters who supply the regions of China, Taiwan, Korea and Japan.

WinCC ASIA includes all familiar WinCC functions and offers in addition the configuration user interface in the respective national language and English. The online help is available in simplified Chinese, traditional Chinese, Korean, Japanese and English. A Chinese, Korean, Japanese or multilingual Windows operating system is required for operation.

The runtime licenses are language-neutral. The English handling program (Automation License Manager – ALM) is executable under the Chinese, Korean and Japanese Windows versions.

In order to use the Asian languages in WinCC, an Asia hardware dongle is required.

IPC packages

There are attractive packages available with SIMATIC Rack PCs (IPC347, IPC547, IPC647, IPC847), SIMATIC Box PCs (IPC227, IPC427, IPC627, IPC827) and SIMATIC Panel PCs (IPC277, IPC477, IPC677) for a completely matched software and hardware package. These IPCs can be configured in different ways for use as single station, server or client.

http://www.siemens.com/scada-ipc

Downloads:

In most cases, the products can also be obtained as software downloads.

You can find more information on the Software Update Service, license forms, Online Software Delivery and handling your SW licenses with the Automation License Manager here:

http://www.siemens.com/simatic-licenses

SIMATIC WinCC V7/V8 options

Overview

The universal WinCC Basic Software is the basis for modular expansions. These functional expansions can be obtained in the form of WinCC options and as WinCC Premium add-ons.

WinCC options are created by WinCC Development and are Siemens Industry Automation products. You can obtain support from our Advisory Services and via the central hotline.

Options for scalable plant configurations

- WinCC/Server
  For configuring a powerful client/server system
- WinCC/Redundancy
  For increasing system availability through redundancy
- WinCC Web Navigator
  For operator control and monitoring of plants via the Internet, in-house intranet or LAN
- WinCC WebUX
  HTML5 client access for operator control and monitoring of plants, independent of platforms and web browsers, via the Internet, in-house intranet or LAN
- SIMATIC Process Historian
  Central, scalable long-term archive for the whole plant
- SIMATIC TeleControl
  For connecting outlying stations (remote terminal units = RTUs) via telecontrol protocols in a WinCC SCADA system

Options for greater efficiency in operations management

- WinCC /User Archives
  For managing data records in user archives
- WinCC/DataMonitor
  For displaying and evaluating current process states and historical data on office PCs with standard tools
- WinCC/Performance Monitor
  For analysis and optimization of production on the basis of individual performance indicators
- WinCC/Audit
  - Change management
  - Generation of Audit Trails for engineering and runtime
- WinCC/Calendar Scheduler
  Calendar-based planning of events
- WinCC/ChangeControl
  - Change and version management
  - Generation of Audit Trails for engineering
- WinCC/Event Notifier
  For sending of notifications triggered by specific events in the WinCC message system
- SIMATIC Information Server
  Web-based, integrated reporting from production to management, based on archived data

Options for openness and individual system expansions

- WinCC/Connectivity Pack
  Access to WinCC logs via OPC HDA, OPC A&E, OPC XML Server, OPC UA Server/Client and WinCC OLE DB / OLE DB, Cloud Connect via MQTT, REST API and REST Connector
- WinCC/Connectivity Station
  Gateway to WinCC server data via OPC HDA, OPC A&E, OPC UA Server/Client, and WinCC OLE DB /OLE DB from independent computers
- WinCC IndustrialDataBridge
  Configurable connection to databases and IT systems
- WinCC/ODK (Open Development Kit)
  For the use of open programming interfaces and the generation of customer-specific WinCC ActiveX objects

More information

SIMATIC WinCC options

More information is available at

http://www.siemens.com/simatic-wincc-options

Overview

SIMATIC TeleControl

SIMATIC TeleControl for WinCC supports connection to outlying stations (Remote Terminal Units = RTUs) via telecontrol protocols.

- SIMATIC TeleControl V7.4 has been released for use with WinCC V7.4.
- For compatibility with WinCC 7.4 SP1, use TeleControl V7.4 update 1
- SIMATIC TeleControl V7.4 supports the combination with WinCC as a Windows service

Licenses

- SIMATIC TeleControl for WinCC consists of an engineering and a runtime component
- The engineering software is supplied with a floating license. The floating license allows installation of the software on any number of computers. This means one user per license can use the software independently of the computer used or a specific work station.
- The runtime software is supplied as a single license for one server and allows a specific number of stations to be connected depending on the license.

You can find more information on the Software Update Service, license types, Online Software Delivery and handling your SW licenses with the Automation License Manager at http://www.siemens.com/simatic-licenses

Benefits

SIMATIC TeleControl for WinCC V7.4 can not only integrate newly configured RTUs, but it can also integrate units which already exist in outlying areas by means of DNP3 or IEC 870-5-101/104 drivers. For communication with the outstations, SIMATIC TeleControl for WinCC V7.4 uses the SINAUT ST7 and DNP3 protocols (both via serial and TCP/IP communication connections) as well as IEC 870-5-101 (serial) and IEC 870-5-104 (Ethernet TCP/IP).

The serial RTU link is possible via the following components, which can be connected directly via WinCC (single station or server):

- SINAUT TIM communication modules (SINAUT ST7 telecontrol protocol)
- TCP/IP serial converter (telecontrol protocols DNP3, IEC 870-5-101)

Equipment from MOXA or Lantronix, for example, can be used as TCP/IP serial converters.

By means of Ethernet TCP/IP, the RTUs can be connected directly or via TCP/IP WAN routers to the SIMATIC WinCC system bus (SINAUT ST7, DNP3, IEC 870-5-104 telecontrol protocols). When using the SINAUT ST7 telecontrol protocol, the SINAUT TIM communication module can be used in addition to the TCP/IP WAN router or as an alternative.

Application

Telecontrol communication over the wide area network is largely determined by the communication infrastructure which already exists. Various transmission media such as dedicated line, analog or digital telephone networks, wireless networks (GSM or private), DSL or GPRS can also be combined with each other.

SINAUT ST7 telecontrol protocol

Detailed information for implementing telecontrol applications with the SINAUT ST 7 telecontrol protocol via the Industry Mall.

IEC 60870-5-101/104 telecontrol protocols

More detailed information for implementing telecontrol applications with the IEC 60870-5-101/104 telecontrol protocols via the Industry Mall.

DNP3 telecontrol protocol

SIMATIC TeleControl for WinCC V7.4 also supports the DNP3 telecontrol protocol. Widely distributed outstations (RTUs) can be controlled and monitored with the DNP3 telecontrol protocol via serial or Ethernet TCP/IP communication links by means of the telecontrol center in SIMATIC WinCC.

The control center integrated with SIMATIC TeleControl into the SCADA system is the master during telecontrol communication. The slaves are represented by the remote stations. SIMATIC S7-1200, SIMATIC S7-1500, SIMATIC Distributed Controllers ET 200SP, SIMATIC S7-300/S7-300F and S7-400/S7-400F/S7-400H/S7-400FH controllers as well as RTU3000C and third-party RTUs can be used as remote stations.

Further hardware and software components round off the range of products:

- TIM communication modules
- TCP/IP converters – serial and MD modem modules
- Mobile radio components (GSM/GPRS)
- TCP/IP routers and switches
- SCALANCE S security modules
- Dedicated line accessories
- Cables
- Engineering package for configuration of DNP3 data objects, stations, networks and connections as well as for diagnostics

In order to implement telecontrol networks, basic topologies including point-to-point, multi-point, star and ring can be configured using classic or TCP/IP-based media. These can be combined flexibly depending on the existing infrastructure.

Classic WAN media:

- Dedicated line via modem, e.g. SINAUT MD2
- Private radio networks
- Analog telephone network
- Digital ISDN network
- GSM, UMTS, LTE mobile network

TCP/IP-based WAN media:

- Ethernet networks, e.g. SCALANCE X with fiber-optic cables
- Industrial Wireless LAN with SCALANCE W
- Public networks and the Internet using DSL and/or GPRS

Function

Special characteristics of DNP3 communication

- Change-driven data transmission
  - Change-driven transmission of process data between RTU and control center
  - Signaling of RTU, control center or connection failure
  - Automatic data updating for all communication partners involved following troubleshooting and following the startup of the RTU or control center
- Chronological processing of process data
  - Time tagging of all data frames at the place of origin allows process data to be archived by the process control system in the correct chronological order
  - The time of the DNP3 stations in the WAN can be synchronized via SIMATIC WinCC (including summertime/wintertime switchover)
- Local data storage
  - The TIM communication module can temporarily store (for several hours or even days) message frames should the connection or the communication partner fail
  - Intermediate storage of message frames of lower priority in the case of priority-controlled data transmission (with dial-up networks or quantity-dependent data transmission costs)

Operating modes

The DNP3 telecontrol protocol supports the following operating modes:

- Polling
- Polling with time slot procedure
- Multi-master polling with time slot procedure
- Spontaneous mode in dial-up networks
- Spontaneous mode in the TCP/IP-based WAN

Integration

Integration of SIMATIC WinCC/TeleControl for WinCC V7.4 into the WinCC SCADA system offers particular advantages for the sectors water/wastewater, as well as oil and gas, especially in the case of the following types of plant:

- Freshwater treatment and distribution
- Wastewater treatment plants
- Oil and gas pipelines and water pipes
- Oil and gas drilling fields and the associated treatment plants

In these types of plant, remote outstations such as pumping stations, valve stations or automated stations for wellheads must be integrated.

Through the support of communication protocols for RTUs such as SINAUT ST7, SIMATIC WinCC/TeleControl for WinCC V7.4 supports the following advanced communication concepts:

- Reduction in the transferred data volume by means of event-controlled communication mechanisms for alarm and measured value information.
- Time synchronization of RTUs and correct time stamping of all data in the RTU.
- Tolerance of lower bandwidth, high latency or lack of reliability of communication lines
- Prevention of data loss due to communications failure through data backup in the RTU
- Support of communication media with serial interface (dedicated lines, dial-up connections over analog telephone lines and ISDN lines), various radio devices (standard, spread spectrum modulation), microwave and GSM
- Support for TCP/IP-based WANs (Wide Area Networks) such as DSL, GPRS or Ethernet radio networks
- Support for redundant communication connections
- Expanded communication diagnostics functions for RTU communication connection
- Remote programming of RTUs
- Support for different communication topologies – Point-to-point, multidrop (multistation mode) and hierarchic network structures
- High quality server redundancy scheme without data loss in the case of server failure

Through the support of communication protocols for RTUs such as IEC 60870-5 and DNP3, SIMATIC WinCC/TeleControl for WinCC V7.4 supports the following advanced communication concepts:

- Reduction in the transferred data volume by means of event-controlled communication mechanisms for alarm and measured value information.
- Time synchronization of RTUs and correct time stamping of all data in the RTU.
- Tolerance of lower bandwidth, high latency or lack of reliability of communication lines
- Prevention of data loss due to communications failure through data backup in the RTU (not all non-Siemens RTUs support this)
- Support of communication media with serial interface (dedicated lines, dial-up connections over analog telephone lines and ISDN lines), various radio devices (standard, spread spectrum modulation), microwave and GSM
- Support for TCP/IP-based WANs (Wide Area Networks) such as DSL, GPRS or Ethernet radio networks
- Support for redundant communication connections
- Expanded communication diagnostics functions for RTU communication connection
- Remote programming of RTUs
- Support for different communication topologies – Point-to-point, multidrop (multistation mode) and hierarchic network structures
- High quality server redundancy scheme without data loss in the case of server failure

Integration

Outstations/remote terminal units

SIMATIC WinCC/TeleControl for WinCC V7.4 supports the following preferred outstations for local distributed automation:

- Controller integrated into ET 200S (IEC 870-5-101/104 telecontrol protocols); for cost-sensitive applications, up to approx. 30 I/O signals or approx. 200 data points
- Controller integrated into RTU3030C (DNP3, IEC 60870-5-104 telecontrol protocols); for very compact and energy-saving applications, up to approx. 16 I/O signals or approx. 150 data points
- S7-1200/S7-1200F Controller (DNP3, IEC 60870-5-104 telecontrol protocols); up to 150 I/O signals or approx. 2 000 data points
- S7-1500 Controller (IEC 60870-5-101/104 telecontrol protocols); up to 250 I/O signals or approx. 4 000 data points
- S7-300/S7-300F Controller (SINAUT ST7, DNP3, IEC 60870-5-101/104 telecontrol protocols); for extremely flexible configuration, up to 100 I/O signals or approx. 2 000 data points
- S7-400/S7-400F Controller (SINAUT ST7, DNP3, IEC 60870-5-101/104 telecontrol protocols); up to 500 I/O signals or approx. 5 000 data points
- Redundant S7-400H/S7-400FH Controller (DNP3 and IEC 60870-5-101/104 telecontrol protocols); up to 500 I/O signals or approx. 5 000 data points
- Third-party station with the IEC 60870-5-101/104 and DNP3 telecontrol protocols (depending on type of station)
- ET 200SP / ET 200SP F Distributed Controllers (telecontrol protocols DNP3, IEC 60870-5-104); extremely flexible configuration options; number of I/O signals / data points depend on the CPU type

The following table provides an overview of the current options for connecting to these outstations:

Spectrum of outstations and integration versions							
Telecontrol protocol		**SINAUT ST 7**		**DNP3**		**IEC 60870-5-101**	**IEC 60870-5-104**
Type of communication		Serial	Ethernet TCP/IP	Serial	Ethernet TCP/IP	Serial	Ethernet TCP/IP
Interface		TIM 4R-IE	TCP/IP WAN router or/and TIM 4R-IE	TCP/IP serial converter	TCP/IP WAN router	TCP/IP serial converter	TCP/IP WAN router
RTU/ interface	ET 200S with integr. CPU (corresponds to S7-314)	-	-	-	-	IM 151-7 CPU or IM 151-8 PN/DP CPU as well as 1 SI module + SIPLUS RIC library	IM 151-8 PN/DP CPU + SIPLUS RIC library
	S7-1200/S7-1200F	-	CP 1243-8 IRC	-	CP 1243-1	-	CP 1243 – 1 IEC
	ET 200SP with integr. CPU CPU1510SP(F)-1PN CPU1512SP(F)-1PN	-	CP 1542SP-1 IRC	-	CP 1542SP-1 IRC	-	CP 1542SP-1 IRC
	S7-1500	TIM 1531 IRC	TIM 1531 IRC	-	-	CM PtP + SIPLUS RIC Library	SIPLUS RIC Library
	RTU3000C	-	UMTS modem integrated or external WAN router	-	UMTS modem integrated or external WAN router	-	UMTS modem integrated or external WAN router
	S7-300/S7-300F	TIM 3V-IE	TIM 3V-IE	TIM 3V-IE DNP3	TIM 3V-IE DNP3	CP 341 + SIPLUS RIC library	CP 343 + IEC on S7 or integr. PN interface + SIPLUS RIC Library
	S7-400/S7-400F	TIM 4R-IE	TIM 4R-IE	TIM 4R-IE DNP3	TIM 4R-IE DNP3	CP 441 + SIPLUS RIC library	CP 443 + SIPLUS RIC library or integrated PN interface + SIPLUS RIC library
	S7-400H/S7-400FH	-	-	TIM 4R-IE DNP3	TIM 4R-IE DNP3	ET 200M + 2 x CP 341 + SIPLUS RIC library	CP 443 + SIPLUS RIC library
	Third-party station	-	-	Depends on type of station		Depends on type of station	
Dial-up lines		•	-	•	-	-	-
Dedicated line and radio networks		•	•	•	•	•	•
Master-slave		•	•	•	•	•	•
Peer-to-peer		•	•	-	-	•	•
Mesh networks		•	•	•	•	•	•
Time tagging in RTU		•	•	•	•	•	•
RTU time synchronization		•	•	•	•	•	•
Data buffering in RTU		•	•	•	•	•	•
Routing with SIMATIC PDM		•	•	-	-	-	•
International standard		-	-	•	•	•	•

SIMATIC TeleControl

Ordering data	Article No.
SIMATIC TeleControl for WinCC	
SIMATIC TeleControl 7.4 for WinCC Basic Engineering Software package with SIMATIC Telecontrol for WinCC 7.4 engineering software, floating license for 1 user; runs with Windows 7 Ultimate and Enterprise 32/64-bit, Windows 10 LTSB 2015 (64-bit), Windows Server 2008 R2 Standard 64-bit or Windows Server 2012 R2 Standard 64-bit, electronic documentation on CD/DVD, two languages (English, German) Type of delivery: License key memory stick, certificate of license including terms and conditions, SIMATIC WinCC Data Medium Package V7.4 and CD "WinCC TeleControl Option V7.4"	**6DL5000-7AA47-0XA5**
SIMATIC TeleControl V7.4 for WinCC Server Runtime Software package with SIMATIC Telecontrol for WinCC 7.4 engineering software, single license for 1 user; runs with Windows 7 Ultimate and Enterprise 32/64-bit, Windows 10 LTSB 2015 (64-bit), Windows Server 2008 R2 Standard 64-bit or Windows Server 2012 R2 Standard 64-bit, electronic documentation on CD/DVD, two languages (English, German) Type of delivery: License key memory stick, certificate of license including terms and conditions, SIMATIC WinCC Data Medium Package V7.4 and CD "WinCC TeleControl Option V7.4"	
• 6 stations	**6DL5002-7AA47-0XA0**
• 12 stations	**6DL5002-7AB47-0XA0**
• 256 stations	**6DL5002-7AE47-0XA0**
• unlimited	**6DL5002-7AF47-0XA0**
Upgrades	
SIMATIC TeleControl for WinCC, upgrade V7.0 to V7.4 Upgrade package; single license for 1 installation, E-SW and documentation on DVD; license key on USB flash drive, Class A; two languages (English, German). Executable under Windows 7 Ult/Server 2008 R2/ Server 2012 R2	**6DL5002-7AA47-0XE0**

	Article No.
Driver software for telecontrol protocols	
TeleControl SINAUT driver Runtime license for a WinCC stand-alone system or WinCC Server, single license for 1 installation. Requirement: SIMATIC TeleControl 7.4 software for WinCC Server Runtime (6, 12, 256 stations) Type of delivery: License key memory stick, certificate of license including terms and conditions	**6DL5101-8AX00-0XB0**
TeleControl DNP3 driver Runtime license for a WinCC stand-alone system or WinCC Server, single license for 1 installation. Requirement: SIMATIC TeleControl 7.4 software for WinCC Server Runtime (6, 12, 256 stations) Type of delivery: License key memory stick, certificate of license including terms and conditions	**6DL5101-8EX00-0XB0**
TeleControl IEC 870-5-101/-104 driver Runtime license for one WinCC Single Station or one WinCC Server, single license for 1 installation Requirement: SIMATIC TeleControl 7.4 software for WinCC Server Runtime (6, 12, 256 stations) Type of delivery: License key memory stick, certificate of license including terms and conditions	**6DL5101-8CX00-0XB0**

More information

For an overview of the complete performance range on the Internet, visit:

Service & Support:

to Germany:

https://support.industry.siemens.com/cs/?lc=de-DE

to International:

https://support.industry.siemens.com/cs/?lc=en-DE

Technical Support (Hotline):

to Germany:

https://support.industry.siemens.com/My/ww/de/requests

to International:

https://support.industry.siemens.com/My/ww/en/requests

More information on telecontrol (RTUs):

to Germany:

http://www.siemens.de/telecontrol

to International:

http://www.siemens.com/telecontrol

Overview

WinCC/Audit & WinCC/ChangeControl

- **WinCC/ChangeControl** is used to **trace engineering changes** in a tamper-proof long-term Audit Trail database, called the Audit Trail for short.
  All engineering changes are automatically recorded in the Audit Trail. This provides a traceable record of every change that has been made, as well as enabling the causes to be deduced and the system downtimes to be minimized.
  To begin tracing at defined project statuses, a project version definition is provided that contains all data and files of a WinCC project version. The project version definition naturally provides the ability to reactivate earlier project versions. Document management is also provided, which manages and archives intermediate statuses for system graphics, reports or user files and stores change information of the user. The audit viewer with helpful filter functions enables the Audit Trail to be quickly and easily evaluated, exported or even printed out.
- **WinCC/Audit** is based on the same Audit Trail database and the same audit viewer as WinCC ChangeControl.
  However, the focus of WinCC Audit is the **traceability of all operator actions** during production, i.e. during the runtime of WinCC. All operations are automatically recorded in the Audit Trail at RT. In addition, WinCC Audit offers additional functions for secure and traceable plant operation, such as electronic signature for certain operating actions.
- The WinCC/Audit or WinCC/ChangeControl options and SIMATIC Logon support users in the validation of their plants and meet the requirements according to FDA CFR 21 Part 11.

Licenses (as of WinCC V8.0)

The complete license WinCC Audit RC includes the licenses for runtime and configuration of WinCC ChangeControl and WinCC Audit.

Licensing applies to one engineering station (configuration) and one operating station (runtime) for which an Audit Trail is to be generated.
An RC license also always includes a runtime (RT) license.
Only one RT license is required for each additional operating station with Audit Trail.
In case of WinCC Server (for UNI or web clients),
an Audit RT Server license must be used.
However, the clients on such a server do not require their own licensing.
The individual functional areas can also be purchased independently of each other via the WinCC ChangeControl or WinCC Audit RC Base single licenses.

Benefits

- Quick and easy traceability configuration
- Gap-free and automated recording of engineering changes and operator actions in an Audit Trail
- Reduction in plant downtimes thanks to fast analysis of the gap-free recorded Audit Trail information
- Logging of defined WinCC project status with all database information and files of the application
- Gap-free documentation of the project version definition procedures with version number, user and comments
- Complete tracing support by WinCC single and multi-station systems, single and multi-project solutions, Client/Server architecture
- Additional protection of selected operating actions by electronic signature
- Extensive reduction in engineering outlay in order to meet the requirements of FDA 21 CFR Part11 & EU 178/2002
- Compliance with the requirements of the Food and Drug Administration (FDA) for the food, beverages and tobacco industries

Design

WinCC/ChangeControl and WinCC/Audit consist of five components:

- The Audit Editor for configuration the Audit Trail content
- The project version definition for archiving WinCC projects
- Document management for automatic archiving and versioning of WinCC plant screens, scripts, reports, and project-specific documents, and the recording of the associated change information
- The Audit Viewer for visualizing, exporting and printing the WinCC Audit Trail. The viewer is available as an executable program under Windows, as well as OCX with WinCC Runtime.
- The Audit Trail, which tracks all changes in respect of both engineering and plant operation in a separate SQL database. The Audit Trail can be set up as a central Audit Trail for a number of projects or even just for a single project.

WinCC/ChangeControl and WinCC/Audit support both single-user and multi-user systems, client/server architectures and even the WinCC redundancy system. No redundant Audit Trail is created however.

Function

WinCC/ChangeControl

WinCC/ChangeControl is a functional subset of WinCC/Audit. WinCC/ChangeControl is for tracing engineering changes in the engineering phase or in online operation. All change data is recorded in an Audit Trail.

There are two types of engineering changes:

- those that change the WinCC database or are executed through the WinCC Explorer, such as e.g. changes to tag management or creating a user group,

and those

- limited to changing files, the so-called document management.

The document management manages plant screens, scripts and log layouts and customer-specific documents and stores respective intermediate versions as backups. All of these documents or files are subject to a change process, i.e. documents can be booked out for processing, booked in for finalization and intermediate versions can be retrieved from backup storage with a rollback function.

The project version definition as a component of WinCC/ChangeControl archives WinCC projects and creates reproducible project statuses or defined start time points for starting tracing. An Audit Trail is also provided with information on who has created which project version or which version has been reproduced or deleted.

Configuring the Audit Trail, the project version definition and the document management is simple, quick and comfortable.

The Audit Trail data is visualized from WinCC via the audit viewer, an executable program under Windows.

The data can also be evaluated with the audit viewer OCX in Runtime by WinCC however. Users select the desired view of the Audit Trail information via filters or selection criteria and can export the data to an Excel file or print it on a printer.

Audit Trail information is tamper-proof and can thus not be modified or deleted. An export function can be used to swap out the Audit Trail to an XML file or to archive it.

WinCC/Audit

WinCC/Audit has all of the functionality of WinCC/ChangeControl and is also used for tracing operator operations in RT operation. Tracing can be used for determining who, when and what conditions the machine has undergone. In addition to recording operator activities, the Audit Trail also records the starting and modifying of recipes or operator logs.

In addition, the user can perform activities of an individual nature at specific objects or events, such as pressing a function button, moving sliders and other actions, while using a so-called audit entry function to record these activities in the Audit Trail.

A WinCC/ChangeControl RC license or a WinCC/Audit RC license is required for configuring the Audit Trail. One RT license is required for each station (client/server) to be monitored. One RC license always includes one RT license.

Ordering data

Ordering data	Article No.
WinCC/ChangeControl	
WinCC ChangeControl V8.0	
• Standard scope of supply	**6AV6371-1DV28-0AX0**
• As download	**6AV6371-1HV28-0AX0**
WinCC/Audit	
WinCC/Audit RC V8.0	
For configuration of ChangeControl and Audit incl. RT	
• Standard scope of supply	**6AV6371-1DV18-0AX0**
• As download	**6AV6371-1HV18-0AX0**
WinCC/Audit RC Base V8.0	
For configuration of Audit incl. RT	
• Standard scope of supply	**6AV6371-1DV48-0AX0**
• As download	**6AV6371-1HV48-0AX0**
WinCC/Audit RT V8.0	
Creation of Audit Trails in RT	
• WinCC Audit RT V8.0	**6AV6371-1DV08-0AX0**
• WinCC Audit RT Server V8.0	**6AV6371-1DV38-0AX0**
• WinCC Audit RT Server PowerPack	**6AV6371-1BV38-0AX0**
As download	
• WinCC Audit RT V8.0	**6AV6371-1HV08-0AX0**
• WinCC Audit RT Server V8.0	**6AV6371-1HV38-0AX0**
• WinCC Audit RT Server PowerPack	**6AV6371-1JV38-0AX0**
Upgrades	
V7.5 to V8.0	
• For WinCC/Audit RT	**6AV6371-1DV08-0BX4**
• For WinCC/Audit RC or WinCC/ChangeControl	**6AV6371-1DV18-0BX4**
As download	
• WinCC/Audit RT	**6AV6371-1KV08-0BX4**
• For WinCC/Audit RC or WinCC/ChangeControl	**6AV6371-1KV18-0BX4**
V7.3/7.4 to V8.0	
• For WinCC/Audit RT	**6AV6371-1DV08-0BX3**
• For WinCC/Audit RC or WinCC/ChangeControl	**6AV6371-1DV18-0BX3**
As download	
• WinCC/Audit RT	**6AV6371-1KV08-0BX3**
• For WinCC/Audit RC or WinCC/ChangeControl	**6AV6371-1KV18-0BX3**

Ordering data

	Article No.
WinCC/ChangeControl	
WinCC/ChangeControl V7.5 SP2	
For the configuration of the Audit Trail incl. RT	
• Standard scope of supply	**6AV6371-1DV27-5AX0**
• As download	**6AV6371-1HV27-5AX0**
WinCC/Audit	
WinCC/Audit RC V7.5 SP2	
For the configuration of the Audit Trail incl. RT	
• Standard scope of supply	**6AV6371-1DV17-5AX0**
• As download	**6AV6371-1HV17-5AX0**
WinCC/Audit RT V7.5 SP2	
Creation of Audit Trails in RT	
• Standard scope of supply	**6AV6371-1DV07-5AX0**
• As download	**6AV6371-1HV07-5AX0**
Upgrades	
V7.4 to V7.5 SP2	
• For WinCC/Audit RT	**6AV6371-1DV07-5BX4**
• For WinCC/Audit RC or WinCC/ChangeControl	**6AV6371-1DV17-5BX4**
As download	
• WinCC/Audit RT	**6AV6371-1KV07-5BX4**
• For WinCC/Audit RC or WinCC/ChangeControl	**6AV6371-1KV17-5BX4**
V7.2/7.3 to V7.5 SP2	
• For WinCC/Audit RT	**6AV6371-1DV07-5BX3**
• For WinCC/Audit RC or WinCC/ChangeControl	**6AV6371-1DV17-5BX3**
As download	
• WinCC/Audit RT	**6AV6371-1KV07-5BX3**
• For WinCC/Audit RC or WinCC/ChangeControl	**6AV6371-1KV17-5BX3**

More information

More information is available at

http://www.siemens.com/wincc-audit

Information on the Declarations of Conformity for SIMATIC WinCC can be found at

https://www.siemens.com/de/de/branchen/pharmaindustrie-life-science/pharma/good-manufacturing-practice.html

WinCC/Calendar Scheduler

Overview

WinCC/Calendar Scheduler

- Option for SIMATIC WinCC for managing events in a calendar.
- Setting WinCC variables or starting global scripts at defined times.

Licenses

- WinCC/Calendar Scheduler comprises engineering and runtime software, with licensing either on the WinCC server or single-user system
- A common "Upgrade for WinCC Calendar options" software package is used to upgrade to a new version.

Benefits

- Simple operation, configuration and planning of events thanks to handling in the style of Microsoft Office Calendar
- Simple configuration of the actions by parameterization (execution of WinCC scripts or writing of WinCC tags at certain times)
- Configuration of recurring events taking account of configurable public holidays, vacation periods, and maintenance periods
- Secure operation of the plant taking account of different authentication levels
- Clear representation of events at runtime by means of Calendar Runtime Control
- Flexible use in all typical WinCC plant configurations client/server, redundant systems, WebNavigator

Function

With the WinCC Calendar Scheduler, events and their associated actions can be configured in a user-friendly and clear way in an editor in WinCC Explorer.

The events are represented in a calendar. The period represented can be freely selected. Recurring events can be defined as serial events with any desired exceptions.

The events are displayed in a .Net control. The Calendar Scheduler is easy and intuitive to operate and supports drag & drop during configuration and runtime.

Ordering data

	Article No.
WinCC/Calendar Scheduler	
• WinCC V8.0	**6AV6372-1DC08-0AX0**
• WinCC V7.5 SP2	**6AV6372-1DC07-5AX0**
As download	
• WinCC V8.0	**6AV6372-1HC08-0AX0**
• WinCC V7.5 SP2	**6AV6372-1HC07-5AX0**
Upgrade	
• V7.5 SP2 -> V8.0	**6AV6372-1DC08-0AX4**
• V7.3/7.4 -> V8.0	**6AV6372-1DC08-0AX3**
• V7.4 -> V7.5 SP2	**6AV6372-1DC07-5AX4**
• V7.2/7.3 -> V7.5 SP2	**6AV6372-1DC07-5AX3**
As download	
• V7.5 SP2 -> V8.0	**6AV6372-1KC08-0AX4**
• V7.3/7.4 -> V8.0	**6AV6372-1KC08-0AX3**
• V7.4 -> V7.5 SP2	**6AV6372-1KC07-5AX4**
• V7.2/7.3 -> V7.5 SP2	**6AV6372-1KC07-5AX3**

More information

More information is available at

http://www.siemens.com/wincc-calendar-options

Overview

WinCC/Connectivity Pack & WinCC Connectivity Station

Cross-manufacturer communication in the automation sector has always been of primary importance for WinCC. This is even more true for the exchange of preprocessed production data for higher-level information systems (e.g. MES = Management Execution System, ERP = Enterprise Resource Planning or Office packages = MS Excel, MS Access, etc.).

WinCC has integrated OPC and OPC UA servers that provide access to online and archive data. In addition to OPC, the Connectivity Pack also activates the access options via OLE DB and, as of WinCC V8.0, also MQTT Cloud Connect, REST API, and REST Connector.

- The following OPC access operations are possible with the Connectivity Pack:
  - OPC UA server for DA, A&C, and HDA
  - OPC server for A&E and HDA

Access via OPC DA is also possible without Connectivity Pack. The Connectivity Station offers OPC UA, OPC and OLE DB access also via a station without WinCC installation.

Licensing

- A Connectivity Pack license is required for each WinCC system to be accessed.
- When using the Connectivity Station it is not necessary to install additional Connectivity Pack licenses on the WinCC systems being accessed.
- In order to use the OPC interfaces of the Connectivity Station on a computer without the WinCC installation, you need the "WinCC Connectivity Station" license.
- For sole use of the OPC interfaces of a WinCC installation, only the "Connectivity Pack" license is required.

The Connectivity Station is configured via the SIMATIC Manager.

You can find more information on the Software Update Service, license types, Online Software Delivery and handling your SW licenses with the Automation License Manager at http://www.siemens.com/simatic-licenses

Benefits

- Access to variables, historical WinCC data, alarm data and user archives from any computer
- Options for analyzing and evaluating process data with specialist tools or user-defined applications

Function

As an OPC HDA server, WinCC makes historical data from the WinCC archive system available to other applications.

An OPC HDA client (e.g. a reporting tool) can define the time interval for the required data by entering a start and end time. OPC HDA servers also support the generation of a variety of aggregate functions on the server itself (e.g. standard deviation, variance, mean values, integral values, etc.), thereby helping to relieve the load on the network, as only preprocessed data are transmitted.

OPC A&E servers are used to forward WinCC messages (along with all associated process values) to any client at production or enterprise control level.
Filter mechanisms and subscriptions ensure that only selected modified data are transmitted. Acknowledgement is of course also supported.

WinCC OLE DB makes standardized and user-friendly access to WinCC archive data possible (MS SQL Server).

In exactly the same way as access via the OPC HDA and OPC A&E interfaces, access via the WinCC OLE DB Provider makes all WinCC archive data available along with the associated process values and message/user texts.
The WinCC OLE DB Provider also supports analysis functions such as minimum, maximum, message hit list, etc.

WinCC Cloud Connect, the REST API and the WinCC REST Connector provide you with additional options for exchanging data with other systems via MQTT and REST. Be it for connecting WinCC to a cloud, such as MindSphere, or for communicating with MES/MOM systems such as Opcenter or other IT systems.

Connectivity Station

If no visualization is required at a station, any Windows computer with access to WinCC via OPC and OLE DB can be configured via the Connectivity Station. This permits access to WinCC stations with server packages from a central computer without WinCC installation. The WinCC stations can be accessed via the following interfaces:

- OPC interfaces of the Connectivity Station
- OLE DB interface of the Connectivity Pack

The two access variants are autonomous access options with different ranges of functions.

OPC interfaces of the Connectivity Station

The Connectivity Station provides interfaces via which you can access the following using an OPC client.

- OPC UA (DA, A&C and HDA)
- OPC (DA, A&E and HDA)

WinCC/Connectivity Pack & WinCC Connectivity Station

Ordering data

	Article No.
WinCC/Connectivity Pack & WinCC/Connectivity Station	
V8.0	
Basic packages	
• WinCC/Connectivity Pack V8.0 [1]	**6AV6371-1DR08-0AX0**
• WinCC/Connectivity Station V8.0 [1]	**6AV6371-1DR18-0AX0**
As download	
• WinCC/Connectivity Pack V8.0	**6AV6371-1HR08-0AX0**
• WinCC/Connectivity Station V8.0	**6AV6371-1HR18-0AX0**
V7.5 SP2	
Basic packages	
• WinCC/Connectivity Pack V7.5 SP2 [1]	**6AV6371-1DR07-5AX0**
• WinCC/Connectivity Station V7.5 SP2 [1]	**6AV6371-1DR17-5AX0**
As download	
• WinCC/Connectivity Pack V7.5 SP2	**6AV6371-1HR07-5AX0**
• WinCC/Connectivity Station V7.5 SP2	**6AV6371-1HR17-5AX0**

[1] Upgrades are included in the WinCC Basic Software upgrades

More information

More information is available at
http://www.siemens.com/wincc-connectivity-pack

Overview

WinCC/Event Notifier

- Option for SIMATIC WinCC for notifying selected persons by email in specified time slots
- Notification depends on events occurring in the WinCC Message System
- Escalation levels, i.e. Group 2 is only notified when nobody "on site" or from Group 1 has reacted within a specified time
- Final notification of all persons previously notified in connection with the specific event about the reaction that has taken place

Licenses

- WinCC/Event Notifier comprises engineering and runtime software, with licensing either on the WinCC server or single-user system
- A common "Upgrade for WinCC Calendar options" software package is used to upgrade to a new version.

Benefits

- Simple operation, configuration and planning of notifications thanks to handling like the Microsoft Office Calendar
- Easy configuration of the notifications including support of the WinCC Runtime languages by connecting to the WinCC Message System
- Configuration of recurring events taking account of configurable public holidays, vacation periods, and maintenance periods
- Secure operation of the plant taking account of different authentication levels
- Clear display and intuitive operation at runtime by means of Calendar Control
- Flexible use in all typical WinCC plant configurations single station, client/server, redundant systems, WebNavigator

Function

The WinCC Event Notifier enables the following to be configured in a clear and user-friendly manner via the Calendar Options Editor in the WinCC Explorer:

- The email service for sending and receiving messages
- The messages by selecting configured messages in the WinCC Alarm System as well the setup and contents of the message by selecting the message blocks
- Contacts by selecting predefined persons from the WinCC user administration.

In a calendar it is then possible to select the persons to be notified within the opened time slot from the existing contacts. If several persons or groups of persons are set up for the same time slot, escalation levels can be implemented by assigning different escalation times (= dead time before notification). The period represented by the calendar can be freely selected. Recurring events can be defined as serial events with any desired exceptions.

The calendar can also be integrated as .Net Control in WinCC screens; the appearance of the calendar controls at runtime is configurable. Via the calendar control, you can create time slots during runtime with contacts who should be notified upon occurrence of the configured events in the WinCC Alarm System. In addition, the calendar control allows the creation of new contacts by means of selection from the WinCC user management.

The Event Notifier is easy and intuitive to operate and supports drag & drop during configuration and runtime.

Ordering data

	Article No.
WinCC/Event Notifier	
• For WinCC V8.0	**6AV6372-1DD08-0AX0**
• For WinCC V7.5 SP2	**6AV6372-1DD07-5AX0**
As download	
• For WinCC V8.0	**6AV6372-1HD08-0AX0**
• For WinCC V7.5 SP2	**6AV6372-1HD07-5AX0**
Upgrade	
(joint upgrade package for Calendar Scheduler and Event Notifier)	
• V7.5 -> V8.0	**6AV6372-1DC08-0AX4**
• V7.3/7.4 -> V8.0	**6AV6372-1DC08-0AX3**
• V7.4 -> V7.5 SP2	**6AV6372-1DC07-5AX4**
• V7.2/7.3 -> V7.5 SP2	**6AV6372-1DC07-5AX3**
As download	
• V7.5 -> V8.0	**6AV6372-1KC08-0AX4**
• V7.3/7.4 -> V8.0	**6AV6372-1KC08-0AX3**
• V7.4 -> V7.5 SP2	**6AV6372-1KC07-5AX4**
• V7.2/7.3 -> V7.5 SP2	**6AV6372-1KC07-5AX3**

More information

More information is available at

http://www.siemens.com/wincc-calendar-options

WinCC/Open Development Kit (ODK)

Overview

WinCC/ODK (Open Development Kit)

- WinCC option for utilization of the exposed programming interfaces that can be used to access data and functions of the WinCC configuration and WinCC runtime system
- The interfaces are designed as "C-Application Programming Interface" (C-API)

Licenses

The scope of supply of WinCC/ODK includes many examples and comprehensive documentation.

You can find more information on the Software Update Service, license types, Online Software Delivery and handling your SW licenses with the Automation License Manager at http://www.siemens.com/simatic-licenses

Benefits

- Individual system expansions via an open standard programming language
- Access to data and functions of the WinCC configuration and runtime system
- Development of your own applications and add-ons for the WinCC basic system

Function

API functions are configuration and runtime functions, such as:

- MSRTCreateMsg: Creates a message
- DMGetValue: Determines the value of a tag
- PDLRTSetProp: Sets the object properties in a display

They can be used as follows:

- Within WinCC, e.g. in global scripts or within the scope of C actions in the Graphics Designer
- In Windows applications in the C programming language (the current version of Microsoft Visual C++ is required as a developer's environment for WinCC)

Ordering data

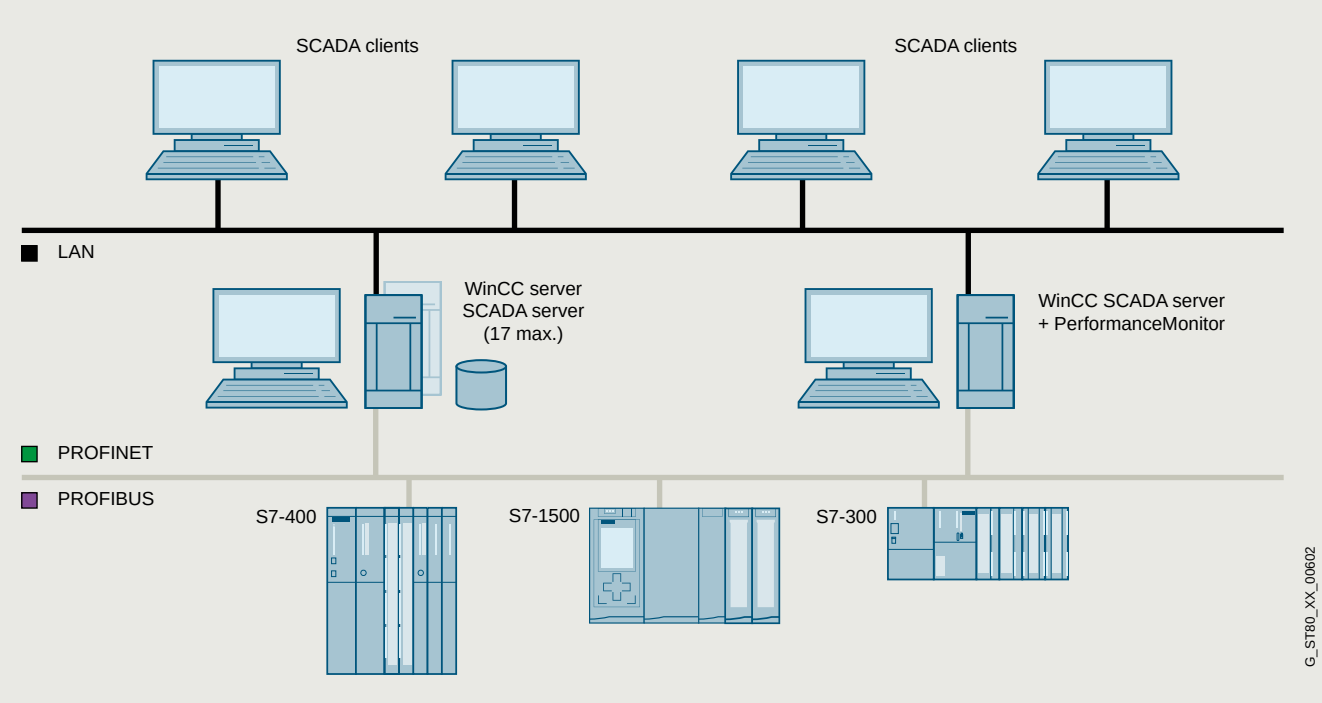
	Article No.
SIMATIC WinCC/ODK	
Open Development Kit, option for SIMATIC WinCC	
• V8.0	**6AV6371-1CC08-0AX0**
• V7.5 SP2	**6AV6371-1CC07-5AX0**
As download	
• V8.0	**6AV6371-1GC08-0AX0**
• V7.5 SP2	**6AV6371-1GC07-5AX0**

More information

More information is available at

http://www.siemens.com/wincc-odk

Overview



WinCC/PerformanceMonitor

WinCC/PerformanceMonitor – Analysis and optimization of production on the basis of individual performance indicators

The WinCC/PerformanceMonitor facilitates flexible calculation and powerful analysis of plant-specific key performance indicators (KPIs). The indicators provide the basis for deriving optimization potential, thus enabling productivity enhancement.

They relate to individual machine groups, plant sections or production lines. The elements to be monitored are designated as equipment. Indicators are calculated based on operands which are derived from already configured WinCC tags.
By combining them with associated values, more accurate production correlations can be highlighted, such as quality/supplier dependencies.
The calculation formulas used are quick and simple to create in WinCC.

Analysis of the indicators and their operands can be carried out in the WinCC system at any time. Indicators, along with their associated values if required, can be clearly displayed in bar graphs, allowing easy comparison. In addition, the input values of each performance indicator can be shown via an integrated analysis function (drill-down). The Gantt chart illustrates the chronological sequence of the operands. The table display lists the archived values, allowing subsequent correction if required. Performance indicators calculated online, either cyclically or triggered by a tag, can be written to WinCC tags for further processing in WinCC, and display in WinCC images, for example.

The PerformanceMonitor can be combined with the WebNavigator for distribution on the Internet, and with the Information Server for reporting purposes. Integration into WinCC ensures fast configuration and complete transparency across all machine and plant data as a basis for optimizing plant productivity.

- The WinCC/PerformanceMonitor can be installed on a WinCC stand-alone system, WinCC server or WinCC client project (WinCC RT Client license), and consists of an engineering client as well as a runtime user interface.
- The WinCC/PerformanceMonitor provides ActiveX control elements for embedding in WinCC images.
  - PerformanceControl: Bar graphs for displaying performance indicators in relation to context values, showing the operands for cause analysis in each case.
  - Gantt chart: Chronological sequence of time-based operands
  - TableControl: Tabular listing of operands with post correction option.
- With the help of the integrated configuration environment, operands are calculated (based on tags) which can be used to calculate key statistics at the set evaluation time.
- For analysis via intranet or Internet, the controls of the WinCC/PerformanceMonitor are available when using the WinCC/WebNavigator.
- The SIMATIC Information Server can be used for generating plant-specific, web-based reports (predefined and expandable).

Licensing

- The basic package comprises a configuration environment, runtime controls (bars, Gantt, tables) and a license for archiving 30 values.
- The logged values (operands, context) form the basis of the analysis. If more values are to be archived, the number of (additive) archive values can be increased in steps of 30, 100, 300 or 1 000 (countable tags).

You can find more information on the Software Update Service, license types, Online Software Delivery and handling your SW licenses with the Automation License Manager at http://www.siemens.com/simatic-licenses

Benefits

Management and quality assurance

Complete transparency throughout the machine park as the basis for optimizing plant productivity.

- Recording of downtimes, localizing causes and reasons for failure times, and monitoring of equipment efficiency.
- Decision making based on performance indicators.
- Global availability of information server reports means they can be used by different user groups.
- Recognition of production correlations by combining associated values with indicators such as material used.

Servicing and maintenance

Support through cyclic and process-event triggered calculation of characteristics:

- Standardization of new plants by defining controller-based status information for key figure calculation
- Individual, targeted analysis using plant-specific performance indicators.
- Weak-point analysis in production processes and recording of undesirable process activities.
- Cause analysis by examining "drill down to operands" calculation basis.
- Identification of the events that lead to cost-intensive failures.

Line management and plant operator

The operator is always kept up-to-date by graphical display of the characteristics.

- Later modification of archived input values.
- Continuous information at the operator interface thanks to integration in the WinCC user interface.
- Alarm messaging of limit violations and trend recording through cyclic calculation of characteristics.
- Integration into the WinCC system means it is not necessary to train operating personnel
- Quick detection of weaknesses in the process using cyclic calculation of characteristics.

WinCC Engineering

- Quick configuration of WinCC operator displays with WinCC and web-based reports from the Information Server.
- Minimal networking overhead by using the WinCC infrastructure in the local network as well as for the Internet.
- Short familiarization times and simple configuration using familiar tools for user interfaces and reports (WinCC, SIMATIC Information Server)
- Minimal configuration overhead due to the type-instance concept
- Minimal administrative overhead by using the WinCC infrastructure in the local network as well as for the Internet.

Highlights

Creation of performance indicators by the WinCC engineer with subsequent utilization by all user groups in the manufacturing company on WinCC stations or Internet clients.

Application

All user groups benefit from the PerformanceMonitor, from the application engineer to management-level evaluators. The engineer can use the application environment integrated in WinCC to derive individual formulas for calculating performance indicators.

Management uses Web-based reporting without the need for installation on standard computers. For maintenance, the web client of the WebNavigator can be used for analysis with the bar (for performance), progression (Gantt) and table controls. Performance indicators can be displayed on local user interfaces using standard WinCC resources to keep machine operators up to date. The service engineer can analyze the plant from his/her workstation using the WinCC Client, the Webclient of the WinCC/WebNavigator, for example. At the management level, it is possible to access Web-based reports without the need for installation on standard computers.

Function

- Structuring of the production plant in equipment units constituting central elements for evaluation
- Use of structured tags in order to facilitate implementation of machine status models
- WinCC tags are compressed to an operand using formulas
- Calculated operands are stored in the archive
- Archived operands are used as input values for calculating performance indicators
- Bar graphs for analyzing performance indicators and root cause determination (drill down)
  Indicator input values (operands) can be displayed if required.
- Tabular presentation of all operands (input values)
- Progression diagrams (Gantt charts) of time-based operands
- Cyclic or event-triggered calculation results are written to WinCC tags
- WinCC Runtime, alarm logging and trend logging can utilize cyclically-calculated values
- Database information and evaluations can be displayed at every WinCC station
- Information server reports can be displayed on independent PC workstations

Ordering data

	Article No.
WinCC/PerformanceMonitor	
WinCC/PerformanceMonitor Basic Package	
Including 30 PerformanceMonitor archive tags	
• WinCC/PerformanceMonitor V8.0	**6AV6372-2DG08-0AA0**
• WinCC/PerformanceMonitor V7.5 SP2	**6AV6372-2DG07-5AA0**
As download	
• WinCC/PerformanceMonitor V8.0	**6AV6372-2HG08-0AA0**
• WinCC/PerformanceMonitor V7.5 SP2	**6AV6372-2HG07-5AA0**
Option for WinCC/PerformanceMonitor V7.5 SP2 and V8.0 Basic package	
• 30 additive PerformanceMonitor archive tags	**6AV6372-2CG20-0BA0**
• 100 additive PerformanceMonitor archive tags	**6AV6372-2CG20-0CA0**
• 300 additive PerformanceMonitor archive tags	**6AV6372-2CG20-0DA0**
• 1 000 additive PerformanceMonitor archive tags	**6AV6372-2CG20-0EA0**
As download	
• 30 additive PerformanceMonitor archive tags	**6AV6372-2JG20-0BA0**
• 100 additive PerformanceMonitor archive tags	**6AV6372-2JG20-0CA0**
• 300 additive PerformanceMonitor archive tags	**6AV6372-2JG20-0DA0**
• 1 000 additive PerformanceMonitor archive tags	**6AV6372-2JG20-0EA0**

	Article No.
WinCC/PerformanceMonitor Upgrade	
V7.5 SP2 to V8.0	
• Standard software	**6AV6372-2DG08-0AX4**
• As download	**6AV6372-2KG08-0AX4**
V7.3/7.4 to V8.0	
• Standard software	**6AV6372-2DG08-0AX3**
• As download	**6AV6372-2KG08-0AX3**
V7.4 to V7.5 SP2	
• Standard software	**6AV6372-2DG07-5AX4**
• As download	**6AV6372-2KG07-5AX4**
V7.2/7.3 to V7.5 SP2	
• Standard software	**6AV6372-2DG07-5AX3**
• As download	**6AV6372-2KG07-5AX3**

More information

More information is available at

http://www.siemens.com/wincc-performancemonitor

WinCC/Redundancy

Overview

WinCC/Redundancy

- Option for SIMATIC WinCC, supporting the parallel operation of two interfaced WinCC single-user systems or process data servers for mutual monitoring
- If one of the two server PCs or one of the two WinCC stations fails, the second one will take over control of the entire system. Once the failed server or station is restored to operation, the process value archives are copied to the restored partner.

Licenses

The WinCC/Redundancy option includes licenses for both redundant servers. A Redundancy license is required on each of the two servers in addition to other necessary licenses.

You can find more information on the Software Update Service, license types, Online Software Delivery and handling your SW licenses with the Automation License Manager at http://www.siemens.com/simatic-licenses

Benefits

- Increased system availability with continuous data integrity
- Automatic changeover of client in the event of failure of a server or failure of the communication to a server
- Continuous operator control and visualization thanks to automatic client changeover to the intact server
- Automatic updating of all archives in the background after rectification of the fault

Function

Normally, two WinCC stations or process data servers run in parallel. Each station has its own process connection and its own data archives. WinCC/Redundancy ensures automatic matching of system and user archive data.

If one of the two server computers or WinCC stations fails, the second will take over the archiving of messages and process data, thereby ensuring seamless data integrity. In client/server mode, the clients are automatically switched from the failed server to the redundant partner. This ensures continuous plant visualization and operation on every operator station.

When the failed partner resumes operation, all process values, messages and data archived during the fail period are automatically matched with the partner. This process runs in the background and does not affect plant continuity. Once this is complete, two equivalent servers/stations will be available again.

Communication with the SIMATIC S7 PLC can also be configured with redundancy (an H Series SIMATIC S7 is required) by plugging in two communication modules and configuring two communication paths (S7-REDCONNECT software package). The use of failsafe H Series SIMATIC S7 PLCs can, if required, further increase availability at control level.

Ordering data

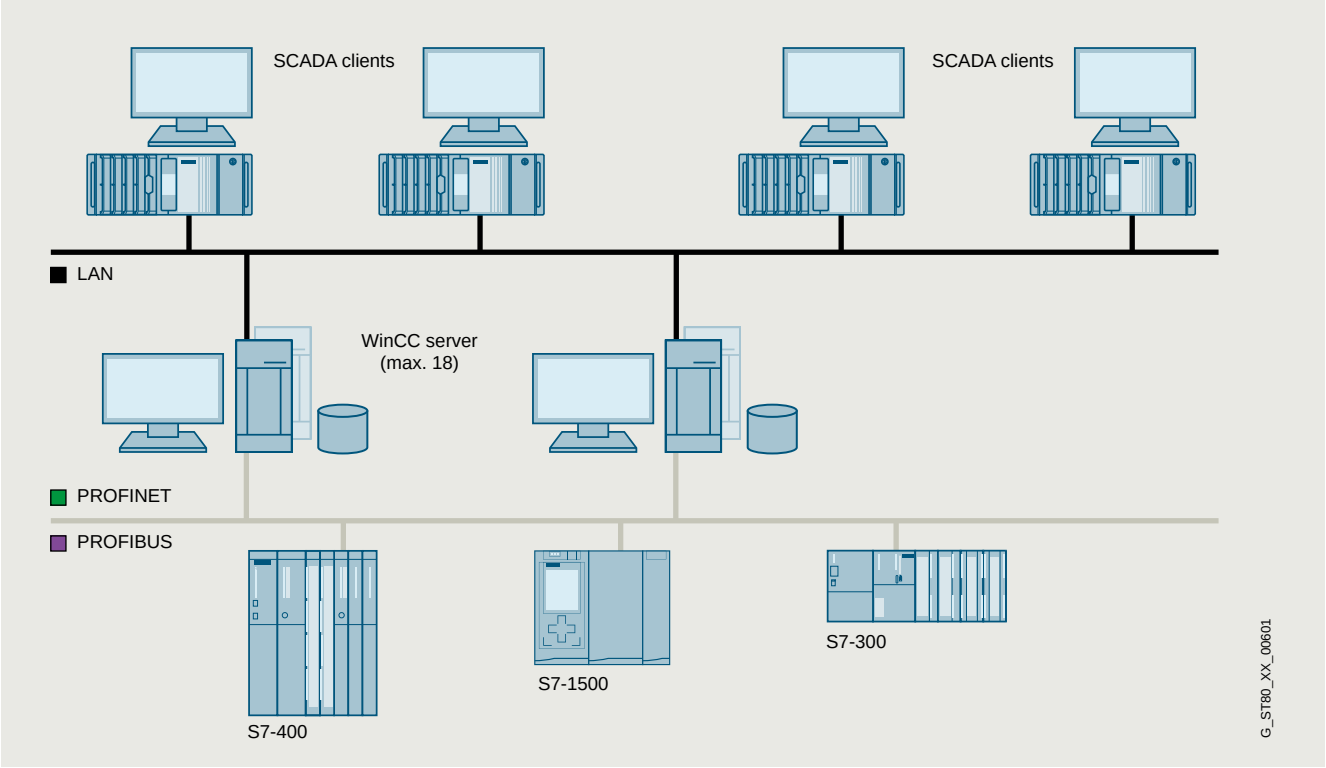
	Article No.
SIMATIC WinCC/Redundancy	
SIMATIC WinCC/Redundancy V8.0	
• Runtime software, single license for 2 installations	**6AV6371-1CF08-0AX0**
• As download, Runtime software, single license for 2 installations	**6AV6371-1HF08-0AX0**
SIMATIC WinCC/Redundancy V7.5 SP2	
• Runtime software, single license for 2 installations	**6AV6371-1CF07-5AX0**
• As download, Runtime software, single license for 2 installations	**6AV6371-1HF07-5AX0**

More information

You can find more information at:

http://www.siemens.com/wincc-redundancy

Overview



SIMATIC WinCC/Server

- Option for SIMATIC WinCC, which permits the configuration of a powerful client/server system.
- A maximum of 3 clients can be connected to non-server operating systems.
- A number of coordinated HMI stations can be operated in a single group with networked automation systems
- Client/server solution:
  - Client without its own project ("UNI-Client"):
    One (redundant) server can supply up to 64 clients with process and archive data, messages, images and reports. The clients act as display and operating stations for the project on the server.
  - Client with its own project ("MULTI-Client"):
    One client can simultaneously access up to 18 (redundant) servers. These servers make the data and images available. This data can be collectively processed and displayed in the client project in order, for example, to implement a system overview across several servers. In this case, one server can supply data to as many as 50 clients.
- Requirement: Network connection (TCP/IP) between the server PC and the connected clients

Licenses

The following licenses are required for configuring a multi-user system:

- WinCC Server license on the server in addition to a WinCC RT license (a server license is required for each server)
- One WinCC RT Client license on each client.

You can find more information on the Software Update Service, license types, Online Software Delivery and handling your SW licenses with the Automation License Manager at http://www.siemens.com/simatic-licenses

WinCC/Server

Benefits

- Plant-wide scalability from the single-user system to the client/server solution
- Significantly higher quantity framework, relieving the individual servers and better performance due to distributing the complete application or tasks over several servers
- Low-cost configuration on the client is possible (the minimum RC license is sufficient)

Application

In a complex plant, WinCC can also be configured as a distributed system according to requirements:

- Functional distribution (e.g. message servers, archive servers, etc.) or
- Distribution according to the physical plant structure (e.g. body-in-white, paintshop, etc.)

Function

Each client can access more than one server at a time. Clients can also be used for configuration on the server.

A configuration of WinCC clients as a central Web server - as a distributed system if required - with an overview of all server projects in the system is also possible.

For WinCC clients, only the smallest runtime license WinCC RT client is required. In order to also facilitate configuration on WinCC clients, the smallest complete license WinCC RC client is required. Remote configuration is possible if WinCC clients without their own project (Uniclients) on the server project are configured. This makes it possible to configure inexpensive operator and configuration stations in a network.

Ordering data

	Article No.
SIMATIC WinCC/Server V8.0	
• Runtime software, single license	**6AV6371-1CA08-0AX0**
• As download, Runtime software, single license	**6AV6371-1HA08-0AX0**
SIMATIC WinCC/Server V7.5 SP2	
• Runtime software, single license	**6AV6371-1CA07-5AX0**
• As download, Runtime software, single license	**6AV6371-1HA07-5AX0**

More information

More information is available at

http://www.siemens.com/wincc-server

Overview

WinCC/UserArchives

- Option for SIMATIC WinCC for managing data records in user archives that contain related data.
- WinCC and its automation partners (e.g. a SIMATIC S7-300/400 controller) write these data records and exchange them if required.

The WinCC/UserArchives option can also be used in the context of the WinCC/WebNavigator (see also WinCC/WebNavigator option).

Licenses

A license is only required for the server (or single-user system).

You can find more information on the Software Update Service, license types, Online Software Delivery and handling your SW licenses with the Automation License Manager at http://www.siemens.com/simatic-licenses

Benefits

- Storing and managing of any user data in data sets
- Flexible display using ActiveX controls
- Simple linking of data set fields to the process via direct tag linking
- Import/export functions for further processing with other tools (e.g. MS Excel)

Function

- Input of parameter sets (e.g. operating parameters of a machine) in WinCC, storage of the sets in the user archive, and forwarding to the automation level
- Continuous acquisition of production parameters by the automation system and forwarding of the parameters to WinCC at the end of the shift
- Acquisition of batch data
- Specification of production parameters
- Management of warehousing data

WinCC user archives are created and assigned data in a user-friendly way using a dedicated editor. Special ActiveX controls are used for displaying data from the user archives at runtime.

Data sets and fields from user archives are linked to the process via direct tag linking.

Import and export functions support read-in/out of data via external applications (e.g. MS Excel). Freely selectable filter criteria allow clear representation of data sets.

WinCC provides functions for free organization of the data storage in the user archives that affect archives, data sets and fields. Archives can thus be generated, opened, closed, or reset, and data sets or field contents can be read, written or overwritten.

Sequence archives can accommodate batch data, shift production data, or also product quality data, and meet legal obligations for verification thanks to gap-free recording.

Ordering data

	Article No.
SIMATIC WinCC/UserArchives	
• Option for SIMATIC WinCC V8.0, Runtime software, single license	**6AV6371-1CB08-0AX0**
• Option for SIMATIC WinCC V7.5 SP2, Runtime software, single license	**6AV6371-1CB07-5AX0**
As download	
• Option for SIMATIC WinCC V8.0, Runtime software, single license	**6AV6371-1HB08-0AX0**
• Option for SIMATIC WinCC V7.5 SP2, Runtime software, single license	**6AV6371-1HB07-5AX0**

More information

More information is available at

http://www.siemens.com/wincc-user-archives

Overview

SIMATIC WinCC Open Architecture

The SCADA System SIMATIC WinCC Open Architecture (WinCC OA) addresses applications with a high demand for customer-specific adaptations, large and/or complex applications, as well as projects that demand special system requirements and functions.

SIMATIC WinCC OA stands for:

- Object orientation supports efficient engineering and flexible plant expansion
- Up to 2 048 servers for distributed systems
- Scalable – from small, single-user systems to networked, redundant high-end systems with more than 10 million PowerTags
- Can be used on any platform, and is available for Windows, Linux, iOS and Android
- Hot standby redundancy and Disaster Recovery system assure maximum fail-safety and availability
- Platform for customized solutions
- Extensive driver and interfacing options:
  S7, S7 PLUS, OPC, OPC UA, Modbus, Rockwell EtherNet/IP, IEC 61850, IEC 60870-5-101/104, DNP3, XML, TCP/IP

Apart from the software, SIMATIC WinCC OA also offers a large spectrum of services and preconfigured supplementary functionalities, such as:

- Single server: products required for operation of a single-user station
- Server: Server Basic Package and expansions with PowerTags (I/Os)
- User interfaces: all available user interface licenses and engineering licenses for one server
- Driver: a wide range of additional connection options for one server
- Add-ons: functional expansions within a WinCC OA Server and supplementary functions based on the server
- IPC Packages: special offers for SIMATIC WinCC OA Servers, purchased together with a SIEMENS PC platform
- Development Packages: special offers for development environments and expansions
- Solution Frameworks: pre-defined projects with pre-implemented functions such as extended maintenance applications, tree views of a plant or simulation options with SIMATIC WinCC OA
- Trade goods: commodities for SIMATIC WinCC OA

SIMATIC WinCC OA IOT Suite

The product spectrum of SIMATIC WinCC OA is extended towards IoT with the SIMATIC WinCC Open Architecture IOT Suite.
This is based on the standard product SIMATIC WinCC OA and comprises two components:

- IOT Box and IOT OPA

SIMATIC WinCC OA Services

SIMATIC WinCC OA offers a multitude of support such as consulting, solution portfolio or special implementations (e.g. driver extensions or creation of new ones), as well as hotline support. A large number of training courses is also offered for the multitude of WinCC Open Architecture possibilities. This offer is rounded out with travel expense flat rates to ensure the deployment of our employees on site.

End User License Agreement

The current End User License Agreement (EULA) can be found at https://www.winccoa.com/downloads/detail/eula-end-user-license-agreement.html

Product warranty

During the 12-month warranty period, faults will be corrected at ETM's discretion either by a workaround, a patch or a new WinCC OA version. For resolved defects, the warranty is extended by max. 3 months for the corrected area in WinCC OA (starting from the availability of the patch correcting the fault). An upgrade to the latest WinCC OA version is not part of the product warranty!

Definitions:

- "Update" means a modification or expansion of the current software release, including additional functionalities
- "Upgrade" means replacing the current software version with the next higher version.

Overview

SIMATIC WinCC Open Architecture

SIMATIC WinCC Open Architecture (OA) is a SCADA system for visualizing and operating processes, production flows, machines and plants in all industrial sectors.

SIMATIC WinCC OA is built consistently on object-oriented structures. Due to this consistent and well-considered use of object-oriented structures, from process images to the database, the engineering costs improve for SIMATIC WinCC OA customers.

Distributed systems enable the connection of up to 2 048 autonomous SIMATIC WinCC Open Architecture systems via a single network. Each subsystem can be configured either as single-user or multi-user system, each of which may be redundant or non-redundant.

Current version:
SIMATIC WinCC Open Architecture

New in Version 3.19:

- Optimized offer for easier ordering and license handling
- Fulfilling of security requirements for upcoming directives such as NIS 2 and Cyber Resilience Act
- Support of Node.js as an additional scripting language
- Improved web visualization thanks to new widgets
- Drivers:
  - OPC UA – complete handling of associated values
  - Data exchange with WinCC Unified based on OPC UA
  - BACnet support for Advanced Workstation Profile (AWS)
  - Certified support for BACnet Secure Connections
  - Improved driver diagnostics
- Archiving
  - Postgres as a standard archiving solution
  - Data importer for legacy to NGA conversion
- Other
  - Docker & Cloud & Edge support (full support with subsequent patches)
  - Facilitated license management directly in WinCC OA

Supported platforms:

- Windows 2022 Server
- Windows 10 LTSC 2021
- Windows 11 CB Version
- Red Hat Enterprise Linux 9
- Oracle Linux 9
- SIEMENS Industrial OS 3.0
- Docker - Debian 11
- VMware Cluster (HA) ESXi

You can find the supported platforms for older versions in the https://www.winccoa.com/knowledge-base.html of the WinCC OA Portal.

Note:

Native 64-bit support.

Software services:

Four types of software services are available. They are ordered for each WinCC OA software component.

Software service	Short description	Available service periods	Renewable
POS	Patch Only Service	1 year	Yes
SUS	Software Update Service	1 year	Yes
SMS	Software Maintenance Service	1 year	Yes
UPG	One Upgrade	n/a	No

An exact description of the respective options can be found under **More information**.

Benefits

Efficient engineering and flexible plant expansion

- Object orientation
- Unlimited number of data points
- Mass engineering
- Multi-language with UTF-8 support

Object-oriented data model

- Mapping of setpoint and measured values for a physical plant object onto a structured data point
- Data point comprises a tree structure with data point elements
- The individual process values are mapped onto the data point elements
- Any number of data points can be instanced from one defined data point structure (data point type), e.g. 20 pumps of the same type.
- Data point types can be embedded in other data point types, which enables more complex plant objects to be generated (e.g. one pump station comprises 2 pumps).
- Graphical plant symbols can be linked with a data point type. They only need to be drawn once, but can be used for all instances of the linked type.
- Savings in engineering outlay.

Freely scalable

- From a small single-user system up to a networked, redundant high-end system
- Distributed systems of up to 2 048 servers

Platform-independent

- Available for Windows, Linux, iOS and Android

Native 64-bit support

- More system memory is usable due to native 64-bit support
- This means that larger data quantity structures per server can be processed

Maximum fail-safety and availability

- Hot standby redundancy
- Disaster Recovery System (2x2 redundancy)
- IEC 61508 SIL 3 certified
- Certifications for PROFIsafe and PROFINET
- Certifications according to 62443 4-1 and IEC 62443 4-2

Quick and easy implementation of new processes

- Platform for customized solutions
  - Graphical user interfaces and wizards facilitate the creation of visualization interfaces
  - Installation of existing object libraries and rapid adaptation to customer requirements
  - Easy creation of new processes via NodeRED connection
- Swift adaptation of plant control and visualization to current market requirements
- Company-internal programming and in-house developments enable independence and protection of intellectual property
- Structure of standardized solutions permits continuous use
- Support of brand labeling
- Individual brand names for OEM developments
- Remote operator stations and mobile operability
  - Desktop UI
  - Mobile UI
  - ULC UX
  - Web Dashboard

Openness thanks to comprehensive driver and interface options:

- TCP/IP: SIMATIC S7, SIMATIC S7 PLUS, MQTT, PROFINET/PROFISAFE, TLS Gateway, Modbus, Ethernet/IP, SNMP, BACnet, NTCIP, SINUMERIK
- OPC UA: DA, AC, HA (client & server)
- OPC: DA, AE, HDA (client & server)
- Telecontrol drivers: SSI, IEC 60870-5-101, -104, DNP3, SINAUT, IEC 61850/61400, RK512
- API

Seamless traceability of system states by means of high-performance archiving:

- Data archiving in value archives (internal database format)
- Data archiving in external databases:
  - Use of Oracle databases
  - Open databases that support time series (e.g. InfluxDB)
  - Databases with SQL-like query mechanisms
  - Use of archived data for reports and trends
  - Storage of archived data locally or centrally – optionally both

Extendable by means of Add-ons and Solution Frameworks:

- Add-on for integration of video management systems (VIDEO)
- Add-on for increasing availability (Redundancy in Hot Standby, Disaster Recovery System, etc.)
- Add-on for clarity in distributed systems (Plant Model overview, CNS, GIS Viewer, etc.)
- Add-on for efficient building automation technology (BACnet)

Application

The SCADA System SIMATIC WinCC Open Architecture addresses applications with a high demand for customer-specific adaptations, large and/or complex applications, as well as projects that demand special system requirements and functions.

SIMATIC WinCC Open Architecture demonstrates its high performance in networked and redundant high-end control systems in particular. Integrated, high-performance communication is guaranteed from the field level to the control station, from the machine to the company headquarters. In every situation, high availability, reliable information, fast interaction, and user friendliness are guaranteed. Applications can also be changed without interrupting the process. Profitability, efficiency and safety are therefore always in equilibrium.

SIMATIC WinCC Open Architecture displays its reliability in a wide range of business-critical applications.

With SIMATIC WinCC Open Architecture, ideas can be quickly and easily converted into new applications. SIMATIC WinCC Open Architecture is open for independent in-house developments and also enables own product branding.

Thanks to its special system properties, SIMATIC WinCC Open Architecture meets the highest demands especially in the case of traffic solutions, building management systems and supply systems (power, telecommunication networks, water, oil and gas, etc.).

Design

SIMATIC WinCC Open Architecture is available as a single-user station Runtime license, multi-user Runtime license, web client license, and parameterization and development license.

With SIMATIC WinCC Open Architecture, one of the factors for determining the required license is the number of inputs and outputs (I/O), referred to as PowerTags hereafter, to be processed.

WinCC OA PowerTag licensing

In the context of WinCC OA, a PowerTag is a data point element (DPE):

- 1) For which data is either sent or received via a driver (e.g. S7 driver reads data from a PLC)
- 2) That originates from a different WinCC OA Server (distributed systems)
- 3) Whose data is exchanged with other software (third-party systems)
- 4) The number of internal data point elements (without external communication) is not limited

Notes on the PowerTag definition:

This definition is the generally valid definition of PowerTag licensing of WinCC OA systems.
The total number of calculated PowerTags must be rounded up to the next higher PowerTag license scale.

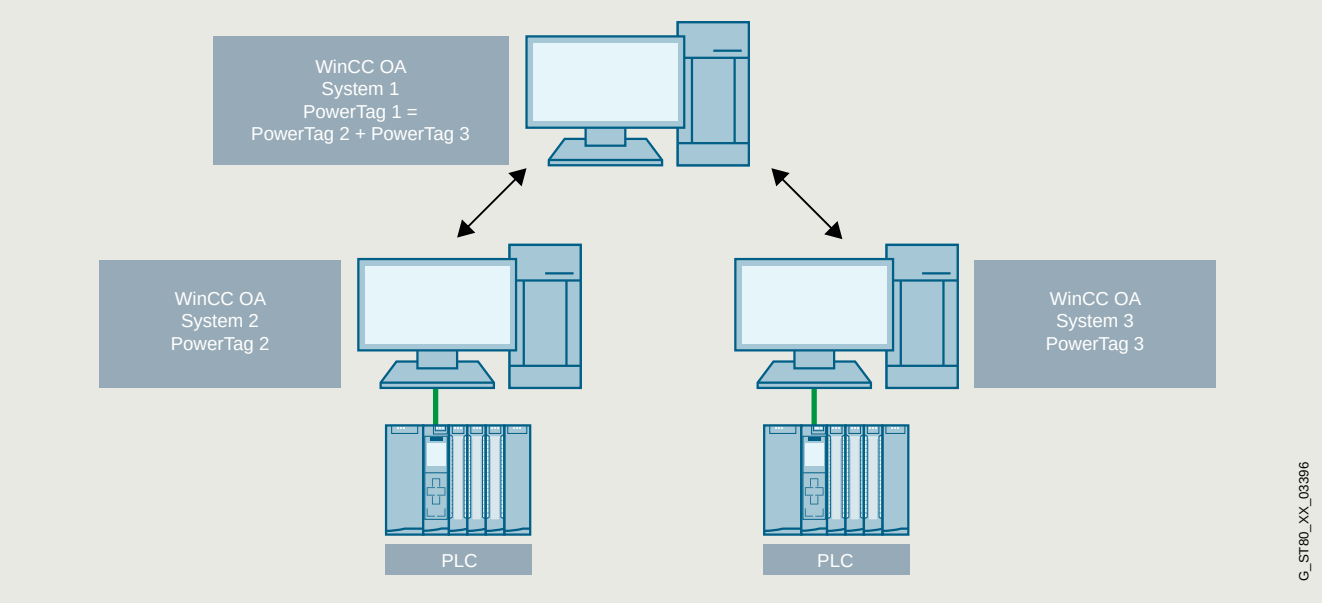
About 1): Data that is communicated via a driver can be determined based on the number of WinCC OA I/O address configs.

About 2): A hierarchically distributed system (i.e. a system that sees its own data and the data of the lower-system systems, but the lower-level systems only see their own data - see OneWay Dist) requires the total number of all licensed PowerTags of the lower-level systems plus the directly connected PowerTags. The license must be rounded up to the next higher license scale.

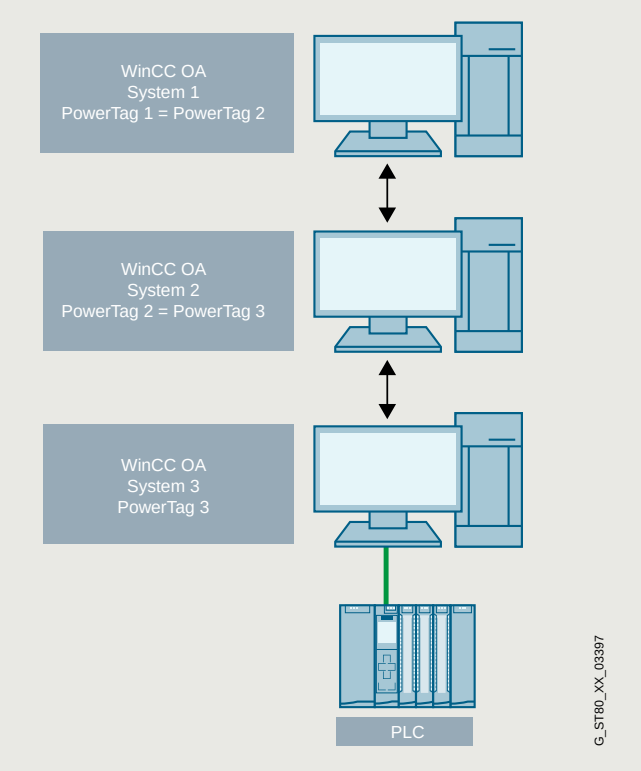
About 3): For the connection to external systems, all data point elements that contain data to be sent or received are counted.

About 4): The exchange of internal data point elements between WinCC systems is not counted as PowerTags. This means that all other data point elements (without I/O address config and not exchanged with external systems) are not counted as PowerTags.

Design



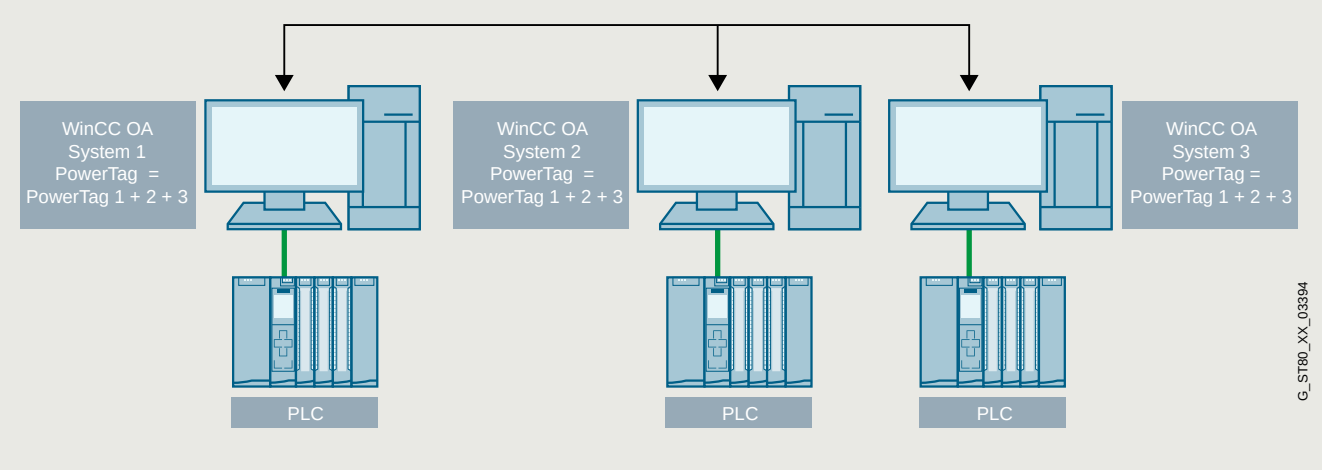
WinCC OA hierarchical system example 1



WinCC OA hierarchical system example 2

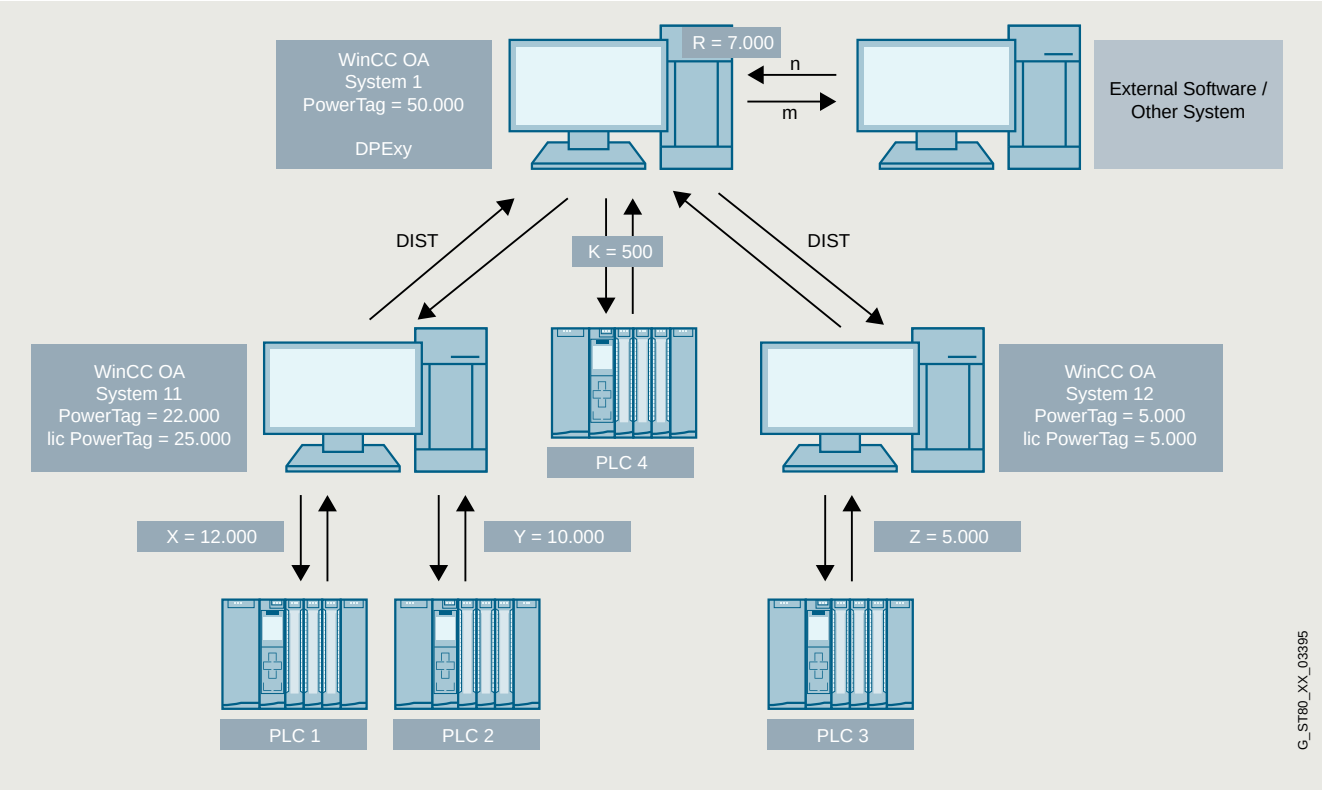
Design

With a distributed system on the same level, the PowerTags of all connected systems are added up and the next higher license scale is rounded up (this means that all systems have the same number of PowerTags for licensing).



WinCC OA example of a distributed system on the same level

To aid understanding, an example of a typical hierarchically distributed system is outlined below, consisting of 3 WinCC OA systems, a number of PLCs and an external system.



WinCC OA example of licensing in a hierarchically distributed system

Design

Number of PowerTags of system 1:

- R = n + m ...Data from external software/other system
- K = PowerTags of PLC4
- System 1 = lic PowerTagsSystem11 + lic PowerTagsSystem12 + K + R
- System 1 = 25 000 + 5 000 + 500 + 7 000 = 37 500
- License is adapted to the next higher PowerTag package
- System 1 licenses = 50 000 PowerTags

Number of PowerTags of system 11:

- X = PowerTags of PLC 1
- X = PowerTags of PLC 2
- System 11 = X + Y
- System 11 = 12 000 + 10 000 = 22 000
- License is adapted to the next higher PowerTag package
- System 11 licenses = 25 000 PowerTags

Number of PowerTags of system 12:

- Z = PowerTags of PLC 3
- System 12 = Z = 5 000
- System 12 licenses = 5 000 PowerTags

The licenses are available either with an unlimited number of PowerTags or with graded limitations of 500 to 250 000 PowerTags.

BACnet object licensing

BACnet objects are extensions of WinCC OA servers by a defined number of BACnet objects.
As a prerequisite, the server must contain a WinCC OA – BACnet license in order to be extended with BACnet objects.

WinCC OA regards a BACnet object as an object communicated by the BACnet driver, whose content is exchanged either via the BACnet driver or with other WinCC OA servers (distributed systems).
For a redundant server configuration, both WinCC OA Server licenses must be extended to the same number of BACnet objects. A BACnet object extension can only be ordered within the same WinCC OA version. The packages on a server are counted cumulatively and can be extended at a later point in time.
A single BACnet object package cannot be divided among several servers for licensing reasons.

BACnet Pack

BACnet Packs are another possibility to increase the BACnet objects of a WinCC OA Server. Purchasing a BACnet Pack, however, only increases the system to the next higher number of BACnet objects. In this way, systems that are too small can be extended quickly and economically.
Example: A server with 1k BACnet objects was purchased, but it turns out that 5k are needed.
The customer can then purchase a 1k/3k BACnet Pack and a 3k/5k BACnet Pack in addition.
For a redundant server configuration, both WinCC OA Server licenses must be extended to the same number of BACnet objects.
Therefore, both servers need the same BACnet Pack extensions.

Multi-user systems

The multi-user runtime license allows working simultaneously on different PCs, with the licensing taking place via the server. The active clients are counted in this case. Clients that can be installed natively as well as web-based user interfaces in common web browsers allow visualization and operation of plant screens via an encrypted HTTP connection between the server and the respective client.

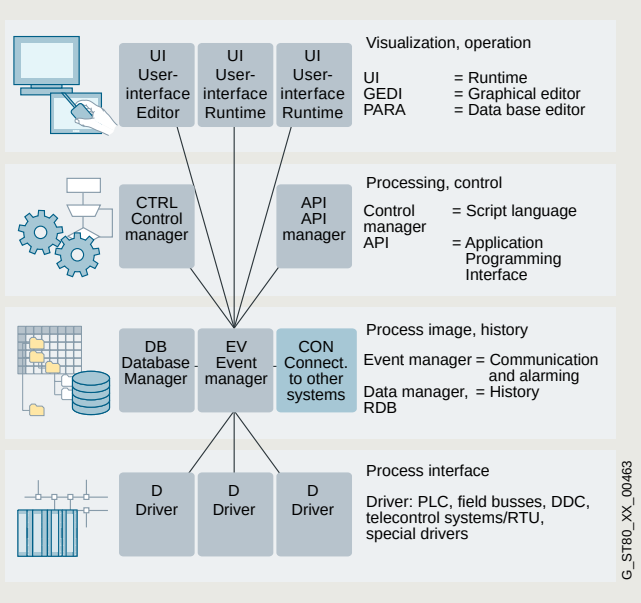
The parameterization and development licenses extend a runtime license with the option of configuration and parameterization. They each require a server license.

Function

SIMATIC WinCC Open Architecture is a very modular SCADA system. The required functionalities are realized by specific, functional entities created for various tasks. In SIMATIC WinCC Open Architecture, these units are called "Managers" – they are also independent processes in software terms.

WinCC OA Manager	Task
Event Manager (EV)	The Event Manager (EV) is the processing center in WinCC OA. This unit provides a constantly updated image of all process tags in the memory. Every other functional unit (Manager) that wants to access the data receives it from the process image of the Event Manager and does not have to communicate directly with a PLC. Conversely, a command from an operator station is initially set only as a value change in the process image of the Event Manager. The associated driver then forwards it to the corresponding target device (e.g. PLC) automatically. The Event Manager is a kind of central data distributor, in effect the communication center for WinCC OA. Furthermore, this Manager also carries out the alarm handling and can execute various arithmetic functions autonomously.
Driver Manager (D)	The lowest level in a WinCC OA System is represented by the process connections, referred to in WinCC OA as drivers (D). These are special programs that handle the communication with the control and field level. Since numerous different forms of communication are possible with the PLCs or telecontrol nodes, there are different drivers that can be selected. In very simple terms, the driver is a unit for converting a particular protocol into the internal communication form of WinCC OA. The driver reads the current states, measured values or counter values from the field and, in the opposite direction, it forwards commands and setpoints to the lower-level PLCs (= the term "PLC" should be used here and below to represent all possible devices of the basic automation (PLC, DDC, telecontrol system, etc.)).
Data Manager (DB)	The Data Manager (DB) represents the link to the database. On one hand, it involves the parameterization data of an application that is to be stored in such a database. On the other hand, it involves the historical recording of changes in values or alarms. If a user wishes to query historical data at a later date, then the Data Manager completes this request and not the database itself.
Control Manager (CTRL)	WinCC OA has numerous options for implementing your own algorithms and processing. The two most important are the internal language Control (CTRL) and the general application programming interface (API). Control is an extremely powerful scripting language. The processing is interpretative, so that no compilation is required. The syntax is almost identical with ANSI-C, with some modifications for simplification. This is a fully developed, procedural high-level language with multi-threading (= quasi-parallel processing of individual programs; the system itself carries out the processing check). The language offers a comprehensive function library for tasks of the control and visualization technology. Control can be used as a stand-alone process (Control Manager), for animation and user interface design or for standardized, data object-oriented processing functions. The API (WinCC OA API) represents the most powerful form of functional extension. It is configured as a C++ class library and allows the software developer to implement individual functions as an independent, additional manager (forecast system, simulation, tools, proprietary databases, etc.).
User Interface Manager (UI)	The interface to the user is created by the User Interface Manager (UI). This is a graphical editor (GEDI), a database editor (PARA) or the general user interface of the application (Vision module). The user interface serves to display values, issue commands or track alarms in the alarm list. Trends and reports are also usually part of the UI. From a programming viewpoint, the user interaction in WinCC OA is completely isolated from the background processing – it is merely a view of the data of the current process image or the history.

Function



A WinCC OA System consists of function-specific units, the managers.

More managers are available for special tasks such as redundancy, management for distributed systems, web server, reporting, simulation, COM etc.

The powerful configuration functions contribute to reducing the engineering and training requirements and lead to increased flexibility and operational reliability.

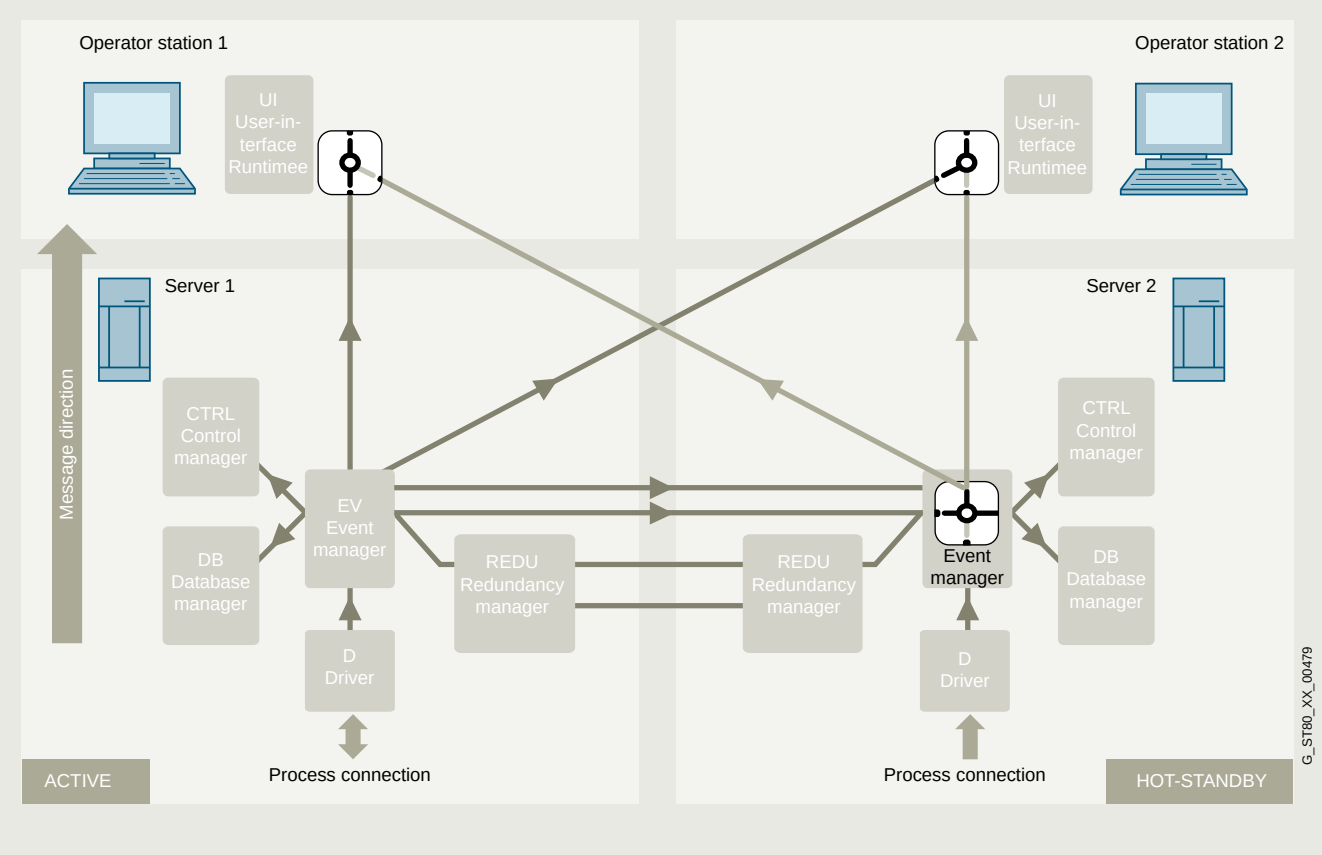
Additional functions	Task
Access to external databases	The database interfaces offer the possibility of access to external databases. Under Windows, the link is established via the ADO Standard. ADO (ActiveX Data Objects) is an interface developed by Microsoft for vendor-independent access to data sources of all types, primarily databases. The data source for ADO is an OLE DB Provider, although ODBC-compatible databases can also be addressed via an internal wrapper. In Linux, the Qt library is used as an interface to relational databases. Access in this case is either direct via the native DB-API or via ODBC. Additional interfaces such as RDB to Oracle or the new archiving interface to open databases such as InfluxDB support the connection of external, also freely available (open source) databases for optimal archiving and protection of the stored data.
API (Application Programming Interface)	The API offers a series of functions that enable WinCC OA to be extended with special managers. A manager is a program that communicates with the system via a protocol defined by WinCC OA.
COM (Component Object Model)	This is a specification for the development of modular software components that can be used by each COM-compatible application. COM components can easily be integrated into such applications and can even be removed from an application during runtime. COM components can be programmed in a host of different languages, although C++ is usually used for this purpose. The specifications OLE, ActiveX and DirectX are based on the COM technology.

Function

Additional functions	Task
Control extension	Extension that allows C++ functions to be added to the programming language. Realization via API
Panel topology/ summation signal	Generation of panel hierarchies/topologies in existing or new projects and automatic creation of summation signals of the alarm data points that are located in the Panels of the topology.
Encryption of Panels and CTRL scripts/libraries	Allows your Panels or scripts to be encrypted, thereby protecting your knowledge and work.
Script Wizard	Easy-to-use tool that simplifies the creation of animated, graphical plant symbols, which saves time during engineering. It offers a large number of animation types and functional elements.
Simple Symbols	Basic Package of plant symbols, which were created with the Script Wizard and can be mapped directly to data point elements. These can be adapted quickly and easily to the specific requirements of the customer.
Easy Faceplates	Simple parameter assignment of predefined pop-up windows that display details of the associated plant symbol. Without any additional drawing outlay, several standard functions per object can be activated for the detail view (alarm display, trend display, measured value table, setpoint value table, address table, notes).
Drag and Draw	Several representative graphical objects can be defined and configured for each plant object in the data model (data point type). These are pre-configured and need only be moved to the panel via drag-and-drop when the plant pictures are drawn. This saves valuable time during engineering.

Additional functions	Task
NodeRED interface	With a new communication interface, WinCC OA supports the integration of NodeRED via a secure web socket server. The graphical editor can be used for easier process mapping and creation on a graphical interface. Pre-defined process chains can be created and modified as easily as on the drawing board. WinCC OA offers its own communication node package, and its own processes created using Node.js can also be integrated.
Multilingual capability	Thanks to the UTF-8 format as the standard for written languages it's possible to use almost all fonts and characters in projects. You can choose from 72 language options. User rights enable the definition of a standard language. In addition it is easy to change the display language during operation. Dictionaries can be made with a special tool or according to individual requirements.
Server-side authentication	The verification of logon data on the server side enables connection of third-party systems including the customer's own solutions for user authentication.
Distributed systems	Permits the coupling of two or more autonomous WinCC OA Systems via a network. Each sub-system of a distributed system can be configured either as a single-user or multi-user system, each of which may be redundant or non-redundant. A sub-system in this context means a server on which an Event Manager is running, whereby in case of redundancy both redundantly operating servers are considered as one system. All process data is mapped to local data points and each system can process data from other systems.
Redundancy (see figure below)	The failure safety in a redundant system is implemented by means of hot standby. Hot standby is a hardware-independent solution for high availability. This is a safety concept that consists of two interconnected server systems. Both servers are constantly in operation and are subject to the same functional loading (but only one server is ever active; the second synchronizes the data with the primary unit during runtime). On the failure of one unit, an "on-the-fly changeover" takes place and the previously passive server assumes the leading role. This guarantees access to data or functions at all times.

Function



The figure shows a detailed representation of the two computers: Server 1 and Server 2. Server 1 is in management mode (active) and Server 2 is in hot standby mode (passive).

In the case of redundant operation, the UIs of both operator stations are connected to both Event Managers, however only the data of the active system is displayed on both UIs.

The Event Manager of the passive system is restricted exclusively to communication with the Event Manager of the active system for synchronization of the process data (it sends no data to the connected UIs or it discards messages from the drivers – this can be seen in the figure with the switches on the UIs or on the passive Event Manager).

Integration

Integration in automation solutions

SIMATIC WinCC Open Architecture is an open SCADA system with comprehensive drivers and flexible options for connection to other external systems.

Depending on the communications protocol and the bus hardware used, specific drivers are used in each case:

- Serial protocols: RK512, 3964R, etc.
- Ethernet: Industrial Ethernet (S7, S7 PLUS), Modbus TCP (OpenModbus), Ethernet IP (AB), etc.
- Telecontrol systems: SINAUT, SSI (Ethernet), IEC 61850/61400, IEC 60870-5-101, IEC 60870-5-104, etc.
- Vendor-independent interfaces: OPC UA, etc.
- Cloud connections: SIEMENS MindSphere Connector, MQTT, AWS, Azure

In SIMATIC WinCC Open Architecture, several drivers can be operated in parallel. These can be of the same type or also of different types. It is possible in a SIMATIC WinCC Open Architecture system, for example, to establish connections via the S7 protocol to a SIMATIC Controller, via IEC 60870-5-104 to a telecontrol system, and via OPC DA to any OPC Server at the same time.

Connection overview

Protocol	Description
BACnet over IP – driver	BACnet (Building Automation and Control Networks) is a standardized protocol for building automation and has been set by the ASHRAE (American Society of Heating, Refrigerating and Air-conditioning Engineers) as a guideline to provide a uniform and cross-company standard for data communication within and between building automation systems. The BACnet Standard 2004 is supported in accordance with the PIC list (see product documentation)
DNP3	The DNP3 (Distributed Network Protocol 3) driver is an open, rugged and modern protocol which exhibits characteristics and strengths similar to the IEC driver. The transfer of any number of frames with different data types takes place between the WinCC OA System (Master) and the remote stations (Slave).
Ethernet/IP	Ethernet/IP is used for communication with several PLC generations and families from Rockwell Automation / Allen Bradley. The protocol is part of the application layer and is based on the standard TCP/IP network protocol.
IEC 60870-5-101, -104	IEC drivers are standardized telecontrol drivers that can process proprietary frames. IEC stands for International Electrotechnical Commission, the international standardization committee for electrical engineering. • IEC 60870-5-104 for data exchange via TCP/IP • IEC 60870-5-101 for serial connection
IEC 61850/61400	IEC 61850 and IEC 61400 Client defines an architecture for satisfying the requirements of electrical station automation. It defines a data model and the communication services for interaction with and between the elements of a substation, such as power supply units, circuit breakers, protective devices etc. A description language and a system configuration language (SCL) have been defined for technical purposes.
Modbus TCP	Modbus/TCP is based on the serial Modbus protocol, which was adapted for TCP/IP. The Modbus/TCP driver can be used simultaneously for Modbus/TCP or UNICOS.
MQTT	The driver and publisher enable communication via the MQTT protocol, both northbound and southbound, at high data throughput (no MQTT broker included)
NTCIP	The NTCIP driver enables an integrative connection of variable message signs directly in WinCC OA.
OPC Client (Data Access)	• Compatibility with specifications DA 1.0 and 2.05a • Connection to inproc, local or remote server • Connection with up to 20 servers at the same time • Monitoring of the connection to the server and automatic reconnection if the connection is interrupted. • Address browsing if supported by the server. • Benefits of the CALL-R functionality for CALL-R servers (simplified parameter assignment)
OPC Server (Data Access)	• Corresponds to Data Access 2.05a specification (reading/writing of online values). • Is to be started as a manager just like other drivers. • The provided DPEs (server -> client) can be easily and quickly defined via data point groups. • DPEs can be declared as readable (read-only access is permitted; Group OPCRead) or as writable items (Group OPCWrite). • Clients can browse the WinCC OA OPC Server hierarchically.
OPC Alarms & Events	OPC Alarms & Events (abbreviated to OPC A&E) is, in addition to Data Access, a further standard for performing central alarm management on a cross-vendor basis. OPC A&E is used to ensure the link to other control systems and the display of alarms/events in a hierarchical system.
OPC Historical Data Access	OPC Historical Data Access (OPC HDA) is used to exchange archived process data. This is in contrast to the OPC Data Access (OPC DA) specification that deals with real-time data.
OPC UA (Unified Architecture)	WinCC OA supports the OPC UA Data Access (DA), Alarms & Conditions (AC) and Historical Access (HA) standards.
Serial: RK512/3964R	Is used for interfacing a PLC via the 3964R/RK512 protocol
S7 TCP/IP	TCP/IP driver for Siemens Industrial Ethernet
S7 PLUS	Drivers for S7 1200 and 1500; Supports alarm messages, online browsing, TIA importer for versions V13, V14 and V15

Integration

Protocol	Description
SSI	Is used for the interfacing of SAT telecontrol systems. The data is exchanged via the LAN (Ethernet, IEEE 802.3); the frame formats used are the SSI formats defined by SAT. The SK 1703 telecontrol components with a suitable communication card (KE/ET) are supported.
SINAUT	SINAUT (Siemens Network AUTomation) is a communication protocol for automated monitoring and control of remote process stations on the basis of SIMATIC S7. Communication takes place via TCP/IP.
SNMP Manager & Agent	SNMP (Simple Network Management Protocol) is a protocol for monitoring network elements (servers, workstations, routers, switches, hubs, etc.) and their functions. • SNMP Manager supports SNMP V1, V2, and V3 • SNMP Agent supports SNMP V1 and V2
S-Bus	The WinCC OA S-Bus driver is used to link SAIA PCD control devices to WinCC OA projects. Client mode of the SAIA S-Bus driver is used. Communication takes place over UDP; the serial version of the protocol is not supported.

Further drivers on request or via C++ API

Technical specifications

Type	SIMATIC WinCC Open Architecture V3.19
Operating system	• Windows 2019 Server • Windows 2022 Server • Windows 10 CB Version 21H2 • Windows 10 LTSC 2021 • Windows 11 • Red Hat Enterprise Linux 9 • Oracle Linux 9 • SIEMENS Industrial OS 3.3 • Docker - Debian 11 • VMware ESXi 7 • vSphere HA Cluster • ITC V3
Mobile operating system	• Android 6 and higher • iOS 13 and higher
Supported browsers	• Are updated continuously, see software requirements in the online documentation
Supported databases	• Oracle Client version: 19c • Oracle Server version: 19c • InfluxDBv1.8 • PostgreSQL V13
PC hardware requirements[1)]	
Processor type	Intel Pentium or equivalent
Minimum	Intel Pentium IV 1.6 GHz (or better) [2)3)]
Recommended	• Client: Intel Pentium IV/Core2/i3, 2 GHz [2)3)] • Server: Intel Core i3 CPU Dual, 3 GHz [2)] • Server large system[4)]: Intel(R) Core(TM) i5/i7 CPU Dual / Quad, 3 GHz [2)3)]
Work memory RAM	
Minimum	2 GB [2)]
Recommended	• Client: 2 GB [2)3)] • Server: 8 GB [2)3)] • Server large system: 16 GB [2)]
Hard disk (available memory for installation)	
Minimum	HD with 800 MB available [2)]
Recommended	Server large system with local logging: SCSI LVD Controller, WIDE SCSI / LVD HDD or comparable storage system with at least 500 MB of available space [2)]
Screen and graphics card (TrueColor)	
Minimum	1024 x 768 [2)]
Recommended	1280 x 1024 [2)]
Mouse and keyboard	Mouse, keyboard
DVD drive	Possible for software installation, also via web installation or USB flash drive
Local power user rights	• For installation • For operation

1) For actual use in plants, the hardware requirements are largely dependent on the project size and the dynamic response of the process variables. Use the most rugged, high-quality hardware possible with corresponding functionalities such as redundant power supply units or RAID or SSD hard disks. WinCC OA supports dual and multi-processor mode and benefits significantly from the fact that each WinCC OA Manager can be assigned to one processor core as a system process. At the same time, however, it is important that the individual cores offer the highest possible performance (high clocking), since load-critical core processes such as the event manager run on exactly one core (for this reason, multi-core machines with many low-clocked cores are unsuitable for WinCC OA). As for RAM, CPU and HDD, the usual rule applies: more is better

2) System requirements generally only refer to the latest WinCC OA Version under the supported versions of the Windows and Linux operating systems.

3) A precondition for the minimum requirement is that the operating system used does not have any greater requirements itself

4) With a large system it is essential that the system permits not only the highest data point numbers but also a high dynamic response.

Technical specifications

WinCC OA is ideally suited for use in very large distributed systems. The optimum design of such systems demands corresponding system knowledge of WinCC OA. Due to the event-oriented processing, individual design parameters can be increased or reduced as necessary in actual applications.

Type	SIMATIC WinCC Open Architecture
Functionality/quantity structure	
Number of messages	150,000 [2]
Message text (number of characters)	System-limited [1]
Message archive	System-limited [1]
Process values per message	1 process value + up to 32 alarm associated values per message
Continuous load of messages, max.	500/s [2]
Message burst, max.	15,000/10 s every 5 min [2]
Archives	
Archive data points	Max. 250,000 per server [2]
Archive types	< 20 parallel archives, different retention period for each archive
Data storage format	Oracle, InfluxDB, MSSQL, Postgre or file system
Measured values per second, max.	Server/single-user station: 12,000/s [2] [3]
User archive	
Archives	System-limited [1]
Type	SIMATIC WinCC Open Architecture
Table size	System-limited by database
Graphics system	
Number of screens	System-limited [1]
Number of objects per screen	System-limited [1]
Number of controllable fields per screen	System-limited [1]
Process tags	< 750,000 per server [2]
User administration	
User accounts	< 4096
Configuration languages	3 (en, de, ru)
Runtime languages	40 (of which 8 Asian)
Multi-user system	
Server	< 2048 [2] [4]
Number of clients	System-limited [2] [5]

1) Dependent on the available storage space

2) Dependent on the system configuration and the system load (due to the event-oriented architecture, the system load is essentially determined by the change rates of the values to be processed)

3) By means of high-performance hardware configuration (one archiving cluster and approx. 120 distributed systems that archive parallel values in the cluster): 200,000 archived value changes per second

4) Physical limit: <2048, in practice systems have already been implemented with up to 550 distributed systems

5) Physical limit: < 255 clients per server, recommended: Max. 100 clients per server

More information

WinCC OA Software Services

Three types of continuous software services are available – POS, SUS and SMS.
In addition, a one-off Software Upgrade (UPG) can also be purchased.
The relevant MLFBs have a specific structure here, as shown in the table below.

License	MLFB
WinCC OA Software license V3.20	6AV6355-1**A**A50-0xxx
WinCC OA One-Time Upgrade (UPG) V3.20	6AV6355-1**C**A50-0xxx
WinCC OA Software Upgrade Service (SUS)	6AV6355-1**D**A00-0xxx
WinCC OA Software Maintenance Service (SMS)	6AV6355-1**F**A00-0xxx
WinCC OA Patch Only Service (POS)	6AV6355-1**G**A00-0xxx

If these standard license services do not meet your specific project requirements, an individual license service contract can be offered.

Please contact your sales representative for this.
To obtain access to ETM Customer Care for product support, you need the license container ID in order to verify the license configuration and determine the active license services.

Overview of software services

After a license is purchased, one of the following service contracts can be entered into during the warranty period (POS/SUS/SMS).
The service period is one year and is automatically extended if it is not terminated in writing by one of the contract partners three months before the end of the contract period. (There may be exceptions for specific regions).
Invoicing for the annual contract takes place at the beginning of the service period.
WinCC OA Software Services can be agreed for the current release and the last two WinCC OA releases.
Software service MLFBs are version-independent and take on the version of the license on import.

Note:

The following applies to all orders: If a type of software service (POS/SUS/SMS/UPG) has been selected, this must be additionally specified for the entire order. A similar software service option must be added for each item in the order.
The license and service MLFB numbers must match exactly; otherwise, it can occur that an update cannot be installed or the license is not functional or only partially functional after an update.
Security patches which resolve security issues published on the Siemens Product CERT can also always be obtained without software service at
https://www.siemens.com/cert/en/cert-security-advisories.htm

Software service during the warranty period

The customer has the right to download software patches for one year after purchase. The right to avail of the Hotline Team does not apply, but faults can be reported via
https://support.industry.siemens.com/My/ww/en/requests#createRequest.

More information

WinCC OA Patch Only Service (POS)

Customers with a valid "Patch Only Service" are authorized to download the latest generally available patches from the WinCC OA Portal/Download area (https://www.winccoa.com) and install them on each server covered by this software service. Switching from a POS to an SUS can be performed by procuring the discounted POS upgrade.
The POS service flat fee is not offset against any other active license services.

WinCC OA Software Upgrade Service (SUS)

The Software Upgrade Service contains all services of the POS as well as:

- Upgrade authorization to available versions of WinCC OA (major release v3.xx).

NOTICE:

The Software Upgrade Service does not include:

- WinCC OA product support by ETM Customer Care
- Individual troubleshooting
- Installation, implementation and activation of upgrades and/or updates

WinCC OA Software Maintenance Service (SMS)

The Software Maintenance Service contains all services of the SUS as well as:

- Individual troubleshooting according to WinCC OA Product Support classification
- 24/7 online submissions of product support requests via Siemens Industry Online Support (https://support.industry.siemens.com/cs/start?lc=en-BG)
- Obtaining more support hours.

You can find details on this in the WinCC OA Support node.
A predefined number of support hours is included depending on the number of licensed PowerTags.

NOTICE:

The Software Maintenance Service does not include:

- Installation, implementation and activation of upgrades and/or updates
- WinCC OA product support of versions that are no longer supported
- Project-specific issues and questions (e.g. relating to engineering). Consulting can be offered in these cases
- Telephone assistance in the development of new WinCC OA Managers with C++ and C#.
- Support, remote or on-site, to reproduce a fault. This can be provided by a WinCC OA Consultant via a separate Consulting agreement.

One-time software version upgrade / One Time Upgrade (UPG)

The One Time Upgrade for plant licenses is calculated based on the current license price of the installed WinCC OA license options and is available for all license options.
Customers who procure a One Time Upgrade have a one-time authorization as of WinCC OA Version 3.13 to upgrade to the latest version and to download patches of this version that are generally available at the time of purchase from the WinCC OA Portal/Download area (https://www.winccoa.com). These can only be installed on servers for which a One Time Upgrade has been purchased.

NOTICE:

WinCC OA Support by ETM customer care supports the current release and the last two WinCC OA releases.
The One Time Upgrade does not include:

- WinCC OA product support by ETM Customer Care
- Individual troubleshooting
- Installation, implementation and activation of updates and/or releases

An SUS or SMS can be ordered for a license upgraded with UPG.

The warranty period of a UPG license is 12 months.

More information is available on the Internet at

http://www.siemens.com/wincc-open-architecture

Overview

A WinCC Open Architecture (WinCC OA) single station or single operator station is a compact WinCC OA server configuration which, in contrast to a regular WinCC OA server license, cannot be extended by additional PowerTags or add-ons. Includes alarm messaging, extended trend, historical recording and SSL encryption.

Benefits

- Common configuration of frequently used services for small solutions
- Easy to order due to bundled product
- Simple basis for standardization through configuration options directly at the station
- Flexible use by offering open, widely used standards such as OPC and OPC UA

Application

For small, compact solutions, the single station configuration offers a quick ordering option without special requirements. Based on customer experience, this bundle was created to provide an optimal, yet open basis for simple, small solutions. This bundle is not intended to be the basis for small stations in a system network, as there are no plans to extend for distributed systems or redundancy. A restriction to certain hardware types is not planned for this bundle. For certain hardware types, "Runtime packages" have therefore been put together, which offer further advantages when using Siemens hardware.

Design

PowerTags

The WinCC OA Single Station contains a maximum of 500 PowerTags. In contrast to Server Basic licenses, however, Single Station licenses **cannot** be extended with additional PowerTag Packages.

UIs

The Single Station includes a Desktop UI license (up to WinCC OA version 3.19) or UI Client license (as of WinCC OA version 3.20) as well as a license for one WinCC OA Operator Device.More information can be found under "WinCC Open Architecture User Interfaces".

Drivers

A Single Station license contains technical licenses for S7 and S7 Plus (8 connections) drivers, as well as one OPC and one OPC UA Client each.More information on drivers can be found under "WinCC Open Architecture Drivers".

Add-ons

Single Stations include an OPC Server and a WinCC OA Web Server**.**More information about the options can be found under "WinCC Open Architecture Add-ons".

WinCC OA Para Single Station

The single station can additionally be extended by a development and parameter assignment license. The WinCC OA – Para Single Stationlicense contains a graphical editor including symbol catalogs, a script development environment and a test framework. An existing WinCC OA Single Station license is required for the purchase. When the PARA Single Station license is procured, the UI contained in the Single Station package can be used either for parameterization or for operator control and display functions, but not for both at the same time. This special PARA license can only be ordered in conjunction with the single-user station package.

Ordering data

Ordering data	Article No.
V3.20	
WinCC OA – Single Station V3.30	
License for single operator station with max. 500 PowerTags (bit, integer)	
• Single Station	**6AV6355-1AA50-0AA0**
• Single Station UPG	**6AV6355-1CA50-0AA0**
WinCC OA – Para Single Station V3.20	
Development and parameter assignment license for WinCC OA – Single Station	
• Para Single Station	**6AV6355-1AA50-0AA1**
• Para Single Station UPG	**6AV6355-1CA50-0AA1**
V3.19	
WinCC OA – Single Station V3.19	
License for single operator station with max. 500 PowerTags (bit, integer)	
• Single Station	**6AV6355-1AA47-7AA0**
• Single Station UPG	**6AV6355-1CA47-7AA0**
WinCC OA – Para Single Station V3.19	
Development and parameter assignment license for WinCC OA – Single Station	
• Para Single Station	**6AV6355-1AA47-7AA1**
• Para Single Station UPG	**6AV6355-1CA47-7AA1**
V3.18	
WinCC OA – Single Station V3.18	
License for single operator station with max. 500 PowerTags (bit, integer)	
• Single Station	**6AV6355-1AA31-8AA0**
• Single Station UPG	**6AV6355-1CA31-8AA0**
WinCC OA – Para Single Station V3.18	
Development and parameter assignment license for WinCC OA – Single Station	
• Para Single Station	**6AV6355-1AA31-8AA1**
• Para Single Station UPG	**6AV6355-1CA31-8AA1**
Software Services - version-independent	
WinCC OA – Single Station	
• Single Station SUS	**6AV6355-1DA00-0AA0**
• Single Station SMS	**6AV6355-1FA00-0AA0**
• Single Station POS	**6AV6355-1GA00-0AA0**
WinCC OA – Para Single Station	
• Para Single Station SUS	**6AV6355-1DA00-0AA1**
• Para Single Station SMS	**6AV6355-1FA00-0AA1**
• Para Single Station POS	**6AV6355-1GA00-0AA1**

More information

More information is available on the internet at

http://www.siemens.com/wincc-open-architecture

WinCC Open Architecture Server

Overview

WinCC Open Architecture Server

A WinCC Open Architecture (WinCC OA) server consists of a WinCC OA Server Basic license, the corresponding number of WinCC OA PowerTag licenses and additional options.

The WinCC OA Server Basic license contains:

- Alarm messaging
- Extended trend
- Historical recordings (NDB and NGA)
- S7 and S7 Plus (8 connections) drivers
- SSL encryption
- OPC Client
- OPC Server
- OPC UA Client
- 1 WinCC OA Web Server
- 1 WinCC OA OPERATOR (1 Device)
- Recipes
- Scheduler
- Maintenance

Other required options can be licensed in addition.
WinCC OA Server can alternatively be built from preconfigured packages. Depending on the package, an extension with additional options may be excluded.

The Server Basic License does not include an external data connection (PowerTags/BACnet objects). These must be purchased for proper operation.
Since version 3.18, dedicated licensing of PowerTag and BACnet objects is required when using the BACnet protocol.

This possibility enables additive ordering of several PowerTag/BACnet object packages on one server or separate ordering and moving of PowerTag/BACnet object packages to different servers by the customer.
PowerTags/BACnet objects can also be increased step by step by means of PowerPacks/BACnetpacks.

Since version 3.20, Recipes, Scheduler and Maintenance are included in the WinCC OA Server Basic license.

Benefits

- Individual adaptation to the needs of the project and the customer through different PowerTag/BACnet object packages
- Customer-oriented options for moving packages as required
- Possibility to let the project grow with the requirements and to quickly extend it
- A basic set of common drivers already included in the Basic Package
- Extension of server packages from single workstations to multi-server architectures

Application

Server packages are the basis of every WinCC OA project. PowerTags correspond to the previously communicated logic of the definition of I/Os where external communication is evaluated. BACnet objects are treated like IOs. Starting from the server package, it must also be considered how the "service" contract and the "redundancy" of the systems are defined.
More information about the maintenance agreement can be found under "Support".

The flexibility of the newly available PowerTag/BACnet object packages as an assignment option for different servers facilitates planning of the overall project as well as customer-oriented design based on need and changes of the packages. This method makes it possible, for example, for customers to order new PowerTag/BACnet object packages and then assign them to the servers in the project.

Due to the different sizes of the packages, there is also the possibility to implement solutions ranging from single-user stations to several 100 servers in a network.
The PowerPacks also offer a more cost-effective way to increase insufficient PowerTag/BACnet object packages. By purchasing such a PowerPack, you can increase the available PowerTags on the server to the next higher package size.

The technical licenses included in the Basic Package can be viewed in detail in the license tool CodeMeter WebAdmin; accordingly, the included features do not need to be ordered separately. These technical licenses are part of the bundle and not individually transferable to other containers.

There are special overall solutions for specific devices – these "IPC Packages" include more services. These cannot be moved and extensions are not possible with these packages. Issuance of these special packages is always combined with the purchase of specific SIEMENS hardware. This is in addition to the license purchase – i.e. as an additional item in an order.

For small, standardized single-user station solutions, a (non-extendable) "Single Station" bundle product is also available, which offers advantages for our customers both in terms of price and simplified ordering.

Design

The WinCC OA Server Basic license includes alarm messaging, extended trend, historical recording and SSL encryption.

Additional services are available as follows:

- UIs
  The WinCC OA Server Basic license includes **one** WinCC OA OPERATOR license; beyond this, no UIs are included and must be ordered separately. More information on this can be found in the <User Interfaces> section.
- Drivers
  A Server Basic license contains technical licenses for S7 and S7 Plus (8 connections) drivers, as well as one OPC and one OPC UA Client each. More information on drivers can be found in the <Drivers> section.
- Add-ons
  WinCC OA Server Basic includes a web server, Maintenance add-on, Recipes, Scheduler.

Options required in addition can also be licensed, if the basic license allows it.

More information on options can be found under <Add-ons>.

PowerTag packages (PowerTags)

PowerTag packages are extensions of WinCC OA Servers by a defined number of PowerTags.
In the context of WinCC OA, a PowerTag is a data point element (DPE), the content of which is exchanged either via drivers (e.g. S7 Driver communicates with a PLC), with other WinCC OA Servers (distributed systems) or with other software systems. Internal data point elements, i.e. DPEs without communication to the outside, are not counted for the licensing.

For a redundant server configuration, both WinCC OA Server licenses must be extended to the same number of PowerTags. A PowerTag extension can only be ordered within the same WinCC OA version. The packages on a server are counted cumulatively and can be extended at a later point in time.

A single PowerTag Package **cannot** be split between several servers due to the license.

PowerPacks

PowerPacks are another possibility to increase the PowerTags of a WinCC OA Server. Purchasing a PowerPack only increases the system to the next higher number of PowerTags.
In this way, systems that are too small can be extended quickly and economically.
Example: A server with a 10k PowerTag Package was purchased, but it turns out that 25k is needed.
The customer can then purchase a 10k/15k PowerPack and a 15k/25k PowerPack in addition.

For a redundant server configuration, both WinCC OA Server licenses must be extended to the same number of PowerTags. Therefore, both servers need the same PowerPack extensions.

BACnet objects

BACnet objects are extensions of WinCC OA Servers by a defined number of BACnet objects. BACnet objects are required by the WinCC OA BACnet driver. As of WinCC OA version 3.20, BACnet is included in the WinCC OA – Standard Protocol (Connectivity) driver package and can only be purchased separately up to WinCC OA version 3.19.

WinCC OA regards a BACnet object as an object communicated by the BACnet driver, whose content is exchanged either via the BACnet driver or with other WinCC OA Servers (distributed systems).

For a redundant server configuration, both WinCC OA Server licenses must be extended to the same number of BACnet objects. A BACnet object extension can only be ordered within the same WinCC OA version. The packages on a server are counted cumulatively and can be extended at a later point in time.
A single BACnet object package cannot be divided among multiple servers due to licensing restrictions.

BACnet Pack

BACnet Packs are another possibility to increase the BACnet objects of a WinCC OA Server. Purchasing a BACnet Pack, however, only increases the system to the next higher number of BACnet objects.
In this way, systems that are too small can be extended quickly and economically.
Example: A server with 1k BACnet objects was purchased, but it turns out that 5k are needed.
The customer can then purchase a 1k/3k BACnet Pack and a 3k/5k BACnet Pack in addition.
For a redundant server configuration, both WinCC OA Server licenses must be extended to the same number of BACnet objects. Therefore, both servers need the same BACnet Pack extensions.

WinCC Open Architecture Server

Ordering data	Article No.
V3.20	
WinCC OA – Server Basic V3.20	
License for WinCC OA Server without external data connection and UIs	
• Server Basic	**6AV6355-1AA50-0BA0**
• Server Basic UPG	**6AV6355-1CA50-0BA0**
WinCC OA – PowerTags V3.20	
Extension of a WinCC OA Server license by a fixed number of PowerTags.	
• 1k PowerTags	**6AV6355-1AA50-0BB0**
• 1k PowerTags UPG	**6AV6355-1CA50-0BB0**
• 3k PowerTags	**6AV6355-1AA50-0BB1**
• 3k PowerTags UPG	**6AV6355-1CA50-0BB1**
• 5k PowerTags	**6AV6355-1AA50-0BB2**
• 5k PowerTags UPG	**6AV6355-1CA50-0BB2**
• 10k PowerTags	**6AV6355-1AA50-0BB3**
• 10k PowerTags UPG	**6AV6355-1CA50-0BB3**
• 15k PowerTags	**6AV6355-1AA50-0BB4**
• 15k PowerTags UPG	**6AV6355-1CA50-0BB4**
• 25k PowerTags	**6AV6355-1AA50-0BB5**
• 25k PowerTags UPG	**6AV6355-1CA50-0BB5**
• 50k PowerTags	**6AV6355-1AA50-0BB6**
• 50k PowerTags UPG	**6AV6355-1CA50-0BB6**
• 75k PowerTags	**6AV6355-1AA50-0BB7**
• 75k PowerTags UPG	**6AV6355-1CA50-0BB7**
• 100k PowerTags	**6AV6355-1AA50-0BB8**
• 100k PowerTags UPG	**6AV6355-1CA50-0BB8**
• 150k PowerTags	**6AV6355-1AA50-0BC0**
• 150k PowerTags UPG	**6AV6355-1CA50-0BC0**
• 200k PowerTags	**6AV6355-1AA50-0BC1**
• 200k PowerTags UPG	**6AV6355-1CA50-0BC1**
• 250k PowerTags	**6AV6355-1AA50-0BC2**
• 250k PowerTags UPG	**6AV6355-1CA50-0BC2**
• Unlimited PowerTags	**6AV6355-1AA50-0BC3**
• Unlimited PowerTags UPG	**6AV6355-1CA50-0BC3**

	Article No.
WinCC OA – PowerPacks V3.20	
Extension for step-by-step increase of PowerTags	
• 1k-3k PowerPack	**6AV6355-1AA50-0BD0**
• 1k-3k PowerPack UPG	**6AV6355-1CA50-0BD0**
• 3k-5k PowerPack	**6AV6355-1AA50-0BD1**
• 3k-5k PowerPack UPG	**6AV6355-1CA50-0BD1**
• 5k-10k PowerPack	**6AV6355-1AA50-0BD2**
• 5k-10k PowerPack UPG	**6AV6355-1CA50-0BD2**
• 10k-15k PowerPack	**6AV6355-1AA50-0BD3**
• 10k-15k PowerPack UPG	**6AV6355-1CA50-0BD3**
• 15k-25k PowerPack	**6AV6355-1AA50-0BD4**
• 15k-25k PowerPack UPG	**6AV6355-1CA50-0BD4**
• 25k-50k PowerPack	**6AV6355-1AA50-0BD5**
• 25k-50k PowerPack UPG	**6AV6355-1CA50-0BD5**
• 50k-75k PowerPack	**6AV6355-1AA50-0BD6**
• 50k-75k PowerPack UPG	**6AV6355-1CA50-0BD6**
• 75k-100k PowerPack	**6AV6355-1AA50-0BD7**
• 75k-100k PowerPack UPG	**6AV6355-1CA50-0BD7**
• 100k-150k PowerPack	**6AV6355-1AA50-0BE0**
• 100k-150k PowerPack UPG	**6AV6355-1CA50-0BE0**
• 150k-200k PowerPack	**6AV6355-1AA50-0BE1**
• 150k-200k PowerPack UPG	**6AV6355-1CA50-0BE1**
• 200k-250k PowerPack	**6AV6355-1AA50-0BE2**
• 200k-250k PowerPack UPG	**6AV6355-1CA50-0BE2**
• 250k-Unlimited PowerPack	**6AV6355-1AA50-0BE3**
• 250k-Unlimited PowerPack UPG	**6AV6355-1CA50-0BE3**

Ordering data	Article No.
V3.19	
WinCC OA – Server Basis V3.19	
License for WinCC OA Server without external data connection and UIs.	
• Server Basic	**6AV6355-1AA47-7BA0**
• Server Basic UPG	**6AV6355-1CA47-7BA0**
WinCC OA – PowerTags V3.19	
Extension of a WinCC OA Server license by a fixed number of PowerTags.	
• 1k PowerTags	**6AV6355-1AA47-7BB0**
• 1k PowerTags UPG	**6AV6355-1CA47-7BB0**
• 3k PowerTags	**6AV6355-1AA47-7BB1**
• 3k PowerTags UPG	**6AV6355-1CA47-7BB1**
• 5k PowerTags	**6AV6355-1AA47-7BB2**
• 5k PowerTags UPG	**6AV6355-1CA47-7BB2**
• 10k PowerTags	**6AV6355-1AA47-7BB3**
• 10k PowerTags UPG	**6AV6355-1CA47-7BB3**
• 15k PowerTags	**6AV6355-1AA47-7BB4**
• 15k PowerTags UPG	**6AV6355-1CA47-7BB4**
• 25k PowerTags	**6AV6355-1AA47-7BB5**
• 25k PowerTags UPG	**6AV6355-1CA47-7BB5**
• 50k PowerTags	**6AV6355-1AA47-7BB6**
• 50k PowerTags UPG	**6AV6355-1CA47-7BB6**
• 75k PowerTags	**6AV6355-1AA47-7BB7**
• 75k PowerTags UPG	**6AV6355-1CA47-7BB7**
• 100k PowerTags	**6AV6355-1AA47-7BB8**
• 100k PowerTags UPG	**6AV6355-1CA47-7BB8**
• 150k PowerTags	**6AV6355-1AA47-7BC0**
• 150k PowerTags UPG	**6AV6355-1CA47-7BC0**
• 200k PowerTags	**6AV6355-1AA47-7BC1**
• 200k PowerTags UPG	**6AV6355-1CA47-7BC1**
• 250k PowerTags	**6AV6355-1AA47-7BC2**
• 250k PowerTags UPG	**6AV6355-1CA47-7BC2**
• Unlimited PowerTags	**6AV6355-1AA47-7BC3**
• Unlimited PowerTags UPG	**6AV6355-1CA47-7BC3**

	Article No.
WinCC OA – PowerPacks V3.19	
Extension for step-by-step increase of PowerTags	
• 1k/3k PowerPack	**6AV6355-1AA47-7BD0**
• 1k/3k PowerPack UPG	**6AV6355-1CA47-7BD0**
• 3k/5k PowerPack	**6AV6355-1AA47-7BD1**
• 3k/5k PowerPack UPG	**6AV6355-1CA47-7BD1**
• 5k/10k PowerPack	**6AV6355-1AA47-7BD2**
• 5k/10k PowerPack UPG	**6AV6355-1CA47-7BD2**
• 10k/15k PowerPack	**6AV6355-1AA47-7BD3**
• 10k/15k PowerPack UPG	**6AV6355-1CA47-7BD3**
• 15k/25k PowerPack	**6AV6355-1AA47-7BD4**
• 15k/25k PowerPack UPG	**6AV6355-1CA47-7BD4**
• 25k/50k PowerPack	**6AV6355-1AA47-7BD5**
• 25k/50k PowerPack UPG	**6AV6355-1CA47-7BD5**
• 50k/75k PowerPack	**6AV6355-1AA47-7BD6**
• 50k/75k PowerPack UPG	**6AV6355-1CA47-7BD6**
• 75k/100k PowerPack	**6AV6355-1AA47-7BD7**
• 75k/100k PowerPack UPG	**6AV6355-1CA47-7BD7**
• 100k/150k PowerPack	**6AV6355-1AA47-7BE0**
• 100k/150k PowerPack UPG	**6AV6355-1CA47-7BE0**
• 150k/200k PowerPack	**6AV6355-1AA47-7BE1**
• 150k/200k PowerPack UPG	**6AV6355-1CA47-7BE1**
• 200k/250k PowerPack	**6AV6355-1AA47-7BE2**
• 200k/250k PowerPack UPG	**6AV6355-1CA47-7BE2**
• 250k/Unlimited PowerPack	**6AV6355-1AA47-7BE3**
• 250k/Unlimited PowerPack UPG	**6AV6355-1CA47-7BE3**

WinCC Open Architecture Server

Ordering data	Article No.
V3.18	
WinCC OA – Server Basic V3.18	
License for WinCC OA Server without external data connection and UIs.	
• Server Basic	**6AV6355-1AA31-8BA0**
• Server Basic UPG	**6AV6355-1CA31-8BA0**
WinCC OA – PowerTags V3.18	
Extension of a WinCC OA Server license by a fixed number of PowerTags.	
• 1k PowerTags	**6AV6355-1AA31-8BB0**
• 1k PowerTags UPG	**6AV6355-1CA31-8BB0**
• 3k PowerTags	**6AV6355-1AA31-8BB1**
• 3k PowerTags UPG	**6AV6355-1CA31-8BB1**
• 5k PowerTags	**6AV6355-1AA31-8BB2**
• 5k PowerTags UPG	**6AV6355-1CA31-8BB2**
• 10k PowerTags	**6AV6355-1AA31-8BB3**
• 10k PowerTags UPG	**6AV6355-1CA31-8BB3**
• 15k PowerTags	**6AV6355-1AA31-8BB4**
• 15k PowerTags UPG	**6AV6355-1CA31-8BB4**
• 25k PowerTags	**6AV6355-1AA31-8BB5**
• 25k PowerTags UPG	**6AV6355-1CA31-8BB5**
• 50k PowerTags	**6AV6355-1AA31-8BB6**
• 50k PowerTags UPG	**6AV6355-1CA31-8BB6**
• 75k PowerTags	**6AV6355-1AA31-8BB7**
• 75k PowerTags UPG	**6AV6355-1CA31-8BB7**
• 100k PowerTags	**6AV6355-1AA31-8BB8**
• 100k PowerTags UPG	**6AV6355-1CA31-8BB8**
• 150k PowerTags	**6AV6355-1AA31-8BC0**
• 150k PowerTags UPG	**6AV6355-1CA31-8BC0**
• 200k PowerTags	**6AV6355-1AA31-8BC1**
• 200k PowerTags UPG	**6AV6355-1CA31-8BC1**
• 250k PowerTags	**6AV6355-1AA31-8BC2**
• 250k PowerTags UPG	**6AV6355-1CA31-8BC2**
• Unlimited PowerTags	**6AV6355-1AA31-8BC3**
• Unlimited PowerTags UPG	**6AV6355-1CA31-8BC3**

	Article No.
WinCC OA – PowerPacks V3.18	
Extension for step-by-step increase of PowerTags	
• 1k/3k PowerPack	**6AV6355-1AA31-8BD0**
• 1k/3k PowerPack UPG	**6AV6355-1CA31-8BD0**
• 3k/5k PowerPack	**6AV6355-1AA31-8BD1**
• 3k/5k PowerPack UPG	**6AV6355-1CA31-8BD1**
• 5k/10k PowerPack	**6AV6355-1AA31-8BD2**
• 5k/10k PowerPack UPG	**6AV6355-1CA31-8BD2**
• 10k/15k PowerPack	**6AV6355-1AA31-8BD3**
• 10k/15k PowerPack UPG	**6AV6355-1CA31-8BD3**
• 15k/25k PowerPack	**6AV6355-1AA31-8BD4**
• 15k/25k PowerPack UPG	**6AV6355-1CA31-8BD4**
• 25k/50k PowerPack	**6AV6355-1AA31-8BD5**
• 25k/50k PowerPack UPG	**6AV6355-1CA31-8BD5**
• 50k/75k PowerPack	**6AV6355-1AA31-8BD6**
• 50k/75k PowerPack UPG	**6AV6355-1CA31-8BD6**
• 75k/100k PowerPack	**6AV6355-1AA31-8BD7**
• 75k/100k PowerPack UPG	**6AV6355-1CA31-8BD7**
• 100k/150k PowerPack	**6AV6355-1AA31-8BE0**
• 100k/150k PowerPack UPG	**6AV6355-1CA31-8BE0**
• 150k/200k PowerPack	**6AV6355-1AA31-8BE1**
• 150k/200k PowerPack UPG	**6AV6355-1CA31-8BE1**
• 200k/250k PowerPack	**6AV6355-1AA31-8BE2**
• 200k/250k PowerPack UPG	**6AV6355-1CA31-8BE2**
• 250k/Unlimited PowerPack	**6AV6355-1AA31-8BE3**
• 250k/Unlimited PowerPack UPG	**6AV6355-1CA31-8BE3**

Ordering data	Article No.
Software services - version-independent	
WinCC OA – Server Basic	
• Server Basic SUS	**6AV6355-1DA00-0BA0**
• Server Basic SMS	**6AV6355-1FA00-0BA0**
• Server Basic POS	**6AV6355-1GA00-0BA0**
WinCC OA – PowerTags	
Extension of a WinCC OA Server license by a fixed number of PowerTags.	
• 1k PowerTags SUS	**6AV6355-1DA00-0BB0**
• 1k PowerTags SMS	**6AV6355-1FA00-0BB0**
• 1k PowerTags POS	**6AV6355-1GA00-0BB0**
• 3k PowerTags SUS	**6AV6355-1DA00-0BB1**
• 3k PowerTags SMS	**6AV6355-1FA00-0BB1**
• 3k PowerTags POS	**6AV6355-1GA00-0BB1**
• 5k PowerTags SUS	**6AV6355-1DA00-0BB2**
• 5k PowerTags SMS	**6AV6355-1FA00-0BB2**
• 5k PowerTags POS	**6AV6355-1GA00-0BB2**
• 10k PowerTags SUS	**6AV6355-1DA00-0BB3**
• 10k PowerTags SMS	**6AV6355-1FA00-0BB3**
• 10k PowerTags POS	**6AV6355-1GA00-0BB3**
• 15k PowerTags SUS	**6AV6355-1DA00-0BB4**
• 15k PowerTags SMS	**6AV6355-1FA00-0BB4**
• 15k PowerTags POS	**6AV6355-1GA00-0BB4**
• 25k PowerTags SUS	**6AV6355-1DA00-0BB5**
• 25k PowerTags SMS	**6AV6355-1FA00-0BB5**
• 25k PowerTags POS	**6AV6355-1GA00-0BB5**
• 50k PowerTags SUS	**6AV6355-1DA00-0BB6**
• 50k PowerTags SMS	**6AV6355-1FA00-0BB6**
• 50k PowerTags POS	**6AV6355-1GA00-0BB6**
• 75k PowerTags SUS	**6AV6355-1DA00-0BB7**
• 75k PowerTags SMS	**6AV6355-1FA00-0BB7**
• 75k PowerTags POS	**6AV6355-1GA00-0BB7**
• 100k PowerTags SUS	**6AV6355-1DA00-0BB8**
• 100k PowerTags SMS	**6AV6355-1FA00-0BB8**
• 100k PowerTags POS	**6AV6355-1GA00-0BB8**
• 150k PowerTags SUS	**6AV6355-1DA00-0BC0**
• 150k PowerTags SMS	**6AV6355-1FA00-0BC0**
• 150k PowerTags POS	**6AV6355-1GA00-0BC0**
• 200k PowerTags SUS	**6AV6355-1DA00-0BC1**
• 200k PowerTags SMS	**6AV6355-1FA00-0BC1**
• 200k PowerTags POS	**6AV6355-1GA00-0BC1**
• 250k PowerTags SUS	**6AV6355-1DA00-0BC2**
• 250k PowerTags SMS	**6AV6355-1FA00-0BC2**
• 250k PowerTags POS	**6AV6355-1GA00-0BC2**
• Unlimited PowerTags SUS	**6AV6355-1DA00-0BC3**
• Unlimited PowerTags SMS	**6AV6355-1FA00-0BC3**
• Unlimited PowerTags POS	**6AV6355-1GA00-0BC3**

	Article No.
WinCC OA – PowerPacks	
• 1k/3k PowerPack SUS	**6AV6355-1DA00-0BD0**
• 1k/3k PowerPack SMS	**6AV6355-1FA00-0BD0**
• 1k/3k PowerPack POS	**6AV6355-1GA00-0BD0**
• 3k/5k PowerPack SUS	**6AV6355-1DA00-0BD1**
• 3k/5k PowerPack SMS	**6AV6355-1FA00-0BD1**
• 3k/5k PowerPack POS	**6AV6355-1GA00-0BD1**
• 5k/10k PowerPack SUS	**6AV6355-1DA00-0BD2**
• 5k/10k PowerPack SMS	**6AV6355-1FA00-0BD2**
• 5k/10k PowerPack POS	**6AV6355-1GA00-0BD2**
• 10k/15k PowerPack SUS	**6AV6355-1DA00-0BD3**
• 10k/15k PowerPack SMS	**6AV6355-1FA00-0BD3**
• 10k/15k PowerPack POS	**6AV6355-1GA00-0BD3**
• 15k/25k PowerPack SUS	**6AV6355-1DA00-0BD4**
• 15k/25k PowerPack SMS	**6AV6355-1FA00-0BD4**
• 15k/25k PowerPack POS	**6AV6355-1GA00-0BD4**
• 25k/50k PowerPack SUS	**6AV6355-1DA00-0BD5**
• 50k/75k PowerPack SMS	**6AV6355-1FA00-0BD5**
• 15k/25k PowerPack POS	**6AV6355-1GA00-0BD5**
• 50k/75k PowerPack SUS	**6AV6355-1DA00-0BD6**
• 50k/75k PowerPack SMS	**6AV6355-1FA00-0BD6**
• 50k/75k PowerPack POS	**6AV6355-1GA00-0BD6**
• 75k/100k PowerPack SUS	**6AV6355-1DA00-0BD7**
• 75k/100k PowerPack SMS	**6AV6355-1FA00-0BD7**
• 75k/100k PowerPack POS	**6AV6355-1GA00-0BD7**
• 100k/150k PowerPack SUS	**6AV6355-1DA00-0BE0**
• 100k/150k PowerPack SMS	**6AV6355-1FA00-0BE0**
• 100k/150k PowerPack POS	**6AV6355-1GA00-0BE0**
• 150k/200k PowerPack SUS	**6AV6355-1DA00-0BE1**
• 150k/200k PowerPack SMS	**6AV6355-1FA00-0BE1**
• 150k/200k PowerPack POS	**6AV6355-1GA00-0BE1**
• 200k/250k PowerPack SUS	**6AV6355-1DA00-0BE2**
• 200k/250k PowerPack SMS	**6AV6355-1FA00-0BE2**
• 200k/250k PowerPack POS	**6AV6355-1GA00-0BE2**
• 250k/Unlimited PowerPack SUS	**6AV6355-1DA00-0BE3**
• 250k/Unlimited PowerPack SMS	**6AV6355-1FA00-0BE3**
• 250k/Unlimited PowerPack POS	**6AV6355-1GA00-0BE3**

More information

More information is available on the internet at
http://www.siemens.com/wincc-open-architecture

WinCC Open Architecture User Interfaces

Overview

WinCC Open Architecture User Interfaces

User interfaces (UIs) form the interface between software and user.

WinCC Open Architecture (WinCC OA) offers a variety of such interfaces: On the one hand for creating panel files, logic operations, libraries and much more in the form of a graphical editor (GEDI), for data point configurations and value management on the other hand (PARA).

The internal, general module (Vision) offers a simple possibility for user interfaces at operator stations (operator stations, workstation stations). The user interface serves to display values, issue commands or track alarms in the alarm list. Trends and reports are also usually part of the UI. From a programming viewpoint, the user interaction in WinCC Open Architecture is completely isolated from the background processing – it is merely a view of the data of the current process image or the history.

UIs on a server are counted cumulatively and can be extended at a later point in time by purchasing additional UI licenses.

UI packages cannot be split between several servers due to license restrictions.

Benefits

The editor tools offer possibilities for self-administration that can be quickly realized:

- Simple creation and adoption of existing elements of a user interface
- Graphical project administration, integration of existing libraries and configuration of different view variants (Content Management System, Standard-based, Shop View, language switching in runtime and much more)
- Simple parameter assignment and instantiation of data points (DP) and DP groups
- Basic license for bulk recordings and multi-user configuration.

The various client versions for operating stations offer decisive added value:

- Native clients for operator stations with extended possibilities
- Operation independent of operating system and identical look and feel of the user interfaces
- App download via Google Play or App Store
- Integration of security mechanisms (encryption, user notes, Audit Trails, authentication, user management, device releases) in remote units
- Web clients (ULC UX) as an alternative without mandatory installation on the terminals

Application

User interfaces provide the optimal interface between human and machine through visual support. There is a wide range of reasons for their use.

Thanks to the extensive set of different connection options and the possibility of using modern layout tools as well as state-of-the-art extensions and the embedding of 3rd party components, WinCC OA offers the perfect basis for the most modern monitoring and control solutions, ranging from mobile phone apps to monitor walls in centralized control rooms. Thanks to the secure connection via the Internet, nothing stands in the way of opening important displays via a standard web browser.

Active user interfaces are licensed at the same time for a solution. It may make sense to plan specific measures to increase performance above a certain scale – depending on the number, content, value quantity, rate of change and role of the operator stations.

Design

UI Client (from WinCC OA version 3.20)

UI Client allows the use of either a desktop UI, a web client (ULC UX), or a WinCC OA dashboard with operator function (from WinCC OA 3.20). One license is required for each connected type. If a ULC UX view is embedded in the dashboard, no additional license is required. As of WinCC OA version 3.20, the individual user interface types can no longer be purchased separately.

UI light (from WinCC OA version 3.20)

UI light allows you to use either a mobile UI, a dashboard or a mobile dashboard. Dashboard modifications ("engineering") are possible in the dashboard and also in the mobile dashboard on suitable devices (depending on the screen size). Operating actions on the dashboard based on "UI light" are excluded. As of WinCC OA version 3.20, the individual user interface types can no longer be purchased separately.

Desktop UI

(available separately only up to WinCC OA version 3.19)

Extends a WinCC OA installation by a graphical operator station with unrestricted functionality according to the WinCC OA documentation. One license is required for each connected desktop UI.

Dashboard (as of V3.18)

(available separately from WinCC OA version 3.18 to 3.19)

Extends a WinCC OA installation by a web-based dashboard display. Simultaneous connections from active dashboards are counted. Available as standard or REDU version. A mobile dashboard version, optimized for mobile devices, is available.

Licenses for extending an existing WinCC OA Server license by a web-based dashboard display. Simultaneous connections from active dashboards are counted. Standard or REDU version available, as well as Mobile Dashboard version optimized for mobile devices.

Web client: UltraLightClient User eXperience (ULC UX)

(available separately only up to WinCC OA version 3.19)

UltraLightClient User eXperience web clients complements a WinCC OA installation. Simultaneous connections from active ULC UX clients are counted. Supports a subset of the Desktop UI functionality. Packages are counted cumulatively. Available in standard or REDU version.

Design

Mobile UI

(available separately only up to WinCC OA version 3.19)

WinCC OA Mobile UI is available as an app for iOS or Android and allows the WinCC OA Panels to be displayed on a mobile end device. Device management in the WinCC OA Engineering module GEDI optionally allows the design of optimized plant screens for mobile devices. The supported Android and iOS versions can be found in the respective App Store. Simultaneous connections from active mobile apps are counted. Packages are counted cumulatively. Available in standard or REDU version.

Operator APP (only available for WinCC OA versions < V3.18!)

License for connecting an Operator app (for iOS) to a WinCC OA Server. SSL secured connection. Measured values and alarms can be queried, commands and acknowledgments can be sent. Configuration is performed in WinCC OA via a wizard. Each device must be assigned a license on the server. The Operator app can be obtained free of charge from the App Store.

Para

Development and parameter assignment module for WinCC OA Server with graphical editor (incl. symbol catalogs), script development environment and test framework.
Requires WinCC OA Server Basic license as a basis.
The parameterization package does not occupy an existing UI license in the server configuration. Parameterization during runtime is possible.

Available in standard, REDU or standalone remote version

REDU

Desktop UI, ULC UX, Mobile UI, Dashboards and Para have a REDU option in addition to the standard version.
When creating a redundant system, the REDU option (x2) must be obtained for the desired UIs. More detailed information can be found under "Redundancy" in the "Add-ons" section.

Ordering data

	Article No.
V3.20	
WinCC OA – UI Client V3.20	
Operator station licenses for extending a WinCC OA Server.	
• 1 UI Client	**6AV6355-1AA50-0CN0**
• 1 UI Client UPG	**6AV6355-1CA50-0CN0**
• 1 UI Client SUS	**6AV6355-1DA00-0CN0**
• 1 UI Client SMS	**6AV6355-1FA00-0CN0**
• 1 UI Client POS	**6AV6355-1GA00-0CN0**
• 10 UI Clients	**6AV6355-1AA50-0CN1**
• 10 UI Clients UPG	**6AV6355-1CA50-0CN1**
• 10 UI Clients SUS	**6AV6355-1DA00-0CN1**
• 10 UI Clients SMS	**6AV6355-1FA00-0CN1**
• 10 UI Clients POS	**6AV6355-1GA00-0CN1**
• 25 UI Clients	**6AV6355-1AA50-0CN2**
• 25 UI Clients UPG	**6AV6355-1CA50-0CN2**
• 25 UI Clients SUS	**6AV6355-1DA00-0CN2**
• 25 UI Clients SMS	**6AV6355-1FA00-0CN2**
• 25 UI Clients POS	**6AV6355-1GA00-0CN2**
• Unlimited UI Clients	**6AV6355-1AA50-0CN3**
• Unlimited UI Clients UPG	**6AV6355-1CA50-0CN3**
• Unlimited UI Clients SUS	**6AV6355-1DA00-0CN3**
• Unlimited UI Clients SMS	**6AV6355-1FA00-0CN3**
• Unlimited UI Clients POS	**6AV6355-1GA00-0CN3**
WinCC OA – UI Client REDU V3.20	
Operator station licenses for extending a WinCC OA REDU Server.	
• 1 UI Client REDU	**6AV6355-1AA50-0CP0**
• 1 UI Client REDU UPG	**6AV6355-1CA50-0CP0**
• 1 UI Client REDU SUS	**6AV6355-1DA00-0CP0**
• 1 UI Client REDU SMS	**6AV6355-1FA00-0CP0**
• 1 UI Client REDU POS	**6AV6355-1FA00-0CP0**
• 10 UI Clients REDU	**6AV6355-1AA50-0CP1**
• 10 UI Clients REDU UPG	**6AV6355-1CA50-0CP1**
• 10 UI Clients REDU SUS	**6AV6355-1DA00-0CP1**
• 10 UI Clients REDU SMS	**6AV6355-1FA00-0CP1**
• 10 UI Clients REDU POS	**6AV6355-1GA00-0CP1**
• 25 UI Clients REDU	**6AV6355-1AA50-0CP2**
• 25 UI Clients REDU UPG	**6AV6355-1CA50-0CN2**
• 25 UI Clients REDU SUS	**6AV6355-1DA00-0CP2**
• 25 UI Clients REDU SMS	**6AV6355-1FA00-0CP2**
• 25 UI Clients REDU POS	**6AV6355-1GA00-0CP2**
• Unlimited UI Clients REDU	**6AV6355-1AA50-0CP3**
• Unlimited UI Clients REDU UPG	**6AV6355-1CA50-0CP3**
• Unlimited UI Clients REDU SUS	**6AV6355-1DA00-0CP3**
• Unlimited UI Clients REDU SMS	**6AV6355-1FA00-0CP3**
• Unlimited UI Clients REDU POS	**6AV6355-1GA00-0CP3**

3

Ordering data	Article No.
WinCC OA – UI Light V3.20	
Licenses for WinCC OA Mobile App for iOS or Android	
• 1 UI light	**6AV6355-1AA50-0CQ0**
• 1 UI light UPG	**6AV6355-1CA50-0CQ1**
• 1 UI light SUS	**6AV6355-1DA00-0CQ0**
• 1 UI SMS	**6AV6355-1FA00-0CQ0**
• 1 UI POS	**6AV6355-1GA00-0CQ0**
• 10 UIs light	**6AV6355-1AA00-0CQ1**
• 10 UIs light UPG	**6AV6355-1CA50-0CQ1**
• 10 UIs light SUS	**6AV6355-1DA00-0CQ1**
• 10 UIs light SMS	**6AV6355-1FA00-0CQ1**
• 10 UIs light POS	**6AV6355-1GA00-0CQ1**
• 25 UIs light	**6AV6355-1AA50-0CQ2**
• 25 UIs light UPG	**6AV6355-1CA50-0CQ2**
• 25 UIs light SUS	**6AV6355-1DA00-0CQ2**
• 25 UIs light SMS	**6AV6355-1FA00-0CQ2**
• 25 UIs light POS	**6AV6355-1GA00-0CQ2**
• Unlimited UIs light	**6AV6355-1AA50-0CQ3**
• Unlimited UIs light UPG	**6AV6355-1CA50-0CQ3**
• Unlimited UIs light SUS	**6AV6355-1DA00-0CQ3**
• Unlimited UIs light SMS	**6AV6355-1FA00-0CQ3**
• Unlimited UIs light POS	**6AV6355-1GA00-0CQ3**
WinCC OA – UI light REDU V3.20	
Licenses for WinCC OA Mobile App for iOS or Android for REDU Server	
• 1 UI light REDU	**6AV6355-1AA47-7CF0**
• 1 UI light REDU UPG	**6AV6355-1CA47-7CF0**
• 1 UI light REDU SUS	**6AV6355-1DA00-0CR0**
• 1 UI light REDU SMS	**6AV6355-1FA00-0CR0**
• 1 UI light REDU POS	**6AV6355-1GA00-0CR0**
• 10 UIs light REDU	**6AV6355-1AA50-0CR3**
• 10 UIs light REDU UPG	**6AV6355-1CA50-0CR1**
• 10 UIs light REDU SUS	**6AV6355-1DA00-0CR1**
• 10 UIs light REDU SMS	**6AV6355-1FA00-0CR1**
• 10 UIs light REDU POS	**6AV6355-1GA00-0CR1**
• 25 UIs light REDU	**6AV6355-1AA50-0CR2**
• 25 UIs light REDU UPG	**6AV6355-1CA50-0CR2**
• 25 UIs light REDU SUS	**6AV6355-1DA00-0CR2**
• 25 UIs light REDU SMS	**6AV6355-1FA00-0CR2**
• 25 UIs light REDU POS	**6AV6355-1GA00-0CR2**
• Unlimited UIs light REDU	**6AV6355-1AA50-0CR3**
• Unlimited UIs light REDU UPG	**6AV6355-1CA50-0CR3**
• Unlimited UIs light REDU SUS	**6AV6355-1DA00-0CR3**
• Unlimited UIs light REDU SMS	**6AV6355-1FA00-0CR3**
• Unlimited UIs light REDU POS	**6AV6355-1GA00-0CR3**
WinCC OA – Para Standard V3.20	
Development and parameter assignment license for WinCC OA Server.	
• Para Standard	**6AV6355-1AA50-0CH0**
• Para Standard UPG	**6AV6355-1CA50-0CH0**
WinCC OA – Para Standard REDU V3.20	
Development and parameter assignment license for WinCC OA REDU Server.	
• Para Standard REDU	**6AV6355-1AA50-0CH1**
• Para Standard REDU UPG	**6AV6355-1CA50-0CH1**
WinCC OA – Para Remote V3.20	
Remote development and parameter assignment license for WinCC OA Server.	
• Para Remote	**6AV6355-1AA50-0CH2**
• Para Remote UPG	**6AV6355-1CA50-0CH2**

	Article No.
V3.19	
WinCC OA – Desktop UI V3.19	
Operator station licenses for extending a WinCC OA Server.	
• 1 Desktop UI	**6AV6355-1AA47-7CA0**
• 1 Desktop UI UPG	**6AV6355-1CA47-7CA0**
• 10 Desktop UI	**6AV6355-1AA47-7CA1**
• 10 Desktop UI UPG	**6AV6355-1CA47-7CA1**
• 25 Desktop UI	**6AV6355-1AA47-7CA2**
• 25 Desktop UI UPG	**6AV6355-1CA47-7CA2**
• 50 Desktop UI	**6AV6355-1AA47-7CA3**
• 50 Desktop UI UPG	**6AV6355-1CA47-7CA3**
• 100 Desktop UI	**6AV6355-1AA47-7CA4**
• 100 Desktop UI UPG	**6AV6355-1CA47-7CA4**
WinCC OA – Desktop UI REDU V3.19	
Operator station licenses for extending a WinCC OA REDU Server.	
• 1 Desktop UI REDU	**6AV6355-1AA47-7CB0**
• 1 Desktop UI REDU UPG	**6AV6355-1CA47-7CB0**
• 10 Desktop UI REDU	**6AV6355-1AA47-7CB1**
• 10 Desktop UI REDU UPG	**6AV6355-1CA47-7CB1**
• 25 Desktop UI REDU	**6AV6355-1AA47-7CB2**
• 25 Desktop UI REDU UPG	**6AV6355-1CA47-7CB2**
• 50 Desktop UI REDU	**6AV6355-1AA47-7CB3**
• 50 Desktop UI REDU UPG	**6AV6355-1CA47-7CB3**
• 100 Desktop UI REDU	**6AV6355-1AA47-7CB4**
• 100 Desktop UI REDU UPG	**6AV6355-1CA47-7CB4**
WinCC OA – ULC UX V3.19	
Licenses for UltraLightClient User eXperience web clients.	
• 1 ULC UX	**6AV6355-1AA47-7CC0**
• 1 ULC UX UPG	**6AV6355-1CA47-7CC0**
• 10 ULC UX	**6AV6355-1AA47-7CC1**
• 10 ULC UX UPG	**6AV6355-1CA47-7CC1**
• 25 ULC UX	**6AV6355-1AA47-7CC2**
• 25 ULC UX UPG	**6AV6355-1CA47-7CC2**
• 50 ULC UX	**6AV6355-1AA47-7CC3**
• 50 ULC UX UPG	**6AV6355-1CA47-7CC3**
• 100 ULC UX	**6AV6355-1AA47-7CC4**
• 100 ULC UX UPG	**6AV6355-1CA47-7CC4**
WinCC OA – ULC UX REDU V3.19	
Licenses for UltraLightClient User eXperience web clients for REDU Server.	
• 1 ULC UX REDU	**6AV6355-1AA47-7CD0**
• 1 ULC UX REDU UPG	**6AV6355-1CA47-7CD0**
• 10 ULC UX REDU	**6AV6355-1AA47-7CD1**
• 10 ULC UX REDU UPG	**6AV6355-1CA47-7CD1**
• 25 ULC UX REDU	**6AV6355-1AA47-7CD2**
• 25 ULC UX REDU UPG	**6AV6355-1CA47-7CD2**
• 50 ULC UX REDU	**6AV6355-1AA47-7CD3**
• 50 ULC UX REDU UPG	**6AV6355-1CA47-7CD3**
• 100 ULC UX REDU	**6AV6355-1AA47-7CD4**
• 100 ULC UX REDU UPG	**6AV6355-1CA47-7CD4**

Ordering data	Article No.
WinCC OA – Mobile V3.19	
Licenses for WinCC OA Mobile App for iOS or Android.	
• 1 Mobile	**6AV6355-1AA47-7CE0**
• 1 Mobile UPG	**6AV6355-1CA47-7CE0**
• 10 Mobiles	**6AV6355-1AA47-7CE1**
• 10 Mobiles UPG	**6AV6355-1CA47-7CE1**
• 25 Mobiles	**6AV6355-1AA47-7CE2**
• 25 Mobiles UPG	**6AV6355-1CA47-7CE2**
• 50 Mobiles	**6AV6355-1AA47-7CE3**
• 50 Mobiles UPG	**6AV6355-1CA47-7CE3**
• 100 Mobiles	**6AV6355-1AA47-7CE4**
• 100 Mobiles UPG	**6AV6355-1CA47-7CE4**
WinCC OA – Mobile REDU V3.19	
Licenses for WinCC OA Mobile App for iOS or Android for REDU Server.	
• 1 Mobile REDU	**6AV6355-1AA47-7CF0**
• 1 Mobile REDU UPG	**6AV6355-1CA47-7CF0**
• 10 Mobiles REDU	**6AV6355-1AA47-7CF1**
• 10 Mobiles REDU UPG	**6AV6355-1CA47-7CF1**
• 25 Mobiles REDU	**6AV6355-1AA47-7CF2**
• 25 Mobiles REDU UPG	**6AV6355-1CA47-7CF2**
• 50 Mobiles REDU	**6AV6355-1AA47-7CF3**
• 50 Mobiles REDU UPG	**6AV6355-1CA47-7CF3**
• 100 Mobiles REDU	**6AV6355-1AA47-7CF4**
• 100 Mobiles REDU UPG	**6AV6355-1CA47-7CF4**
WinCC OA – Para Standard V3.19	
Development and parameter assignment license for WinCC OA Server.	
• Para Standard	**6AV6355-1AA47-7CH0**
• Para Standard UPG	**6AV6355-1CA47-7CH0**
WinCC OA – Para Standard REDU V3.19	
Development and parameter assignment license for WinCC OA REDU Server.	
• Para Standard REDU	**6AV6355-1AA47-7CH1**
• Para Standard REDU UPG	**6AV6355-1CA47-7CH1**
WinCC OA – Para Remote V3.19	
Remote development and parameter assignment license for WinCC OA Server.	
• Para Remote	**6AV6355-1AA47-7CH2**
• Para Remote UPG	**6AV6355-1CA47-7CH2**
WinCC OA – Mobile Dashboard V3.19	
Licenses for native HTML5 dashboard display optimized for mobile devices.	
• 1 Mobile Dashboard	**6AV6355-1AA47-7CJ0**
• 1 Mobile Dashboard UPG	**6AV6355-1CA47-7CJ0**
• 10 Mobile Dashboards	**6AV6355-1AA47-7CJ1**
• 10 Mobile Dashboards UPG	**6AV6355-1CA47-7CJ1**
• 25 Mobile Dashboards	**6AV6355-1AA47-7CJ2**
• 25 Mobile Dashboards UPG	**6AV6355-1CA47-7CJ2**
• 50 Mobile Dashboards	**6AV6355-1AA47-7CJ3**
• 50 Mobile Dashboards UPG	**6AV6355-1CA47-7CJ3**
• 100 Mobile Dashboards	**6AV6355-1AA47-7CJ4**
• 100 Mobile Dashboards UPG	**6AV6355-1CA47-7CJ4**

	Article No.
WinCC OA – Mobile Dashboard REDU V3.19	
Licenses for web-based dashboard display on redundant server, optimized for mobile devices:	
• 1 Mobile Dashboard REDU	**6AV6355-1AA47-7CK0**
• 1 Mobile Dashboard REDU UPG	**6AV6355-1CA47-7CK0**
• 10 Mobile Dashboards REDU	**6AV6355-1AA47-7CK1**
• 10 Mobile Dashboards REDU UPG	**6AV6355-1CA47-7CK1**
• 25 Mobile Dashboards REDU	**6AV6355-1AA47-7CK2**
• 25 Mobile Dashboards REDU UPG	**6AV6355-1CA47-7CK2**
• 50 Mobile Dashboards REDU	**6AV6355-1AA47-7CK3**
• 50 Mobile Dashboards REDU UPG	**6AV6355-1CA47-7CK3**
• 100 Mobile Dashboards REDU	**6AV6355-1AA47-7CK4**
• 100 Mobile Dashboards REDU UPG	**6AV6355-1CA47-7CK4**
WinCC OA – Dashboard V3.19	
Licenses for web-based dashboard display	
• 1 Dashboard	**6AV6355-1AA47-7CL0**
• 1 Dashboard UPG	**6AV6355-1CA47-7CL0**
• 10 Dashboards	**6AV6355-1AA47-7CL1**
• 10 Dashboards UPG	**6AV6355-1CA47-7CL1**
• 25 Dashboards	**6AV6355-1AA47-7CL2**
• 25 Dashboards UPG	**6AV6355-1CA47-7CL2**
• 50 Dashboards	**6AV6355-1AA47-7CL3**
• 50 Dashboards UPG	**6AV6355-1CA47-7CL3**
• 100 Dashboards	**6AV6355-1AA47-7CL4**
• 100 Dashboards UPG	**6AV6355-1CA47-7CL4**
WinCC OA – Dashboard REDU V3.19	
Licenses for web-based dashboard display on redundant server:	
• 1 Dashboard REDU	**6AV6355-1AA47-7CM0**
• 1 Dashboard REDU UPG	**6AV6355-1CA47-7CM0**
• 10 Dashboards REDU	**6AV6355-1AA47-7CM1**
• 10 Dashboards REDU UPG	**6AV6355-1CA47-7CM1**
• 25 Dashboards REDU	**6AV6355-1AA47-7CM2**
• 25 Dashboards REDU UPG	**6AV6355-1CA47-7CM2**
• 50 Dashboards REDU	**6AV6355-1AA47-7CM3**
• 50 Dashboards REDU UPG	**6AV6355-1CA47-7CM3**
• 100 Dashboards REDU	**6AV6355-1AA47-7CM4**
• 100 Dashboards REDU UPG	**6AV6355-1CA47-7CM4**

3

Ordering data	Article No.
V3.18	
WinCC OA – Desktop UI V3.18	
Operator station licenses for extending a WinCC OA Server.	
• 1 Desktop UI	**6AV6355-1AA31-8CA0**
• 1 Desktop UI UPG	**6AV6355-1CA31-8CA0**
• 10 Desktop UI	**6AV6355-1AA31-8CA1**
• 10 Desktop UI UPG	**6AV6355-1CA31-8CA1**
• 25 Desktop UI	**6AV6355-1AA31-8CA2**
• 25 Desktop UI UPG	**6AV6355-1CA31-8CA2**
• 50 Desktop UI	**6AV6355-1AA31-8CA3**
• 50 Desktop UI UPG	**6AV6355-1CA31-8CA3**
• 100 Desktop UI	**6AV6355-1AA31-8CA4**
• 100 Desktop UI UPG	**6AV6355-1CA31-8CA4**
WinCC OA – Desktop UI REDU V3.18	
Operator station licenses for extending a WinCC OA REDU Server.	
• 1 Desktop UI REDU	**6AV6355-1AA31-8CB0**
• 1 Desktop UI REDU UPG	**6AV6355-1CA31-8CB0**
• 10 Desktop UI REDU	**6AV6355-1AA31-8CB1**
• 10 Desktop UI REDU UPG	**6AV6355-1CA31-8CB1**
• 25 Desktop UI REDU	**6AV6355-1AA31-8CB2**
• 25 Desktop UI REDU UPG	**6AV6355-1CA31-8CB2**
• 50 Desktop UI REDU	**6AV6355-1AA31-8CB3**
• 50 Desktop UI REDU UPG	**6AV6355-1CA31-8CB3**
• 100 Desktop UI REDU	**6AV6355-1AA31-8CB4**
• 100 Desktop UI REDU UPG	**6AV6355-1CA31-8CB4**
WinCC OA – ULC UX V3.18	
Licenses for UltraLightClient User eXperience web clients.	
• 1 ULC UX	**6AV6355-1AA31-8CC0**
• 1 ULC UX UPG	**6AV6355-1CA31-8CC0**
• 10 ULC UX	**6AV6355-1AA31-8CC1**
• 10 ULC UX UPG	**6AV6355-1CA31-8CC1**
• 25 ULC UX	**6AV6355-1AA31-8CC2**
• 25 ULC UX UPG	**6AV6355-1CA31-8CC2**
• 50 ULC UX	**6AV6355-1AA31-8CC3**
• 50 ULC UX UPG	**6AV6355-1CA31-8CC3**
• 100 ULC UX	**6AV6355-1AA31-8CC4**
• 100 ULC UX UPG	**6AV6355-1CA31-8CC4**
WinCC OA – ULC UX REDU V3.18	
Licenses for UltraLightClient User eXperience web clients for REDU Server.	
• 1 ULC UX REDU	**6AV6355-1AA31-8CD0**
• 1 ULC UX REDU UPG	**6AV6355-1CA31-8CD0**
• 10 ULC UX REDU	**6AV6355-1AA31-8CD1**
• 10 ULC UX REDU UPG	**6AV6355-1CA31-8CD1**
• 25 ULC UX REDU	**6AV6355-1AA31-8CD2**
• 25 ULC UX REDU UPG	**6AV6355-1CA31-8CD2**
• 50 ULC UX REDU	**6AV6355-1AA31-8CD3**
• 50 ULC UX REDU UPG	**6AV6355-1CA31-8CD3**
• 100 ULC UX REDU	**6AV6355-1AA31-8CD4**
• 100 ULC UX REDU UPG	**6AV6355-1CA31-8CD4**

	Article No.
WinCC OA – Mobile V3.18	
Licenses for WinCC OA Mobile App for iOS or Android.	
• 1 Mobile	**6AV6355-1AA31-8CE0**
• 1 Mobile UPG	**6AV6355-1CA31-8CE0**
• 10 Mobiles	**6AV6355-1AA31-8CE1**
• 10 Mobiles UPG	**6AV6355-1CA31-8CE1**
• 25 Mobiles	**6AV6355-1AA31-8CE2**
• 25 Mobiles UPG	**6AV6355-1CA31-8CE2**
• 50 Mobiles	**6AV6355-1AA31-8CE3**
• 50 Mobiles UPG	**6AV6355-1CA31-8CE3**
• 100 Mobiles	**6AV6355-1AA31-8CE4**
• 100 Mobiles UPG	**6AV6355-1CA31-8CE4**
WinCC OA – Mobile REDU V3.18	
Licenses for WinCC OA Mobile App for iOS or Android for REDU Server.	
• 1 Mobile REDU	**6AV6355-1AA31-8CF0**
• 1 Mobile REDU UPG	**6AV6355-1CA31-8CF0**
• 10 Mobiles REDU	**6AV6355-1AA31-8CF1**
• 10 Mobiles REDU UPG	**6AV6355-1CA31-8CF1**
• 25 Mobiles REDU	**6AV6355-1AA31-8CF2**
• 25 Mobiles REDU UPG	**6AV6355-1CA31-8CF2**
• 50 Mobiles REDU	**6AV6355-1AA31-8CF3**
• 50 Mobiles REDU UPG	**6AV6355-1CA31-8CF3**
• 100 Mobiles REDU	**6AV6355-1AA31-8CF4**
• 100 Mobiles REDU UPG	**6AV6355-1CA31-8CF4**
WinCC OA – Para Standard V3.18	
Development and parameter assignment license for WinCC OA Server.	
• Para Standard	**6AV6355-1AA31-8CH0**
• Para Standard UPG	**6AV6355-1CA31-8CH0**
WinCC OA – Para Standard REDU V3.18	
Development and parameter assignment license for WinCC OA REDU Server.	
• Para Standard REDU	**6AV6355-1AA31-8CH1**
• Para Standard REDU UPG	**6AV6355-1CA31-8CH1**
WinCC OA – Para Remote V3.18	
Remote development and parameter assignment license for WinCC OA Server.	
• Para Remote	**6AV6355-1AA31-8CH2**
• Para Remote UPG	**6AV6355-1CA31-8CH2**
WinCC OA – Mobile Dashboard V3.18	
Licenses for native HTML5 dashboard display optimized for mobile devices.	
• 1 Mobile Dashboard	**6AV6355-1AA31-8CJ0**
• 1 Mobile Dashboard UPG	**6AV6355-1CA31-8CJ0**
• 10 Mobile Dashboards	**6AV6355-1AA31-8CJ1**
• 10 Mobile Dashboards UPG	**6AV6355-1CA31-8CJ1**
• 25 Mobile Dashboards	**6AV6355-1AA31-8CJ2**
• 25 Mobile Dashboards UPG	**6AV6355-1CA31-8CJ2**
• 50 Mobile Dashboards	**6AV6355-1AA31-8CJ3**
• 50 Mobile Dashboards UPG	**6AV6355-1CA31-8CJ3**
• 100 Mobile Dashboards	**6AV6355-1AA31-8CJ4**
• 100 Mobile Dashboards UPG	**6AV6355-1CA31-8CJ4**

Ordering data

	Article No.
WinCC OA – Mobile Dashboard REDU V3.18	
Licenses for web-based dashboard display on redundant server, optimized for mobile devices:	
• 1 Mobile Dashboard REDU	**6AV6355-1AA31-8CK0**
• 1 Mobile Dashboard REDU UPG	**6AV6355-1CA31-8CK0**
• 10 Mobile Dashboards REDU	**6AV6355-1AA31-8CK1**
• 10 Mobile Dashboards REDU UPG	**6AV6355-1CA31-8CK1**
• 25 Mobile Dashboards REDU	**6AV6355-1AA31-8CK2**
• 25 Mobile Dashboards REDU UPG	**6AV6355-1CA31-8CK2**
• 50 Mobile Dashboards REDU	**6AV6355-1AA31-8CK3**
• 50 Mobile Dashboards REDU UPG	**6AV6355-1CA31-8CK3**
• 100 Mobile Dashboards REDU	**6AV6355-1AA31-8CK4**
• 100 Mobile Dashboards REDU UPG	**6AV6355-1CA31-8CK4**
WinCC OA – Dashboard V3.18	
Licenses for web-based dashboard display	
• 1 Dashboard	**6AV6355-1AA31-8CL0**
• 1 Dashboard UPG	**6AV6355-1CA31-8CL0**
• 10 Dashboards	**6AV6355-1AA31-8CL1**
• 10 Dashboards UPG	**6AV6355-1CA31-8CL1**
• 25 Dashboards	**6AV6355-1AA31-8CL2**
• 25 Dashboards UPG	**6AV6355-1CA31-8CL2**
• 50 Dashboards	**6AV6355-1AA31-8CL3**
• 50 Dashboards UPG	**6AV6355-1CA31-8CL3**
• 100 Dashboards	**6AV6355-1AA31-8CL4**
• 100 Dashboards UPG	**6AV6355-1CA31-8CL4**

	Article No.
WinCC OA – Dashboard REDU V3.18	
Licenses for web-based dashboard display on redundant server:	
• 1 Dashboard REDU	**6AV6355-1AA31-8CM0**
• 1 Dashboard REDU UPG	**6AV6355-1CA31-8CM0**
• 10 Dashboards REDU	**6AV6355-1AA31-8CM1**
• 10 Dashboards REDU UPG	**6AV6355-1CA31-8CM1**
• 25 Dashboards REDU	**6AV6355-1AA31-8CM2**
• 25 Dashboards REDU UPG	**6AV6355-1CA31-8CM2**
• 50 Dashboards REDU	**6AV6355-1AA31-8CM3**
• 50 Dashboards REDU UPG	**6AV6355-1CA31-8CM3**
• 100 Dashboards REDU	**6AV6355-1AA31-8CM4**
• 100 Dashboards REDU UPG	**6AV6355-1CA31-8CM4**

WinCC Open Architecture User Interfaces

Ordering data	Article No.
Software Services - version-independent	
WinCC OA – Desktop UI	
• 1 Desktop UI SUS	**6AV6355-1DA00-0CA0**
• 1 Desktop UI SMS	**6AV6355-1FA00-0CA0**
• 1 Desktop UI POS	**6AV6355-1GA00-0CA0**
• 10 Desktop UI SUS	**6AV6355-1DA00-0CA1**
• 10 Desktop UI SMS	**6AV6355-1FA00-0CA1**
• 10 Desktop UI POS	**6AV6355-1GA00-0CA1**
• 25 Desktop UI SUS	**6AV6355-1DA00-0CA2**
• 25 Desktop UI SMS	**6AV6355-1FA00-0CA2**
• 25 Desktop UI POS	**6AV6355-1GA00-0CA2**
• 50 Desktop UI SUS	**6AV6355-1DA00-0CA3**
• 50 Desktop UI SMS	**6AV6355-1FA00-0CA3**
• 50 Desktop UI POS	**6AV6355-1GA00-0CA3**
• 100 Desktop UI SUS	**6AV6355-1DA00-0CA4**
• 100 Desktop UI SMS	**6AV6355-1FA00-0CA4**
• 100 Desktop UI POS	**6AV6355-1GA00-0CA4**
WinCC OA – Desktop UI REDU	
• 1 Desktop UI REDU SUS	**6AV6355-1DA00-0CB0**
• 1 Desktop UI REDU SMS	**6AV6355-1FA00-0CB0**
• 1 Desktop UI REDU POS	**6AV6355-1GA00-0CB0**
• 10 Desktop UI REDU SUS	**6AV6355-1DA00-0CB1**
• 10 Desktop UI REDU SMS	**6AV6355-1FA00-0CB1**
• 10 Desktop UI REDU POS	**6AV6355-1GA00-0CB1**
• 25 Desktop UI REDU SUS	**6AV6355-1DA00-0CB2**
• 25 Desktop UI REDU SMS	**6AV6355-1FA00-0CB2**
• 25 Desktop UI REDU POS	**6AV6355-1GA00-0CB2**
• 50 Desktop UI REDU SUS	**6AV6355-1DA00-0CB3**
• 50 Desktop UI REDU SMS	**6AV6355-1FA00-0CB3**
• 50 Desktop UI REDU POS	**6AV6355-1GA00-0CB3**
• 100 Desktop UI REDU SUS	**6AV6355-1DA00-0CB4**
• 100 Desktop UI REDU SMS	**6AV6355-1FA00-0CB4**
• 100 Desktop UI REDU POS	**6AV6355-1GA00-0CB4**
WinCC OA – ULC UX	
• 1 ULC UX SUS	**6AV6355-1DA00-0CC0**
• 1 ULC UX SMS	**6AV6355-1FA00-0CC0**
• 1 ULC UX POS	**6AV6355-1GA00-0CC0**
• 10 ULC UX SUS	**6AV6355-1DA00-0CC1**
• 10 ULC UX SMS	**6AV6355-1FA00-0CC1**
• 10 ULC UX POS	**6AV6355-1GA00-0CC1**
• 25 ULC UX SUS	**6AV6355-1DA00-0CC2**
• 25 ULC UX SMS	**6AV6355-1FA00-0CC2**
• 25 ULC UX POS	**6AV6355-1GA00-0CC2**
• 50 ULC UX SUS	**6AV6355-1DA00-0CC3**
• 50 ULC UX SMS	**6AV6355-1FA00-0CC3**
• 50 ULC UX POS	**6AV6355-1GA00-0CC3**
• 100 ULC UX SUS	**6AV6355-1DA00-0CC4**
• 100 ULC UX SMS	**6AV6355-1FA00-0CC4**
• 100 ULC UX POS	**6AV6355-1GA00-0CC4**

	Article No.
WinCC OA – ULC UX REDU	
• 1 ULC UX REDU SUS	**6AV6355-1DA00-0CD0**
• 1 ULC UX REDU SMS	**6AV6355-1FA00-0CD0**
• 1 ULC UX REDU POS	**6AV6355-1GA00-0CD0**
• 10 ULC UX REDU SUS	**6AV6355-1DA00-0CD1**
• 10 ULC UX REDU SMS	**6AV6355-1FA00-0CD1**
• 10 ULC UX REDU POS	**6AV6355-1GA00-0CD1**
• 25 ULC UX REDU SUS	**6AV6355-1DA00-0CD2**
• 25 ULC UX REDU SMS	**6AV6355-1FA00-0CD2**
• 25 ULC UX REDU POS	**6AV6355-1GA00-0CD2**
• 50 ULC UX REDU SUS	**6AV6355-1DA00-0CD3**
• 50 ULC UX REDU SMS	**6AV6355-1FA00-0CD3**
• 50 ULC UX REDU POS	**6AV6355-1GA00-0CD3**
• 100 ULC UX REDU SUS	**6AV6355-1DA00-0CD4**
• 100 ULC UX REDU SMS	**6AV6355-1FA00-0CD4**
• 100 ULC UX REDU POS	**6AV6355-1GA00-0CD4**
WinCC OA – Mobile	
• 1 Mobile SUS	**6AV6355-1DA00-0CE0**
• 1 Mobile SMS	**6AV6355-1FA00-0CE0**
• 1 Mobile POS	**6AV6355-1GA00-0CE0**
• 10 Mobiles SUS	**6AV6355-1DA00-0CE1**
• 10 Mobiles SMS	**6AV6355-1FA00-0CE1**
• 10 Mobiles POS	**6AV6355-1GA00-0CE1**
• 25 Mobiles SUS	**6AV6355-1DA00-0CE2**
• 25 Mobiles SMS	**6AV6355-1FA00-0CE2**
• 25 Mobiles POS	**6AV6355-1GA00-0CE2**
• 50 Mobiles SUS	**6AV6355-1DA00-0CE3**
• 50 Mobiles SMS	**6AV6355-1FA00-0CE3**
• 50 Mobiles POS	**6AV6355-1GA00-0CE3**
• 100 Mobiles SUS	**6AV6355-1DA00-0CE4**
• 100 Mobiles SMS	**6AV6355-1FA00-0CE4**
• 100 Mobiles POS	**6AV6355-1GA00-0CE4**
WinCC OA – Mobile REDU	
• 1 Mobile REDU SUS	**6AV6355-1DA00-0CF0**
• 1 Mobile REDU SMS	**6AV6355-1FA00-0CF0**
• 1 Mobile REDU POS	**6AV6355-1GA00-0CF0**
• 10 Mobiles REDU SUS	**6AV6355-1DA00-0CF1**
• 10 Mobiles REDU SMS	**6AV6355-1FA00-0CF1**
• 10 Mobiles REDU POS	**6AV6355-1GA00-0CF1**
• 25 Mobiles REDU SUS	**6AV6355-1DA00-0CF2**
• 25 Mobiles REDU SMS	**6AV6355-1FA00-0CF2**
• 25 Mobiles REDU POS	**6AV6355-1GA00-0CF2**
• 50 Mobiles REDU SUS	**6AV6355-1DA00-0CF3**
• 50 Mobiles REDU SMS	**6AV6355-1FA00-0CF3**
• 50 Mobiles REDU POS	**6AV6355-1GA00-0CF3**
• 100 Mobiles REDU SUS	**6AV6355-1DA00-0CF4**
• 100 Mobiles REDU SMS	**6AV6355-1FA00-0CF4**
• 100 Mobiles REDU POS	**6AV6355-1GA00-0CF4**

Ordering data	Article No.
WinCC OA – Operator	
• 1 Device SUS	**6AV6355-1DA00-0CG0**
• 1 Device SMS	**6AV6355-1FA00-0CG0**
• 1 Device POS	**6AV6355-1GA00-0CG0**
• 3 Devices SUS	**6AV6355-1DA00-0CG1**
• 3 Devices SMS	**6AV6355-1FA00-0CG1**
• 3 Devices POS	**6AV6355-1GA00-0CG1**
• 10 Devices SUS	**6AV6355-1DA00-0CG2**
• 10 Devices SMS	**6AV6355-1FA00-0CG2**
• 10 Devices POS	**6AV6355-1GA00-0CG2**
• 25 Devices SUS	**6AV6355-1DA00-0CG3**
• 25 Devices SMS	**6AV6355-1FA00-0CG3**
• 25 Devices POS	**6AV6355-1GA00-0CG3**
• 50 Devices SUS	**6AV6355-1DA00-0CG4**
• 50 Devices SMS	**6AV6355-1FA00-0CG4**
• 50 Devices POS	**6AV6355-1GA00-0CG4**
WinCC OA – Para Standard	
• Para Standard SUS	**6AV6355-1DA00-0CH0**
• Para Standard SMS	**6AV6355-1FA00-0CH0**
• Para Standard POS	**6AV6355-1GA00-0CH0**
WinCC OA – Para Standard REDU	
• Para Standard REDU SUS	**6AV6355-1DA00-0CH1**
• Para Standard REDU SMS	**6AV6355-1FA00-0CH1**
• Para Standard REDU POS	**6AV6355-1GA00-0CH1**
WinCC OA – Para Remote	
• Para Remote SUS	**6AV6355-1DA00-0CH2**
• Para Remote SMS	**6AV6355-1FA00-0CH2**
• Para Remote POS	**6AV6355-1GA00-0CH2**
WinCC OA – Mobile Dashboard	
• 1 Mobile Dashboard SUS	**6AV6355-1DA00-0CJ0**
• 1 Mobile Dashboard SMS	**6AV6355-1FA00-0CJ0**
• 1 Mobile Dashboard POS	**6AV6355-1GA00-0CJ0**
• 10 Mobile Dashboards SUS	**6AV6355-1DA00-0CJ1**
• 10 Mobile Dashboards SMS	**6AV6355-1FA00-0CJ1**
• 10 Mobile Dashboards POS	**6AV6355-1GA00-0CJ1**
• 25 Mobile Dashboards SUS	**6AV6355-1DA00-0CJ2**
• 25 Mobile Dashboards SMS	**6AV6355-1FA00-0CJ2**
• 25 Mobile Dashboards POS	**6AV6355-1GA00-0CJ2**
• 50 Mobile Dashboards SUS	**6AV6355-1DA00-0CJ3**
• 50 Mobile Dashboards SMS	**6AV6355-1FA00-0CJ3**
• 50 Mobile Dashboards POS	**6AV6355-1GA00-0CJ3**
• 100 Mobile Dashboards SUS	**6AV6355-1DA00-0CJ4**
• 100 Mobile Dashboards SMS	**6AV6355-1FA00-0CJ4**
• 100 Mobile Dashboards POS	**6AV6355-1GA00-0CJ4**

	Article No.
WinCC OA – Mobile Dashboard REDU	
• 1 Mobile Dashboard REDU SUS	**6AV6355-1DA00-0CK0**
• 1 Mobile Dashboard REDU SMS	**6AV6355-1FA00-0CK0**
• 1 Mobile Dashboard REDU POS	**6AV6355-1GA00-0CK0**
• 10 Mobile Dashboards REDU SUS	**6AV6355-1DA00-0CK1**
• 10 Mobile Dashboards REDU SMS	**6AV6355-1FA00-0CK1**
• 10 Mobile Dashboards REDU POS	**6AV6355-1GA00-0CK1**
• 25 Mobile Dashboards REDU SUS	**6AV6355-1DA00-0CK2**
• 25 Mobile Dashboards REDU SMS	**6AV6355-1FA00-0CK2**
• 25 Mobile Dashboards REDU POS	**6AV6355-1GA00-0CK2**
• 50 Mobile Dashboards REDU SUS	**6AV6355-1DA00-0CK3**
• 50 Mobile Dashboards REDU SMS	**6AV6355-1FA00-0CK3**
• 50 Mobile Dashboards REDU POS	**6AV6355-1GA00-0CK3**
• 100 Mobile Dashboards REDU SUS	**6AV6355-1DA00-0CK4**
• 100 Mobile Dashboards REDU SMS	**6AV6355-1FA00-0CK4**
• 100 Mobile Dashboards REDU POS	**6AV6355-1GA00-0CK4**
WinCC OA – Dashboard	
• 1 Dashboard SUS	**6AV6355-1DA00-0CL0**
• 1 Dashboard SMS	**6AV6355-1FA00-0CL0**
• 1 Dashboard POS	**6AV6355-1GA00-0CL0**
• 10 Dashboards SUS	**6AV6355-1DA00-0CL1**
• 10 Dashboards SMS	**6AV6355-1FA00-0CL1**
• 10 Dashboards POS	**6AV6355-1GA00-0CL1**
• 25 Dashboards SUS	**6AV6355-1DA00-0CL2**
• 25 Dashboards SMS	**6AV6355-1FA00-0CL2**
• 25 Dashboards POS	**6AV6355-1GA00-0CL2**
• 50 Dashboards SUS	**6AV6355-1DA00-0CL3**
• 50 Dashboards SMS	**6AV6355-1FA00-0CL3**
• 50 Dashboards POS	**6AV6355-1GA00-0CL3**
• 100 Dashboards SUS	**6AV6355-1DA00-0CL4**
• 100 Dashboards SMS	**6AV6355-1FA00-0CL4**
• 100 Dashboards POS	**6AV6355-1GA00-0CL4**
WinCC OA – Dashboard REDU	
• 1 Dashboard REDU SUS	**6AV6355-1DA00-0CM0**
• 1 Dashboard REDU SMS	**6AV6355-1FA00-0CM0**
• 1 Dashboard REDU POS	**6AV6355-1GA00-0CM0**
• 10 Dashboards REDU SUS	**6AV6355-1DA00-0CM1**
• 10 Dashboards REDU SMS	**6AV6355-1FA00-0CM1**
• 10 Dashboards REDU POS	**6AV6355-1GA00-0CM1**
• 25 Dashboards REDU SUS	**6AV6355-1DA00-0CM2**
• 25 Dashboards REDU SMS	**6AV6355-1FA00-0CM2**
• 25 Dashboards REDU POS	**6AV6355-1GA00-0CM2**
• 50 Dashboards REDU SUS	**6AV6355-1DA00-0CM3**
• 50 Dashboards REDU SMS	**6AV6355-1FA00-0CM3**
• 50 Dashboards REDU POS	**6AV6355-1GA00-0CM3**
• 100 Dashboards REDU SUS	**6AV6355-1DA00-0CM4**
• 100 Dashboards REDU SMS	**6AV6355-1FA00-0CM4**
• 100 Dashboards REDU POS	**6AV6355-1GA00-0CM4**

More information

More information is available on the internet at

http://www.siemens.com/wincc-open-architecture

WinCC Open Architecture Drivers

Overview

WinCC Open Architecture Drivers

In WinCC Open Architecture (WinCC OA), drivers handle communication with the control and field level.

Since numerous and very different forms of communication are possible with the PLCs or telecontrol nodes, there are several different drivers that can be selected.

The PLC used or the associated communication bus determines which WinCC OA Driver is to be used.

The driver reads current states, measured or counted values from the field and, in the other direction, directs commands and setpoints to the lower-level PLCs.

Benefits

- Simple connection of devices with various protocols
- Open system with possibilities for flexible extension
- Different devices can be addressed in a project
- Platform-independent support of different PLCs
- Everything in one system, from serial ports to cloud connectivity

Application

Due to the high number of drivers, WinCC OA is suitable for complex projects and especially for retrofitting existing systems. In addition to proven Siemens standards and generally used open standards such as OPC UA or MQTT, special industry standards such as IEC 61400 and IEC 104 are also supported.

Function

Several different drivers can run simultaneously on one server in WinCC OA. Data transmission can be event-based or polled in scan cycles.

Pre-processing of data is included:

- Scaling/conversion in both directions
- Type transformations
- Smoothing (value, time, noise reduction, etc.)
- Optimized reading:
  "Poll on use mechanisms"
- With certain drivers, different polling groups and corresponding time-shifted polling times can be desynchronized (Sync on sec) for better load distribution on the managers.

Time stamping can be obtained from the I/O. Resolution up to 1 ms for value storage.
Regular retrieval and processing of values is based on driver-specific time periods.

In addition to the listed drivers, customer-specific drivers can be produced on request or via the C++ API.

As of WinCC OA version 3.20, drivers can only be ordered in groups. One license of the corresponding group is required for each protocol needed. **Example**: OPC UA Server and Modbus drivers are required: Two licenses of Standard Protocol (Connectivity) required.

Function

Group	Content
Standard Protocol (Connectivity)	OPC UA Server, Modbus, Modbus server, MQTT, SNMP, ProfiNet, Omron FINS, Ethernet/IP, IEC101, RK512, SAIA S-Bus, SSI, BACnet. Insights Hub Connector (MindSphere)
Premium Protocol (Connectivity)	IEC104, IEC 61850 / 61400, DNP3, PROFIsafe, SINAUT, TLS, NTCIP
Included drivers (included in the Server Basic package)	S7/S7+, OPC Client, OPC UA Client, OPC Server

Protocol	Description
S7	Includes drivers for unlimited connection of S7-3xx and S7-4xx Controllers. S7-12xx and S7-15xx Controllers can be connected for a limited time (8, 64 or 512 connections). Connection of Open Controller, PLC-Sim, symbolic addressing, all protection levels and browsing of TIA Portal projects and online browsing of S7-1xxx Controllers.
PROFINET	Driver for connecting programmable controllers that support this fieldbus. Requires a compatible PROFINET network adapter (e.g. CP1616) and enables consistent communication from the PLC to the SCADA system without protocol break.
PROFIsafe	Supports the safety-oriented PROFIsafe protocol. Requires a compatible PROFINET network adapter (e.g. CP1616). This license also includes the operation of PROFINET.
BACnet	BACnet provides an integrated BACnet-compliant online/offline engineering solution for building automation technology, including object library. Designed for heating, ventilation and air-conditioning, lighting control and safety engineering. The BACnet license allows the use of the BACnet driver, diagnostics and the BACnet engineering environment. Possession of a WinCC OA Para license is a prerequisite. The engineering environment consists of BACnet object library (including faceplates), BACnet browser, EDE tool and EDE file interface. BACnet objects are intended for dedicated use with the BACnet driver. They can be expanded additively or with the help of BACnetpacks, which work in the same way as the WinCC OA PowerPacks.
DNP3	The DNP3 (Distributed Network Protocol 3) driver is an open, rugged and modern protocol with characteristics and strengths similar to the IEC driver. The transfer of any number of frames with different data types takes place between the WinCC OA System (Master) and the remote stations (Slave).
IEC 60870 101, 104	IEC drivers are standardized telecontrol drivers that can process proprietary frames. IEC stands for International Electrotechnical Commission, the international standardization committee for electrical engineering. • IEC 60870-5-104 for data exchange via TCP/IP • IEC 60870-5-101 for serial connection
IEC 61850/61400	IEC 61850 and IEC 61400 clients define an architecture that covers special needs in substation automation. As a driver for medium and high voltage technology, it defines a data model and the communications services for interaction with and between the elements of a substation, such as power supply units, circuit breakers, protective devices etc. A description language and a system configuration language (SCL) have been defined for technical purposes. Consists of the IEC 61850 driver (client – according to IEC 61850 Standard Part 7 & Part 8 Edition 2 & IEC 61400-25) and the IEC 61850/61400 browser.
SAIA S-Bus	The SAIA S-Bus driver is a serial driver that natively supports the SAIA S-Bus for connecting SAIA PCD control gear to WinCC OA projects.
TLS	The TLS standard (Technische Lieferbedingungen für Streckenstationen – Technical Delivery Conditions for Remote Stations) defines the use and setup of traffic control systems in Austria. The WinCC OA TLS gateway is designed for communication with TLS-compliant devices. The gateway takes over the complete communication by providing the corresponding values according to the TLS standard or by reacting to their reception. The TLS gateway obtains its parameters via configuration files that define the operating mode and TLS terminals.
SSI	The SSI (Synchronous Serial Interface) driver is used to connect SAT telecontrol systems. The data is exchanged via the LAN (Ethernet, IEEE 802.3); the frame formats used are the SSI formats defined by SAT. The SK 1703 telecontrol components with a suitable communication card (KE/ET) are supported.
Modbus	Modbus TCP is based on the serial Modbus protocol (as part of IEC 61158), which was adapted for TCP/IP. The Modbus TCP driver can also be used for Modbus TCP or UNICOS.

Function

RK512	Serial driver for coupling via the RK512 protocol to the internal memory area of a SIEMENS S5 Controller.
SINAUT	SINAUT (**SI**emens **N**etwork **AUT**omation) is a communication protocol for automated monitoring and control of remote process stations on the basis of SIMATIC S7. Communication takes place via TCP/IP.
SNMP	SNMP (Simple Network Management Protocol) is a protocol for monitoring network elements (servers, workstations, routers, switches, hubs, etc.) and their functions. It supports SNMP V1, V2 and V3.
Cerberus	Cerberus/ DMS7000 is a fire, intrusion and gas alarm system from Siemens. The Cerberus driver guarantees communication to and from the central fire alarm systems and building security facilities in the event of a fire, gas or intruder alarm. Communication is realized via C-Bus (Cer-Ban) using the serial interface RS232 (MK 7022). This option is not available for Linux. Notice: This driver is no longer supported as of WinCC OA V3.19!
EIP (Ethernet/IP)	Ethernet/IP is used for communication with several PLC generations and families from Rockwell Automation / Allen Bradley. The protocol is part of the application layer and is based on the standard TCP/IP network protocol.
OPC UA Client	OPC UA Client allows access to process data and alarms from an OPC UA Server, according to the OPC Foundation standard.
OPC Client	OPC (OLE for Process Control) is the use of OLE/COM technology for process control systems. The WinCC OA OPC Client (DA, HDA & A&E) allows access to process data and alarms of an OPC Server, according to the specifications of the OPC Foundation.
MQTT	MQTT (Message Queuing Telemetry Transport) is a message protocol based on TCP/IP and is intended for communication in networks with limited bandwidth. An MQTT communication network consists of at least one server (broker) and several clients. A client can either publish data or subscribe to data. Communication is therefore based on the publish/subscribe principle. The MQTT license allows the coupling of a WinCC OA Server with a MQTT broker for simplified data exchange with other smart devices (sensors or actuators) or for simple cloud connection (AWS, Azure, etc.). **The MQTT Broker is not included in the license!**
NTCIP	Drivers based on the NTCIP 1203 Standard enable direct communication as a gateway between WinCC OA and variable message signs from different manufacturers.
Customer Interfaces	On request, additional interfaces can be provided against specification and corresponding product planning or developed by the customer. A corresponding interface must be taken into account and ordered for the license configuration.

[1] Further drivers on request or via C++ API

Ordering data	Article No.
V3.20	
WinCC OA – Driver S7 V3.20	
Unlimited connection of S7-3x8x and S7-4xx, limited connection of S7-12xx and S7-15xx (options for max 64, 512)	
• Driver S7 64	**6AV6355-1AA50-0DA1**
• Driver S7 64 UPG	**6AV6355-1CA50-0DA1**
• Driver S7 512	**6AV6355-1AA50-0DA2**
• Driver S7 512 UPG	**6AV6355-1CA50-0DA2**
WinCC OA Standard Protocol (Connectivity) V3.20	
• Standard Protocol (Connectivity)	**6AV6355-1AA50-0DN0**
• Standard Protocol (Connectivity) UPG	**6AV6355-1CA50-0DN0**
• Standard Protocol (Connectivity) SUS	**6AV6355-1DA00-0DN0**
• Standard Protocol (Connectivity) SMS	**6AV6355-1FA00-0DN0**
• Standard Protocol (Connectivity) POS	**6AV6355-1GA00-0DN0**
WinCC OA – Premium Protocol (Connectivity) V3.20	
• Premium Protocol (Connectivity)	**6AV6355-1AA50-0DN1**
• Premium Protocol (Connectivity) UPG	**6AV6355-1CA50-0DN1**
• Premium Protocol (Connectivity) SUS	**6AV6355-1DA00-0DN1**
• Premium Protocol (Connectivity) SMS	**6AV6355-1FA00-0DN1**
• Premium Protocol (Connectivity) POS	**6AV6355-1GA00-0DN1**
WinCC OA – BACnet objects V3.20	
Dedicated PowerTags for use with the BACnet driver	
• BACnet objects 200	**6AV6355-1AA50-0DL1**
• BACnet objects 200 UPG	**6AV6355-1CA50-0DL1**
• BACnet objects 500	**6AV6355-1AA50-0DL2**
• BACnet objects 500 UPG	**6AV6355-1CA50-0DL2**
• BACnet objects 1k	**6AV6355-1AA50-0DL3**
• BACnet objects 1k UPG	**6AV6355-1CA50-0DL3**
• BACnet objects 3k	**6AV6355-1AA50-0DL4**
• BACnet objects 3k UPG	**6AV6355-1CA50-0DL4**
• BACnet objects 5k	**6AV6355-1AA50-0DL5**
• BACnet objects 5k UPG	**6AV6355-1CA50-0DL5**
• BACnet objects 30k	**6AV6355-1AA50-0DL6**
• BACnet objects 30k UPG	**6AV6355-1CA50-0DL6**
• BACnet objects unlimited	**6AV6355-1AA50-0DL7**
• BACnet objects unlimited UPG	**6AV6355-1CA50-0DL7**
WinCC OA – BACnetpacks V3.20	
For the step-by-step increase of BACnet objects	
• BACnetpack 200-500	**6AV6355-1AA50-0DM0**
• BACnetpack 200-500 UPG	**6AV6355-1CA50-0DM0**
• BACnetpack 500-1k	**6AV6355-1AA50-0DM1**
• BACnetpack 500-1k UPG	**6AV6355-1CA50-0DM1**
• BACnetpack 1k-3k	**6AV6355-1AA50-0DM2**
• BACnetpack 1k-3k UPG	**6AV6355-1CA50-0DM2**
• BACnetpack 3k-5k	**6AV6355-1AA50-0DM3**
• BACnetpack 3k-5k UPG	**6AV6355-1CA50-0DM3**
• BACnetpack 5k-30k	**6AV6355-1AA50-0DM4**
• BACnetpack 5k-30k UPG	**6AV6355-1CA50-0DM4**
• BACnetpack 30k-UL	**6AV6355-1AA50-0DM5**
• BACnetpack 30k-UL UPG	**6AV6355-1CA50-0DM5**

	Article No.
V3.19	
WinCC OA – Driver S7 V3.19	
Unlimited connection of S7-3x8x and S7-4xx, limited connection of S7-12xx and S7-15xx (options for max 64, 512)	
• Driver S7 64	**6AV6355-1AA47-7DA1**
• Driver S7 64 UPG	**6AV6355-1CA47-7DA1**
• Driver S7 512	**6AV6355-1AA47-7DA2**
• Driver S7 512 UPG	**6AV6355-1CA47-7DA2**
WinCC OA – Driver PROFINET V3.19	
Connection of PROFINET-compatible devices. Requires PROFINET network adapter	
• Driver PROFINET	**6AV6355-1AA47-7DA4**
• Driver PROFINET UPG	**6AV6355-1CA47-7DA4**
WinCC OA – Driver PROFIsafe V3.19	
Safety-related PROFIsafe protocol. Requires PROFINET network adapter. Includes operation of PROFINET.	
• Driver PROFIsafe	**6AV6355-1AA47-7DA5**
• Driver PROFIsafe UPG	**6AV6355-1CA47-7DA5**
WinCC OA – BACnet V3.19	
Use of BACnet drivers, diagnostics, BACnet engineering environment (BACnet object library (incl. faceplates), BACnet browser, EDE tool, EDE file interface)	
• BACnet	**6AV6355-1AA47-7EB0**
• BACnet UPG	**6AV6355-1CA47-7EB0**
WinCC OA – BACnet objects V3.19	
Dedicated PowerTags for use with the BACnet driver.	
• BACnet objects 200	**6AV6355-1AA47-7DL1**
• BACnet objects 200 UPG	**6AV6355-1CA47-7DL1**
• BACnet objects 500	**6AV6355-1AA47-7DL2**
• BACnet objects 500 UPG	**6AV6355-1CA47-7DL2**
• BACnet objects 1k	**6AV6355-1AA47-7DL3**
• BACnet objects 1k UPG	**6AV6355-1CA47-7DL3**
• BACnet objects 3k	**6AV6355-1AA47-7DL4**
• BACnet objects 3k UPG	**6AV6355-1CA47-7DL4**
• BACnet objects 5k	**6AV6355-1AA47-7DL5**
• BACnet objects 5k UPG	**6AV6355-1CA47-7DL5**
• BACnet objects 30k	**6AV6355-1AA47-7DL6**
• BACnet objects 30k UPG	**6AV6355-1CA47-7DL6**
• BACnet objects unlimited	**6AV6355-1AA47-7DL7**
• BACnet objects unlimited UPG	**6AV6355-1CA47-7DL7**
WinCC OA – BACnetpacks V3.19	
For the step-by-step increase of BACnet objects	
• BACnetpack 200/500	**6AV6355-1AA47-7DM0**
• BACnetpack 200/500 UPG	**6AV6355-1CA47-7DM0**
• BACnetpack 500/1k	**6AV6355-1AA47-7DM1**
• BACnetpack 500/1k UPG	**6AV6355-1CA47-7DM1**
• BACnetpack 1k/3k	**6AV6355-1AA47-7DM2**
• BACnetpack 1k/3k UPG	**6AV6355-1CA47-7DM2**
• BACnetpack 3k/5k	**6AV6355-1AA47-7DM3**
• BACnetpack 3k/5k UPG	**6AV6355-1CA47-7DM3**
• BACnetpack 5k/30k	**6AV6355-1AA47-7DM4**
• BACnetpack 5k/30k UPG	**6AV6355-1CA47-7DM4**
• BACnetpack 30k/UL	**6AV6355-1AA47-7DM5**
• BACnetpack 30k/UL UPG	**6AV6355-1CA47-7DM5**

WinCC Open Architecture Drivers

Ordering data	Article No.
WinCC OA – Driver DNP3 V3.19	
Connection of WinCC OA Server with devices via DNP3 protocol.	
• Driver DNP3	**6AV6355-1AA47-7DB2**
• Driver DNP3 UPG	**6AV6355-1CA47-7DB2**
WinCC OA – Driver IEC 101 V3.19	
Serial driver according to IEC 60870-5-101	
• Driver IEC 101	**6AV6355-1AA47-7DC0**
• Driver IEC 101 UPG	**6AV6355-1CA47-7DC0**
WinCC OA – Driver IEC 104 V3.19	
TCP/IP drivers according to IEC 60870-5-104	
• Driver IEC 104	**6AV6355-1AA47-7DC1**
• Driver IEC 104 UPG	**6AV6355-1CA47-7DC1**
WinCC OA – Driver IEC 61850/61400 V3.19	
Medium- and high-voltage technology drivers according to IEC 61850. Consists of IEC 61850 driver and IEC 61850/61400 browser	
• Driver IEC 61850/61400	**6AV6355-1AA47-7DC2**
• Driver IEC 61850/61400 UPG	**6AV6355-1CA47-7DC2**
WinCC OA – Driver SAIA-S-Bus V3.19	
Serial driver for native SAIA S-Bus support	
• Driver SAIA S-Bus	**6AV6355-1AA47-7DC3**
• Driver SAIA S-Bus UPG	**6AV6355-1CA47-7DC3**
WinCC OA – Driver TLS V3.19	
TLS gateway for setting up traffic control systems in Austria.	
• Driver TLS	**6AV6355-1AA47-7DC4**
• Driver TLS UPG	**6AV6355-1CA47-7DC4**
WinCC OA – Driver SSI V3.1	
Synchronous Serial Interface, driver for Ethernet communication via satellite telecontrol components.	
• Driver SSI	**6AV6355-1AA47-7DC5**
• Driver SSI UPG	**6AV6355-1CA47-7DC5**
WinCC OA – Driver Modbus V3.19	
Driver for the Modbus TCP standard (as part of IEC 61158)	
• Driver Modbus	**6AV6355-1AA47-7DD0**
• Driver Modbus UPG	**6AV6355-1CA47-7DD0**

	Article No.
WinCC OA – Driver RK512 V3.19	
Serial driver for connecting to internal memory of SIEMENS S5 via RK512 protocol	
• Driver RK512	**6AV6355-1AA47-7DE0**
• Driver RK512 UPG	**6AV6355-1CA47-7DE0**
WinCC OA – Driver SINAUT V3.19	
SIemens Network AUTomation for connection via SINAUT protocol.	
• Driver SINAUT	**6AV6355-1AA47-7DF2**
• Driver SINAUT UPG	**6AV6355-1CA47-7DF2**
WinCC OA – Driver SNMP V3.19	
Simple Network Management Protocol driver for network monitoring. Supports SNMP up to version V3	
• Driver SNMP	**6AV6355-1AA47-7DG0**
• Driver SNMP UPG	**6AV6355-1CA47-7DG0**
WinCC OA – Driver Cerberus V3.19	
For coupling with Siemens fire alarm system DMS7000/Cerberus.	
• Driver Cerberus	**6AV6355-1AA47-7DH0**
• Driver Cerberus UPG	**6AV6355-1CA47-7DH0**
WinCC OA – Driver EIP V3.19	
Ethernet/IP driver for the connection of external PLCs (e.g. Allen Bradley, etc.)	
• Driver EIP	**6AV6355-1AA47-7DJ0**
• Driver EIP UPG	**6AV6355-1CA47-7DJ0**
WinCC OA – Driver MQTT Client V3.19	
Coupling of WinCC OA Server with an MQTT Broker (not included)	
• Driver MQTT Client	**6AV6355-1AA47-7DK2**
• Driver MQTT Client UPG	**6AV6355-1CA47-7DK2**
WinCC OA – Driver NTCIP V3.19	
NTCIP 1203 Standard for communication with variable message signs	
• Driver NTCIP	**6AV6355-1AA47-7DC6**
• Driver NTCIP UPG	**6AV6355-1CA47-7DC6**

Ordering data	Article No.
V3.18	
WinCC OA – Driver S7 V3.18	
Unlimited connection of S7-3x8x and S7-4xx, limited connection of S7-12xx and S7-15xx (options for max 64, 512)	
• Driver S7 64	**6AV6355-1AA31-8DA1**
• Driver S7 64 UPG	**6AV6355-1CA31-8DA1**
• Driver S7 512	**6AV6355-1AA31-8DA2**
• Driver S7 512 UPG	**6AV6355-1CA31-8DA2**
WinCC OA – Driver PROFINET V3.18	
Connection of PROFINET-compatible devices. Requires PROFINET network adapter	
• Driver PROFINET	**6AV6355-1AA31-8DA4**
• Driver PROFINET UPG	**6AV6355-1CA31-8DA4**
WinCC OA – Driver PROFIsafe V3.18	
Safety-related PROFIsafe protocol. Requires PROFINET network adapter. Includes operation of PROFINET.	
• Driver PROFIsafe	**6AV6355-1AA31-8DA5**
• Driver PROFIsafe UPG	**6AV6355-1CA31-8DA5**
WinCC OA – BACnet V3.18	
Use of BACnet drivers, diagnostics, BACnet engineering environment (BACnet object library (incl. faceplates), BACnet browser, EDE tool, EDE file interface)	
• BACnet	**6AV6355-1AA31-8EB0**
• BACnet UPG	**6AV6355-1CA31-8EB0**
WinCC OA – BACnet objects V3.18	
Dedicated PowerTags for use with the BACnet driver.	
• BACnet objects 200	**6AV6355-1AA31-8DL1**
• BACnet objects 200 UPG	**6AV6355-1CA31-8DL1**
• BACnet objects 500	**6AV6355-1AA31-8DL2**
• BACnet objects 500 UPG	**6AV6355-1CA31-8DL2**
• BACnet objects 1k	**6AV6355-1AA31-8DL3**
• BACnet objects 1k UPG	**6AV6355-1CA31-8DL3**
• BACnet objects 3k	**6AV6355-1AA31-8DL4**
• BACnet objects 3k UPG	**6AV6355-1CA31-8DL4**
• BACnet objects 5k	**6AV6355-1AA31-8DL5**
• BACnet objects 5k UPG	**6AV6355-1CA31-8DL5**
• BACnet objects 30k	**6AV6355-1AA31-8DL6**
• BACnet objects 30k UPG	**6AV6355-1CA31-8DL6**
• BACnet objects unlimited	**6AV6355-1AA31-8DL7**
• BACnet objects unlimited UPG	**6AV6355-1CA31-8DL7**

	Article No.
WinCC OA – BACnetpacks V3.18	
For the step-by-step increase of BACnet objects	
• BACnetpack 200/500	**6AV6355-1AA31-8DM0**
• BACnetpack 200/500 UPG	**6AV6355-1CA31-8DM0**
• BACnetpack 500/1k	**6AV6355-1AA31-8DM1**
• BACnetpack 500/1k UPG	**6AV6355-1CA31-8DM1**
• BACnetpack 1k/3k	**6AV6355-1AA31-8DM2**
• BACnetpack 1k/3k UPG	**6AV6355-1CA31-8DM2**
• BACnetpack 3k/5k	**6AV6355-1AA31-8DM3**
• BACnetpack 3k/5k UPG	**6AV6355-1CA31-8DM3**
• BACnetpack 5k/30k	**6AV6355-1AA31-8DM4**
• BACnetpack 5k/30k UPG	**6AV6355-1CA31-8DM4**
• BACnetpack 30k/UL	**6AV6355-1AA31-8DM5**
• BACnetpack 30k/UL UPG	**6AV6355-1CA31-8DM5**
WinCC OA – Driver DNP3 V3.18	
Connection of WinCC OA Server with devices via DNP3 protocol.	
• Driver DNP3	**6AV6355-1AA31-8DB2**
• Driver DNP3 UPG	**6AV6355-1CA31-8DB2**
WinCC OA – Driver IEC 101 V3.18	
Serial driver according to IEC 60870-5-101	
• Driver IEC 101	**6AV6355-1AA31-8DC0**
• Driver IEC 101 UPG	**6AV6355-1CA31-8DC0**
WinCC OA – Driver IEC 104 V3.18	
TCP/IP drivers according to IEC 60870-5-104	
• Driver IEC 104	**6AV6355-1AA31-8DC1**
• Driver IEC 104 UPG	**6AV6355-1CA31-8DC1**
WinCC OA – Driver IEC 61850/61400 V3.18	
Medium- and high-voltage technology drivers according to IEC 61850. Consists of IEC 61850 driver and IEC 61850/61400 browser	
• Driver IEC 61850/61400	**6AV6355-1AA31-8DC2**
• Driver IEC 61850/61400 UPG	**6AV6355-1CA31-8DC2**
WinCC OA – Driver SAIA S-Bus V3.18	
Serial driver for native SAIA S-Bus support	
• Driver SAIA S-Bus	**6AV6355-1AA31-8DC3**
• Driver SAIA S-Bus UPG	**6AV6355-1CA31-8DC3**
WinCC OA – Driver TLS V3.18	
TLS gateway for setting up traffic control systems in Austria.	
• Driver TLS	**6AV6355-1AA31-8DC4**
• Driver TLS UPG	**6AV6355-1CA31-8DC4**

WinCC Open Architecture Drivers

Ordering data	Article No.
WinCC OA – Driver SSI V3.18	
Synchronous Serial Interface, driver for Ethernet communication via satellite telecontrol components.	
• Driver SSI	**6AV6355-1AA31-8DC5**
• Driver SSI UPG	**6AV6355-1CA31-8DC5**
WinCC OA – Driver Modbus V3.18	
Driver for the Modbus TCP standard (as part of IEC 61158)	
• Driver Modbus	**6AV6355-1AA31-8DD0**
• Driver Modbus UPG	**6AV6355-1CA31-8DD0**
WinCC OA – Driver RK512 V3.18	
Serial driver for connecting to internal memory of SIEMENS S5 via RK512 protocol	
• Driver RK512	**6AV6355-1AA31-8DE0**
• Driver RK512 UPG	**6AV6355-1CA31-8DE0**
WinCC OA – Driver SINAUT V3.18	
SIemens Network AUTomation for connection via SINAUT protocol.	
• Driver SINAUT	**6AV6355-1AA31-8DF2**
• Driver SINAUT UPG	**6AV6355-1CA31-8DF2**
WinCC OA – Driver SNMP V3.18	
Simple Network Management Protocol driver for network monitoring. Supports SNMP up to version V3	
• Driver SNMP	**6AV6355-1AA31-8DG0**
• Driver SNMP UPG	**6AV6355-1CA31-8DG0**
WinCC OA – Driver Cerberus V3.18	
For coupling with Siemens fire alarm system DMS7000/Cerberus.	
• Driver Cerberus	**6AV6355-1AA31-8DH0**
• Driver Cerberus UPG	**6AV6355-1CA31-8DH0**
WinCC OA – Driver EIP V3.18	
Ethernet/IP driver for the connection of external PLCs (e.g. Allen Bradley, etc.)	
• Driver EIP	**6AV6355-1AA31-8DJ0**
• Driver EIP UPG	**6AV6355-1CA31-8DJ0**
WinCC OA – Driver Omron FINS V3.18	
Omron FINS driver for connection to Omron PLCs	
• Driver Omron FINS	**6AV6355-1AA31-8DJ1**
• Driver Omron FINS UPG	**6AV6355-1CA31-8DJ1**
WinCC OA – Driver MQTT Client V3.18	
Coupling of WinCC OA Server with an MQTT Broker (not included)	
• Driver MQTT Client	**6AV6355-1AA31-8DK2**
• Driver MQTT Client UPG	**6AV6355-1CA31-8DK2**
WinCC OA – Driver NTCIP V3.18	
NTCIP 1203 Standard for communication with variable message signs	
• Driver NTCIP	**6AV6355-1AA31-8DC6**
• Driver NTCIP UPG	**6AV6355-1CA31-8DC6**

	Article No.
Software Services - version-independent	
WinCC OA – Driver S7	
• Driver S7 64 SUS	**6AV6355-1DA00-0DA1**
• Driver S7 64 SMS	**6AV6355-1FA00-0DA1**
• Driver S7 64 POS	**6AV6355-1GA00-0DA1**
• Driver S7 512 SUS	**6AV6355-1DA00-0DA2**
• Driver S7 512 SMS	**6AV6355-1FA00-0DA2**
• Driver S7 512 POS	**6AV6355-1GA00-0DA2**
WinCC OA – Driver PROFINET	
• Driver PROFINET SUS	**6AV6355-1DA00-0DA4**
• Driver PROFINET SMS	**6AV6355-1FA00-0DA4**
• Driver PROFINET POS	**6AV6355-1GA00-0DA4**
WinCC OA – Driver PROFIsafe	
• Driver PROFIsafe SUS	**6AV6355-1DA00-0DA5**
• Driver PROFIsafe SMS	**6AV6355-1FA00-0DA5**
• Driver PROFIsafe POS	**6AV6355-1GA00-0DA5**
WinCC OA – BACnet	
• BACnet SUS	**6AV6355-1DA00-0EB0**
• BACnet SMS	**6AV6355-1FA00-0EB0**
• BACnet POS	**6AV6355-1GA00-0EB0**
WinCC OA – BACnet objects	
• BACnet objects 200 SUS	**6AV6355-1DA00-0DL1**
• BACnet objects 200 SMS	**6AV6355-1FA00-0DL1**
• BACnet objects 200 POS	**6AV6355-1GA00-0DL1**
• BACnet objects 500 SUS	**6AV6355-1DA00-0DL2**
• BACnet objects 500 SMS	**6AV6355-1FA00-0DL2**
• BACnet objects 500 POS	**6AV6355-1GA00-0DL2**
• BACnet objects 1k SUS	**6AV6355-1DA00-0DL3**
• BACnet objects 1k SMS	**6AV6355-1FA00-0DL3**
• BACnet objects 1k POS	**6AV6355-1GA00-0DL3**
• BACnet objects 3k SUS	**6AV6355-1DA00-0DL4**
• BACnet objects 3k SMS	**6AV6355-1FA00-0DL4**
• BACnet objects 3k POS	**6AV6355-1GA00-0DL4**
• BACnet objects 5k SUS	**6AV6355-1DA00-0DL5**
• BACnet objects 5k SMS	**6AV6355-1FA00-0DL5**
• BACnet objects 5k POS	**6AV6355-1GA00-0DL5**
• BACnet objects 30k SUS	**6AV6355-1DA00-0DL6**
• BACnet objects 30k SMS	**6AV6355-1FA00-0DL6**
• BACnet objects 30k POS	**6AV6355-1GA00-0DL6**
• BACnet objects unlimited SUS	**6AV6355-1DA00-0DL7**
• BACnet objects unlimited SMS	**6AV6355-1FA00-0DL7**
• BACnet objects unlimited POS	**6AV6355-1GA00-0DL7**
WinCC OA – BACnetpacks	
• BACnetpack 200/500 SUS	**6AV6355-1DA00-0DM0**
• BACnetpack 200/500 SMS	**6AV6355-1FA00-0DM0**
• BACnetpack 200/500 POS	**6AV6355-1GA00-0DM0**
• BACnetpack 500/1k SUS	**6AV6355-1DA00-0DM1**
• BACnetpack 500/1k SMS	**6AV6355-1FA00-0DM1**
• BACnetpack 500/1k POS	**6AV6355-1GA00-0DM1**
• BACnetpack 1k/3k SUS	**6AV6355-1DA00-0DM2**
• BACnetpack 1k/3k SMS	**6AV6355-1FA00-0DM2**
• BACnetpack 1k/3k POS	**6AV6355-1GA00-0DM2**
• BACnetpack 3k/5k SUS	**6AV6355-1DA00-0DM3**
• BACnetpack 3k/5k SMS	**6AV6355-1FA00-0DM3**
• BACnetpack 3k/5k POS	**6AV6355-1GA00-0DM3**
• BACnetpack 5k/30k SUS	**6AV6355-1DA00-0DM4**
• BACnetpack 5k/30k SMS	**6AV6355-1FA00-0DM4**
• BACnetpack 5k/30k POS	**6AV6355-1GA00-0DM4**
• BACnetpack 30k/UL SUS	**6AV6355-1DA00-0DM5**
• BACnetpack 30k/UL SMS	**6AV6355-1FA00-0DM5**
• BACnetpack 30k/UL POS	**6AV6355-1GA00-0DM5**

Ordering data	Article No.
WinCC OA – Driver DNP3	
• Driver DNP3 SUS	**6AV6355-1DA00-0DB2**
• Driver DNP3 SMS	**6AV6355-1FA00-0DB2**
• Driver DNP3 POS	**6AV6355-1GA00-0DB2**
• Driver DNP3 100 SUS	**6AV6355-1DA00-0DB0**
• Driver DNP3 100 SMS	**6AV6355-1FA00-0DB0**
• Driver DNP3 100 POS	**6AV6355-1GA00-0DB0**
• Driver DNP3 1000 SUS	**6AV6355-1DA00-0DB1**
• Driver DNP3 1000 SMS	**6AV6355-1FA00-0DB1**
• Driver DNP3 1000 POS	**6AV6355-1GA00-0DB1**
WinCC OA – Driver IEC 101	
• Driver IEC 101 SUS	**6AV6355-1DA00-0DC0**
• Driver IEC 101 SMS	**6AV6355-1FA00-0DC0**
• Driver IEC 101 POS	**6AV6355-1GA00-0DC0**
WinCC OA – Driver IEC 104	
• Driver IEC 104 SUS	**6AV6355-1DA00-0DC1**
• Driver IEC 104 SMS	**6AV6355-1FA00-0DC1**
• Driver IEC 104 POS	**6AV6355-1GA00-0DC1**
WinCC OA – Driver IEC 61850/61400	
• Driver IEC 61850/61400 SUS	**6AV6355-1DA00-0DC2**
• Driver IEC 61850/61400 SMS	**6AV6355-1FA00-0DC2**
• Driver IEC 61850/61400 POS	**6AV6355-1GA00-0DC2**
WinCC OA – Driver SAIA S-Bus	
• Driver SAIA S-Bus SUS	**6AV6355-1DA00-0DC3**
• Driver SAIA S-Bus SMS	**6AV6355-1FA00-0DC3**
• Driver SAIA S-Bus POS	**6AV6355-1GA00-0DC3**
WinCC OA – Driver TLS	
• Driver TLS SUS	**6AV6355-1DA00-0DC4**
• Driver TLS SMS	**6AV6355-1FA00-0DC4**
• Driver TLS POS	**6AV6355-1GA00-0DC4**
WinCC OA – Driver SSI	
• Driver SSI SUS	**6AV6355-1DA00-0DC5**
• Driver SSI SMS	**6AV6355-1FA00-0DC5**
• Driver SSI POS	**6AV6355-1GA00-0DC5**
WinCC OA – Driver Modbus	
• Driver Modbus SUS	**6AV6355-1DA00-0DD0**
• Driver Modbus SMS	**6AV6355-1FA00-0DD0**
• Driver Modbus POS	**6AV6355-1GA00-0DD0**
WinCC OA – Driver RK512	
• Driver RK512 SUS	**6AV6355-1DA00-0DE0**
• Driver RK512 SMS	**6AV6355-1FA00-0DE0**
• Driver RK512 POS	**6AV6355-1GA00-0DE0**

	Article No.
WinCC OA – Driver SINAUT	
• Driver SINAUT SUS	**6AV6355-1DA00-0DF2**
• Driver SINAUT SMS	**6AV6355-1FA00-0DF2**
• Driver SINAUT POS	**6AV6355-1GA00-0DF2**
• Driver SINAUT 50 SUS	**6AV6355-1DA00-0DF0**
• Driver SINAUT 50 SMS	**6AV6355-1FA00-0DF0**
• Driver SINAUT 50 POS	**6AV6355-1GA00-0DF0**
• Driver SINAUT 250 SUS	**6AV6355-1DA00-0DF1**
• Driver SINAUT 250 SMS	**6AV6355-1FA00-0DF1**
• Driver SINAUT 250 POS	**6AV6355-1GA00-0DF1**
WinCC OA – Driver SNMP	
• Driver SNMP SUS	**6AV6355-1DA00-0DG0**
• Driver SNMP SMS	**6AV6355-1FA00-0DG0**
• Driver SNMP POS	**6AV6355-1GA00-0DG0**
WinCC OA – Driver Cerberus	
• Driver Cerberus SUS	**6AV6355-1DA00-0DH0**
• Driver Cerberus SMS	**6AV6355-1FA00-0DH0**
• Driver Cerberus POS	**6AV6355-1GA00-0DH0**
WinCC OA – Driver EIP	
• Driver EIP SUS	**6AV6355-1DA00-0DJ0**
• Driver EIP SMS	**6AV6355-1FA00-0DJ0**
• Driver EIP POS	**6AV6355-1GA00-0DJ0**
WinCC OA – Driver MQTT Client	
• Driver MQTT Client SUS	**6AV6355-1DA00-0DK2**
• Driver MQTT Client SMS	**6AV6355-1FA00-0DK2**
• Driver MQTT Client POS	**6AV6355-1GA00-0DK2**
WinCC OA NTCIP	
• Driver NTCIP SUS	**6AV6355-1DA00-0DC6**
• Driver NTCIP SMS	**6AV6355-1FA00-0DC6**
• Driver NTCIP POS	**6AV6355-1GA00-0DC6**

More information

More information is available on the internet at
http://www.siemens.com/wincc-open-architecture

WinCC Open Architecture Add-ons

Overview

The WinCC Open Architecture (WinCC OA) Basic Software forms the core for many modular extensions.

These functional extensions are available in the form of WinCC Open Architecture Add-ons.

As of WinCC OA version 3.20, basic modules are covered by the WinCC OA Server Basic package (Maintenance, Recipes, Scheduler).

- RDB, DB Logger, NGA, CommCenter, Custom Component, Dist System, Redundancy, Disaster Recovery System (DRS), Secure Map, Report, OPC UP Server, Insights hub, Modbus server, Web Server
- SmartSCADA
  - SmartSCADA Toolbox
  - SmartSCADA KPI Extension
  - SmartSCADA Analytics
- Video
  - Video Light
  - Video Basic
  - Video Display
  - Video Sources
  - Video Workstation

Benefits

- Extensive range of additional services
- Add-ons based on customer requests: Optimally integrated through cooperation and years of experience
- Maintenance of the integrated product components is guaranteed with the product maintenance (according to maintenance contract conditions)
- Extensions to increase stability and security in the overall solution

Function

Add-on	Task
RDB	Relational database Add-on for connecting an Oracle database to a WinCC OA Server. Oracle licenses are not included in this license, but must be ordered separately. Requires one license per server.
DB Logger	Database Logger Add-on allows the export of freely selectable data from WinCC OA to an external database. The DB Logger offers parallel options for data outsourcing to allow data to be analyzed by various evaluation tools. It does not replace the RDB or the Value Archive
NGA Standard	The NGA Standard license allows use of the Next Generation Archiver in projects with up to 150 000 PowerTags. It contains the option to connect a freely selectable backend and can be extended by additional backend connections.
NGA Premium	The NGA Premium license can be used for large projects of more than 150 000 PowerTags. The connection of backends is the same as with the standard license
NGA connection	Enables the connection of another freely selectable backend for the Next Generation Archiver.
CommCenter	Modern alarm management / remote alarm messaging and communication with current standards via various media. The Communication Center creates synergies by using the various interfaces for remote alerting via the control system. Remote alarm messaging takes place via SMS and email. Price per WinCC OA Server. Packaging according to the number of alarms (25, 250, 2500, unlimited). Packages are counted cumulatively and can be extended at a later point in time. Notice: These packages **cannot** be split between servers!
Custom Component	The Custom Component option extends a WinCC OA Server license by integrating a customer-specific manager, driver, script or graphic extension. One license is required for each customer-specific component. In redundant systems, a license in the REDU version must be purchased for each server.
Dist System	Permits the coupling of two or more autonomous WinCC OA Systems via a network. Each subsystem of a distributed system can be configured either as a single-user or multi-user system, each of which may be redundant or non-redundant. Up to 2048 servers can be connected. See special calculation rule for the PowerTag number of servers.

Function

Redundancy	The fail-safe safety in a redundant system is implemented by means of hot standby. Hot standby is a hardware independent solution for high availability with bumpless switchover. This is a safety concept that consists of two interconnected server systems. Both servers are constantly in operation and are subject to the same functional loading (but only one server is ever active; the second synchronizes the data with the primary unit during runtime). On the failure of one unit, an "on-the-fly changeover" takes place and the previously passive server assumes the leading role. This guarantees access to data or functions at all times. Both servers in a redundant system require a WinCC OA Redundancy license. Use of the license options designated by REDU is also possible only in redundant systems. License options for which there is no REDU version must be purchased twice for a redundant system.
Disaster Recovery System (DRS)	Also known as 2x2 redundancy. Enables the operation of a remote Backup Control Center, whereby the WinCC OA redundancy concept is extended by a second hot standby system. This ensures that the functionality of the system is maintained on another system, even in the event of a complete failure or shutdown during, for example, maintenance of the first hot standby system. Use of a central Oracle database and one WinCC OA RDB option per server are prerequisites for operating a DRS. Example configurations can be viewed in the online help. Each server in this constellation requires a separate WinCC OA DRS license.
Secure	Extension of a WinCC OA Server with extended protection via Kerberos-based authentication. It allows each WinCC OA component to verify the identity of another component. WinCC OA Servers can verify the identity of the clients and clients can verify the identity of the servers. Kerberos also ensures that messages are not modified during transmission (Capture Replay attacks are prevented) and makes it possible to encrypt messages.
Map	Add-on for displaying state-of-the-art cartographic information in WinCC OA. Both Open Street Map as well as your own map material can be displayed. One license per UI is required. The maps can be used in WinCC OA Desktop UI and Ultralight UX. Map material is not included in the license. Can also be operated offline. WinCC OA objects can be displayed within the map material. The map license also authorizes the use of the GIS Viewer.
Maintenance	Add-on for basic maintenance management for recording operating hours, switching cycles, message handling and notepad function. Up to WinCC OA 3.19, one license per WinCC OA Server is required for the application. Included in the Server Basic package as of WinCC version 3.20.
OPC UA Server	This OPC Foundation-compliant server for WinCC OA allows OPC UA Clients to query data. Supported standard: 'OPC UA Server 1.03' (mandatory functions).
MindSphere	The MindSphere Connector enables native connection of a WinCC OA Server to MindSphere. The connection is guided by a wizard and the transmission and reading of data can be freely configured via scripting. This requires the operation of a valid MindSphere Tenant.
Modbus Server	Modbus/TCP server allows Modbus/TCP clients to query data from a WinCC OA System and display it within the Modbus data model.
OPC Server	OPC Foundation-compliant (legacy) server for WinCC OA allows OPC Clients to request data. Supported profiles: DA, HDA and A&E. Supported standard: "OPC 1.20" (mandatory functions). Not available under Linux.
Recipe	WinCC OA recipes allow setpoints or commands for certain data point elements to be sent simultaneously. Based on "recipe types", which define the quantity of the assigned data point elements, recipes are created that send their values to the data point elements upon activation. Add-on for creating recipe types and instances, transfer of current process values as recipe, activation/download to data points, import and export (MS Excel). Up to WinCC OA 3.19, one license per WinCC OA Server is required for the application. Included in the Server Basic package as of WinCC version 3.20.

Function

Report	Web-based reporting is implemented using the standardized Simple Object Access Protocol (SOAP) reporting interface. Third-party reporting tools can thus be used without additional workload. The BIRT templates that are also provided, as well as the predefined reporting data, further simplify the reporting. • Web-capable reporting interface (SOAP): - ECLIPSE BIRT (large number of reporting templates for ECLIPSE BIRT are also supplied) - Crystal Reports - SIMATIC Information Server - Microsoft Excel • Online values, history • Support of compressed data, SQL, alarms • Diagnostic tools • Audit Trail Reporting Clients can be purchased in the scale 1, 2, 5 or 10. Packages are counted cumulatively and can be extended at a later point in time. Notice: These packages **cannot** be split between servers! In redundant systems, a license in the REDU version must be purchased for each server.
Scheduler	Permits the creation, parameterization and management of time programs that allow the time and event-driven triggering of specific actions. Daily, weekly and monthly programs as well as individual non-periodic events can be created, taking into account holidays, priority assignment and override functions. Up to WinCC OA 3.19, one license per WinCC OA Server is required for the application. Included in the Server Basic package as of WinCC version 3.20.
Web Server	This option enables administration of different connections between WinCC OA Servers and web-based operator stations such as WinCC OA ULC UX clients or dashboards. From a number >1, load balancing can be enabled for ULC UX. Multilevel architectures such as access to DMZ can be realized with remote web servers.
WebSocket connection	Extends a WinCC OA Server license by a WebSocket connection.
Load Balancing	This option allows load balancing of different connections between WinCC OA Servers that provide the WinCC OA ULC UX web client solution. One license is required for each configured web server.

SmartSCADA

The WinCC OA feature SmartSCADA is a tool for root cause analysis and plant optimization and can be used to support decision-making.
This makes it easy to identify areas with potential for increasing efficiency and achieving increases in system performance and availability. Wizards for key performance indicators (KPI), data mining and classification as well as an interface to statistics tool "R" make it easy to functionally integrate statistics into WinCC OA projects and perform all calculations directly in the SCADA system without programming. By training statistical models, system data can be examined and the models can be used in the system at runtime.

SmartSCADA license needs to be purchased twice for redundant servers.

Add-on	Task
SmartSCADAToolbox	SmartSCADA Toolbox enables creation of key performance indicator definitions and key performance indicator instances in the easy-to-use formula editor or freely in CONTROL. The devices are connected by means of a context-based search in the system model or in data points. The performance indicators can be calculated manually, event-driven or cyclically. Online engineering takes place in its own wizard (no Para license included). It includes 20 KPI instances.
SmartSCADA KPI Extension	SmartSCADA KPI Extension for SmartSCADA Toolbox, extends the toolbox by another 100 KPI instances.
SmartSCADA Analytics	SmartSCADA Analytics is a time-limited license for wizard-guided data analysis of historical data and teaching of statistical models for plant classification. Numerous evaluation tools are available through the integration of the "R" statistics toolbox. No para license included. Learned models can be calculated without this license. License expires after one year.

Function

Video

Enables the integration of a video management system in WinCC OA. Through the combination of SCADA and video monitoring in one system, the costs for separate video interfaces and the additional expense of maintenance and operation can be saved, and the period of training for operating personnel can also be reduced.

Add-on	Task
Video Light	The Video Light package allows the connection of 4 cameras/sources and an external video display. This package cannot be extended.
Video Basic	The Video Basic Package enables the native (via ONVIF) connection of cameras/sources to a WinCC OA System. All streams, recordings and playbacks are included. Video sources for recording and playback are counted per IP address and must be purchased separately. Linux and virtual machines are only supported to a limited extent.
Video Display	Adds an external display to the Video Basic system. A Video Display license is included in the Basic Package. The Video Display is also available as REDU and DIST option
Video Sources	Extends the Video Basic system by a defined number of sources/cameras. Includes all streaming, recording and playback functions. Video sources are counted per IP address. Video Sources can be purchased in the packages of 1, 10, 25, 50, 100, 250 or 500, packages are counted cumulatively and can be extended at a later point in time. Notice: These packages **cannot** be split between servers! In redundant systems, a license in the REDU version must be purchased for each server.
Video Workstation	Connection of an additional workstation for pure display/research of video data (incl. export) with limited functionality

Ordering data

	Article No.
V3.19	
WinCC OA – RDB V3.19 For connecting the Oracle database to WinCC OA Server (Oracle licenses not included).	
• RDB	**6AV6355-1AA47-7EA0**
• RDB UPG	**6AV6355-1CA47-7EA0**
WinCC OA – DB Logger V3.19 Allows export of data from WinCC OA to external databases.	
• DB Logger	**6AV6355-1AA47-7EA1**
• DB Logger UPG	**6AV6355-1CA47-7EA1**
WinCC OA – NGA Standard V3.19 Enables the use of the Next Generation Archiver in projects with up to 150,000 PowerTags	
• NGA Standard	**6AV6355-1AA47-7EA2**
• NGA Standard UPG	**6AV6355-1CA47-7EA2**
WinCC OA – NGA Premium V3.19 Enables the use of the Next Generation Archiver in large projects with more than 150,000 PowerTags	
• NGA Premium	**6AV6355-1AA47-7EA3**
• NGA Premium UPG	**6AV6355-1CA47-7EA3**
WinCC OA – NGA backend connection V3.19 Connection of another freely selectable backend for the NGA	
• NGA backend connection	**6AV6355-1AA47-7EA4**
• NGA backend connection UPG	**6AV6355-1CA47-7EA4**
WinCC OA – CommCenter 1 V3.19 Remote alarming basic package 25 alarms. Output as SMS or email possible.	
• CommCenter 1	**6AV6355-1AA47-7EC0**
• CommCenter 1 UPG	**6AV6355-1CA47-7EC0**
WinCC OA – CommCenter 2 V3.19 Remote alarming basic package 250 alarms. Output as SMS or email possible.	
• CommCenter 2	**6AV6355-1AA47-7EC1**
• CommCenter 2 UPG	**6AV6355-1CA47-7EC1**
WinCC OA – CommCenter 3 V3.19 Remote alarming basic package 2500 alarms. Output as SMS or email possible.	
• CommCenter 3	**6AV6355-1AA47-7EC2**
• CommCenter 3 UPG	**6AV6355-1CA47-7EC2**
WinCC OA – CommCenter 4 V3.19 Remote alarming basic package unlimited alarms. Output as SMS or email possible.	
• CommCenter 4	**6AV6355-1AA47-7EC3**
• CommCenter 4 UPG	**6AV6355-1CA47-7EC3**

WinCC Open Architecture Add-ons

Ordering data	Article No.
WinCC OA – Custom Component V3.19	
Integration of a customer-specific manager, driver, script or graphic extension.	
• Custom Comp	**6AV6355-1AA47-7ED2**
• Custom Comp UPG	**6AV6355-1CA47-7ED2**
WinCC OA – Custom Component REDU V3.19	
Integration of a customer-specific manager, driver, script or graphic extension for REDU system.	
• Custom Comp REDU	**6AV6355-1AA47-7ED3**
• Custom Comp REDU UPG	**6AV6355-1CA47-7ED3**
WinCC OA – Dist System V3.19	
Extends a WinCC OA Server with the Multiserver option (up to 2048 servers).	
• Dist System	**6AV6355-1AA47-7EE0**
• Dist System UPG	**6AV6355-1CA47-7EE0**
WinCC OA – Redundancy V3.19	
High availability with bumpless switchover. Both servers need a license in REDU systems.	
• Redundancy	**6AV6355-1AA47-7EF0**
• Redundancy UPG	**6AV6355-1CA47-7EF0**
WinCC OA – DRS V3.19	
Disaster Recovery System, remote Backup Control Center. 2 redundant systems (4 servers in total).	
• DRS	**6AV6355-1AA47-7EF1**
• DRS UPG	**6AV6355-1CA47-7EF1**
WinCC OA – Secure V3.19	
Extended protection with Kerberos. Increases IT security level by using ticket-based authentication.	
• Secure	**6AV6355-1AA47-7EG0**
• Secure UPG	**6AV6355-1CA47-7EG0**
WinCC OA – Map V3.19	
Display of maps in WinCC OA. Open Street Map as well as own map material are supported.	
• Map	**6AV6355-1AA47-7EH5**
• Map UPG	**6AV6355-1CA47-7EH5**
WinCC OA – Maintenance V3.19	
Simple maintenance management. Operating hours, switching cycles, message handling and notepad function.	
• Maintenance	**6AV6355-1AA47-7EJ0**
• Maintenance UPG	**6AV6355-1CA47-7EJ0**
WinCC OA – OPC UA Server V3.19	
OPC Foundation-compliant server for WinCC OA Server allows OPC UA Clients to query data.	
• OPC UA Server	**6AV6355-1AA47-7EK0**
• OPC UA Server UPG	**6AV6355-1CA47-7EK0**

	Article No.
WinCC OA – MindSphere V3.19	
Enables connection of WinCC OA Server to MindSphere. Requires operation of a valid MindSphere Tenant.	
• MindSphere	**6AV6355-1AA47-7EK1**
• MindSphere UPG	**6AV6355-1CA47-7EK1**
WinCC OA – Modbus Server V3.19	
Enables data of a WinCC OA System to be queried by Modbus/TCP clients.	
• Modbus Server	**6AV6355-1AA47-7EK2**
• Modbus Server UPG	**6AV6355-1CA47-7EK2**
WinCC OA – Recipe V3.19	
Creation of any recipe types and instances, transfer of the current process values as recipe.	
• Recipe	**6AV6355-1AA47-7EL0**
• Recipe UPG	**6AV6355-1CA47-7EL0**
WinCC OA – Report V3.19	
Defined number of reporting clients for evaluation of WinCC OA data using a third-party tool.	
• 1 Reporting Client	**6AV6355-1AA47-7EM0**
• 1 Reporting Client UPG	**6AV6355-1CA47-7EM0**
• 2 Reporting Clients	**6AV6355-1AA47-7EM1**
• 2 Reporting Clients UPG	**6AV6355-1CA47-7EM1**
• 5 Reporting Clients	**6AV6355-1AA47-7EM2**
• 5 Reporting Clients UPG	**6AV6355-1CA47-7EM2**
• 10 Reporting Clients	**6AV6355-1AA47-7EM3**
• 10 Reporting Clients UPG	**6AV6355-1CA47-7EM3**
WinCC OA – Report REDU V3.19	
Defined number of reporting clients for evaluation of WinCC OA data using a third-party tool for REDU systems.	
• 1 Reporting Client REDU	**6AV6355-1AA47-7EM5**
• 1 Reporting Client REDU UPG	**6AV6355-1CA47-7EM5**
• 2 Reporting Clients REDU	**6AV6355-1AA47-7EM6**
• 2 Reporting Clients REDU UPG	**6AV6355-1CA47-7EM6**
• 5 Reporting Clients REDU	**6AV6355-1AA47-7EM7**
• 5 Reporting Clients REDU UPG	**6AV6355-1CA47-7EM7**
• 10 Reporting Clients REDU	**6AV6355-1AA47-7EM8**
• 10 Reporting Clients REDU UPG	**6AV6355-1CA47-7EM8**
WinCC OA – Scheduler V3.19	
Scheduling of daily, weekly and monthly programs, non-periodic events, priority assignment, override function.	
• Scheduler	**6AV6355-1AA47-7EN0**
• Scheduler UPG	**6AV6355-1CA47-7EN0**
WinCC OA – SmartSCADA Toolbox V3.19	
Allows creation of key figure definitions and instances via formula editor or CONTROL. Contains 20 KPI instances.	
• SmartSCADA Toolbox	**6AV6355-1AA47-7EP0**
• SmartSCADA Toolbox UPG	**6AV6355-1CA47-7EP0**

Ordering data	Article No.
WinCC OA – SmartSCADA KPI Ext. V3.19	
Extends Toolbox by 100 KPI instances	
• SmartSCADA KPI Ext.	**6AV6355-1AA47-7EP1**
• SmartSCADA KPI Ext. UPG	**6AV6355-1CA47-7EP1**
WinCC OA – SmartSCADA Analytics V3.19	
Time-limited license (1 year) for data analysis and learning of statistical models. Contains statistical toolbox "R".	
• SmartSCADA Analytics	**6AV6355-1AA47-7EP2**
• SmartSCADA Analytics UPG	**6AV6355-1CA47-7EP2**
WinCC OA – Video Light V3.19	
Allows connection of 4 cameras/ sources and an external video display. Cannot be extended.	
• Video Light	**6AV6355-1AA47-7EQ0**
• Video Light UPG	**6AV6355-1CA47-7EQ0**
WinCC OA – Video Basic V3.19	
Enables native connection (ONVIF) of cameras/sources to a WinCC OA System. Includes all streaming, recording and playback functions.	
Video Basic	**6AV6355-1AA47-7EQ1**
• Video Basic UPG	**6AV6355-1CA47-7EQ1**
WinCC OA – Video Basic REDU V3.19	
Enables native connection (ONVIF) of cameras/sources to a redundant WinCC OA System. Includes all streaming, recording and playback functions.	
• Video Basic REDU	**6AV6355-1AA47-7EU0**
• Video Basic REDU UPG	**6AV6355-1CA47-7EU0**
WinCC OA – Video Display V3.19	
Extends the Video Basic system by an external display. A Video Display license is included in the basic package.	
• Video Display	**6AV6355-1AA47-7EQ2**
• Video Display UPG	**6AV6355-1CA47-7EQ2**
WinCC OA – Video Display REDU V3.19	
Extends Video Basic in a REDU system by an external display. A Video Display license is included in the basic package.	
• Video Display REDU	**6AV6355-1AA47-7EU1**
• Video Display REDU UPG	**6AV6355-1CA47-7EU1**
WinCC OA – Video Display DIST V3.19	
Extends Video Basic in a DIST system by an external display.	
• Video Display DIST	**6AV6355-1AA47-7EQ3**
• Video Display DIST UPG	**6AV6355-1CA47-7EQ3**

	Article No.
WinCC OA – Video Cameras V3.19	
Extends Video Basic by a defined number of sources/cameras.	
• 1 Extension	**6AV6355-1AA47-7ER0**
• 1 Extension UPG	**6AV6355-1CA47-7ER0**
• 10 Extensions	**6AV6355-1AA47-7ER1**
• 10 Extensions UPG	**6AV6355-1CA47-7ER1**
• 25 Extensions	**6AV6355-1AA47-7ER2**
• 25 Extensions UPG	**6AV6355-1CA47-7ER2**
• 50 Extensions	**6AV6355-1AA47-7ER3**
• 50 Extensions UPG	**6AV6355-1CA47-7ER3**
• 100 Extensions	**6AV6355-1AA47-7ER4**
• 100 Extensions UPG	**6AV6355-1CA47-7ER4**
• 250 Extensions	**6AV6355-1AA47-7ER5**
• 250 Extensions UPG	**6AV6355-1CA47-7ER5**
• 500 Extensions	**6AV6355-1AA47-7ER6**
• 500 Extensions UPG	**6AV6355-1CA47-7ER6**
WinCC OA – Video Workstation V3.19	
Connection of an additional workstation for pure display/research of video data	
• Video Workstation	**6AV6355-1AA47-7EQ4**
• Video Workstation UPG	**6AV6355-1CA47-7EQ4**
WinCC OA – Video Cameras REDU V3.19	
Extends Video Basic in a REDU system by a defined number of sources/cameras.	
• 1 Extension REDU	**6AV6355-1AA47-7ES0**
• 1 Extension REDU UPG	**6AV6355-1CA47-7ES0**
• 10 Extensions REDU	**6AV6355-1AA47-7ES1**
• 10 Extensions REDU UPG	**6AV6355-1CA47-7ES1**
• 25 Extensions REDU	**6AV6355-1AA47-7ES2**
• 25 Extensions REDU UPG	**6AV6355-1CA47-7ES2**
• 50 Extensions REDU	**6AV6355-1AA47-7ES3**
• 50 Extensions REDU UPG	**6AV6355-1CA47-7ES3**
• 100 Extensions REDU	**6AV6355-1AA47-7ES4**
• 100 Extensions REDU UPG	**6AV6355-1CA47-7ES4**
• 250 Extensions REDU	**6AV6355-1AA47-7ES5**
• 250 Extensions REDU UPG	**6AV6355-1CA47-7ES5**
• 500 Extensions REDU	**6AV6355-1AA47-7ES6**
• 500 Extensions REDU UPG	**6AV6355-1CA47-7ES6**
WinCC OA – Load Balancing V3.19	
Enables load balancing of connections between WinCC OA Servers and ULC UX	
• Load Balancing	**6AV6355-1AA47-7ET1**
• Load Balancing UPG	**6AV6355-1CA47-7ET1**
WinCC OA – WebSocket connection V3.19	
Enables management of connections between WinCC OA Servers and WinCC OA ULC UX clients.	
• WebSocket connection	**6AV6355-1AA47-7ET2**
• WebSocket connection UPG	**6AV6355-1CA47-7ET2**

WinCC Open Architecture Add-ons

Ordering data	Article No.
V3.18	
WinCC OA – RDB V3.18	
For connecting the Oracle database to WinCC OA Server (Oracle licenses not included).	
• RDB	**6AV6355-1AA31-8EA0**
• RDB UPG	**6AV6355-1CA31-8EA0**
WinCC OA – DB Logger V3.18	
Allows export of data from WinCC OA to external databases.	
• DB Logger	**6AV6355-1AA31-8EA1**
• DB Logger UPG	**6AV6355-1CA31-8EA1**
WinCC OA – NGA Standard V3.18	
Enables the use of the Next Generation Archiver in projects with up to 150,000 PowerTags	
• NGA Standard	**6AV6355-1AA31-8EA2**
• NGA Standard UPG	**6AV6355-1CA31-8EA2**
WinCC OA – NGA Premium V3.18	
Enables the use of the Next Generation Archiver in large projects with more than 150,000 PowerTags	
• NGA Premium	**6AV6355-1AA31-8EA3**
• NGA Premium UPG	**6AV6355-1CA31-8EA3**
WinCC OA – NGA backend connection V3.18	
Connection of another freely selectable backend for the NGA	
• NGA backend connection	**6AV6355-1AA31-8EA4**
• NGA backend connection UPG	**6AV6355-1CA31-8EA4**
WinCC OA – CommCenter 1 V3.18	
Remote alarming basic package 25 alarms. Output as SMS or email possible.	
• CommCenter 1	**6AV6355-1AA31-8EC0**
• CommCenter 1 UPG	**6AV6355-1CA31-8EC0**
WinCC OA – CommCenter 2 V3.18	
Remote alarming basic package 250 alarms. Output as SMS or email possible.	
• CommCenter 2	**6AV6355-1AA31-8EC1**
• CommCenter 2 UPG	**6AV6355-1CA31-8EC1**
WinCC OA – CommCenter 3 V3.18	
Remote alarming basic package 2500 alarms. Output as SMS or email possible.	
• CommCenter 3	**6AV6355-1AA31-8EC2**
• CommCenter 3 UPG	**6AV6355-1CA31-8EC2**
WinCC OA – CommCenter 4 V3.18	
Remote alarming basic package unlimited alarms. Output as SMS or email possible.	
• CommCenter 4	**6AV6355-1AA31-8EC3**
• CommCenter 4 UPG	**6AV6355-1CA31-8EC3**
WinCC OA – Custom Component V3.18	
Integration of a customer-specific manager, driver, script or graphic extension.	
• Custom Comp	**6AV6355-1AA31-8ED2**
• Custom Comp UPG	**6AV6355-1CA31-8ED2**
WinCC OA – Custom Component REDU V3.18	
Integration of a customer-specific manager, driver, script or graphic extension for REDU system.	
• Custom Comp REDU	**6AV6355-1AA31-8ED3**
• Custom Comp REDU UPG	**6AV6355-1CA31-8ED3**
WinCC OA – Dist System V3.18	
Extends a WinCC OA Server with the Multiserver option (up to 2048 servers).	
• Dist System	**6AV6355-1AA31-8EE0**
• Dist System UPG	**6AV6355-1CA31-8EE0**
WinCC OA – Redundancy V3.18	
High availability with bumpless switchover. Both servers need a license in REDU systems.	
• Redundancy	**6AV6355-1AA31-8EF0**
• Redundancy UPG	**6AV6355-1CA31-8EF0**
WinCC OA – DRS V3.18	
Disaster Recovery System, remote Backup Control Center. 2 redundant systems (4 servers in total).	
• DRS	**6AV6355-1AA31-8EF1**
• DRS UPG	**6AV6355-1CA31-8EF1**
WinCC OA – Secure V3.18	
Extended protection with Kerberos. Increases IT security level by using ticket-based authentication.	
• Secure	**6AV6355-1AA31-8EG0**
• Secure UPG	**6AV6355-1CA31-8EG0**
WinCC OA – Map V3.18	
Display of maps in WinCC OA. Open Street Map as well as own map material are supported.	
• Map	**6AV6355-1AA31-8EH5**
• Map UPG	**6AV6355-1CA31-8EH5**
WinCC OA – Maintenance V3.18	
Simple maintenance management. Operating hours, switching cycles, message handling and notepad function.	
• Maintenance	**6AV6355-1AA31-8EJ0**
• Maintenance UPG	**6AV6355-1CA31-8EJ0**
WinCC OA – OPC UA Server V3.18	
OPC Foundation-compliant server for WinCC OA Server allows OPC UA Clients to query data.	
• OPC UA Server	**6AV6355-1AA31-8EK0**
• OPC UA Server UPG	**6AV6355-1CA31-8EK0**
WinCC OA – MindSphere V3.18	
Enables connection of WinCC OA Server to MindSphere. Requires operation of a valid MindSphere Tenant.	
• MindSphere	**6AV6355-1AA31-8EK1**
• MindSphere UPG	**6AV6355-1CA31-8EK1**
WinCC OA – Modbus Server V3.18	
Enables data of a WinCC OA System to be queried by Modbus/TCP clients.	
• Modbus Server	**6AV6355-1AA31-8EK2**
• Modbus Server UPG	**6AV6355-1CA31-8EK2**

Ordering data	Article No.
WinCC OA – Recipe V3.18	
Creation of any recipe types and instances, transfer of the current process values as recipe.	
• Recipe	**6AV6355-1AA31-8EL0**
• Recipe UPG	**6AV6355-1CA31-8EL0**
WinCC OA – Report V3.18	
Defined number of reporting clients for evaluation of WinCC OA data using a third-party tool.	
• 1 Reporting Client	**6AV6355-1AA31-8EM0**
• 1 Reporting Client UPG	**6AV6355-1CA31-8EM0**
• 2 Reporting Clients	**6AV6355-1AA31-8EM1**
• 2 Reporting Clients UPG	**6AV6355-1CA31-8EM1**
• 5 Reporting Clients	**6AV6355-1AA31-8EM2**
• 5 Reporting Clients UPG	**6AV6355-1CA31-8EM2**
• 10 Reporting Clients	**6AV6355-1AA31-8EM3**
• 10 Reporting Clients UPG	**6AV6355-1CA31-8EM3**
WinCC OA – Report REDU V3.18	
Defined number of reporting clients for evaluation of WinCC OA data using a third-party tool for REDU systems.	
• 1 Reporting Client REDU	**6AV6355-1AA31-8EM5**
• 1 Reporting Client REDU UPG	**6AV6355-1CA31-8EM5**
• 2 Reporting Clients REDU	**6AV6355-1AA31-8EM6**
• 2 Reporting Clients REDU UPG	**6AV6355-1CA31-8EM6**
• 5 Reporting Clients REDU	**6AV6355-1AA31-8EM7**
• 5 Reporting Clients REDU UPG	**6AV6355-1CA31-8EM7**
• 10 Reporting Clients REDU	**6AV6355-1AA31-8EM8**
• 10 Reporting Clients REDU UPG	**6AV6355-1CA31-8EM8**
WinCC OA – Scheduler V3.18	
Scheduling of daily, weekly and monthly programs, non-periodic events, priority assignment, override function.	
• Scheduler	**6AV6355-1AA31-8EN0**
• Scheduler UPG	**6AV6355-1CA31-8EN0**
WinCC OA – SmartSCADA Toolbox V3.18	
Allows creation of key figure definitions and instances via formula editor or CONTROL. Contains 20 KPI instances.	
• SmartSCADA Toolbox	**6AV6355-1AA31-8EP0**
• SmartSCADA Toolbox UPG	**6AV6355-1CA31-8EP0**
WinCC OA – SmartSCADA KPI Ext. V3.18	
Extends Toolbox by 100 KPI instances	
• SmartSCADA KPI Ext.	**6AV6355-1AA31-8EP1**
• SmartSCADA KPI Ext. UPG	**6AV6355-1CA31-8EP1**
WinCC OA – SmartSCADA Analytics V3.18	
Time-limited license (1 year) for data analysis and learning of statistical models. Contains statistical toolbox "R".	
• SmartSCADA Analytics	**6AV6355-1AA31-8EP2**
• SmartSCADA Analytics UPG	**6AV6355-1CA31-8EP2**
WinCC OA – Video Light V3.18	
Allows connection of 4 cameras/ sources and an external video display. Cannot be extended.	
• Video Light	**6AV6355-1AA31-8EQ0**
• Video Light UPG	**6AV6355-1CA31-8EQ0**

	Article No.
WinCC OA – Video Basic V3.18	
Enables native connection (ONVIF) of cameras/sources to a WinCC OA System. Includes all streaming, recording and playback functions.	
Video Basic	**6AV6355-1AA31-8EQ1**
• Video Basic UPG	**6AV6355-1CA31-8EQ1**
WinCC OA – Video Basic REDU V3.18	
Enables native connection (ONVIF) of cameras/sources to a redundant WinCC OA System. Includes all streaming, recording and playback functions.	
• Video Basic REDU	**6AV6355-1AA31-8EU0**
• Video Basic REDU UPG	**6AV6355-1CA31-8EU0**
WinCC OA – Video Display V3.18	
Extends the Video Basic system by an external display. A Video Display license is included in the basic package.	
• Video Display	**6AV6355-1AA31-8EQ2**
• Video Display UPG	**6AV6355-1CA31-8EQ2**
WinCC OA – Video Display REDU V3.18	
Extends Video Basic in a REDU system by an external display. A Video Display license is included in the basic package.	
• Video Display REDU	**6AV6355-1AA31-8EU1**
• Video Display REDU UPG	**6AV6355-1CA31-8EU1**
WinCC OA – Video Display DIST V3.18	
Extends Video Basic in a DIST system by an external display.	
• Video Display DIST	**6AV6355-1AA31-8EQ3**
• Video Display DIST UPG	**6AV6355-1CA31-8EQ3**
WinCC OA – Video Cameras V3.18	
Extends Video Basic by a defined number of sources/cameras.	
• 1 Extension	**6AV6355-1AA31-8ER0**
• 1 Extension UPG	**6AV6355-1CA31-8ER0**
• 10 Extensions	**6AV6355-1AA31-8ER1**
• 10 Extensions UPG	**6AV6355-1CA31-8ER1**
• 25 Extensions	**6AV6355-1AA31-8ER2**
• 25 Extensions UPG	**6AV6355-1CA31-8ER2**
• 50 Extensions	**6AV6355-1AA31-8ER3**
• 50 Extensions UPG	**6AV6355-1CA31-8ER3**
• 100 Extensions	**6AV6355-1AA31-8ER4**
• 100 Extensions UPG	**6AV6355-1CA31-8ER4**
• 250 Extensions	**6AV6355-1AA31-8ER5**
• 250 Extensions UPG	**6AV6355-1CA31-8ER5**
• 500 Extensions	**6AV6355-1AA31-8ER6**
• 500 Extensions UPG	**6AV6355-1CA31-8ER6**

WinCC Open Architecture Add-ons

Ordering data	Article No.
WinCC OA – Video Workstation V3.18	
Connection of an additional workstation for pure display/research of video data	
• Video Workstation	**6AV6355-1AA31-8EQ4**
WinCC OA – Video Cameras REDU V3.18	
Extends Video Basic in a REDU system by a defined number of sources/cameras.	
• 1 Extension REDU	**6AV6355-1AA31-8ES0**
• 1 Extension REDU UPG	**6AV6355-1CA31-8ES0**
• 10 Extensions REDU	**6AV6355-1AA31-8ES1**
• 10 Extensions REDU UPG	**6AV6355-1CA31-8ES1**
• 25 Extensions REDU	**6AV6355-1AA31-8ES2**
• 25 Extensions REDU UPG	**6AV6355-1CA31-8ES2**
• 50 Extensions REDU	**6AV6355-1AA31-8ES3**
• 50 Extensions REDU UPG	**6AV6355-1CA31-8ES3**
• 100 Extensions REDU	**6AV6355-1AA31-8ES4**
• 100 Extensions REDU UPG	**6AV6355-1CA31-8ES4**
• 250 Extensions REDU	**6AV6355-1AA31-8ES5**
• 250 Extensions REDU UPG	**6AV6355-1CA31-8ES5**
• 500 Extensions REDU	**6AV6355-1AA31-8ES6**
• 500 Extensions REDU UPG	**6AV6355-1CA31-8ES6**
WinCC OA – Load Balancing V3.18	
Enables load balancing of connections between WinCC OA Servers and ULC UX	
• Load Balancing	**6AV6355-1AA31-8ET1**
• Load Balancing UPG	**6AV6355-1CA31-8ET1**
WinCC OA – WebSocket connection V3.18	
Enables management of connections between WinCC OA Servers and WinCC OA ULC UX clients.	
• WebSocket connection	**6AV6355-1AA31-8ET2**
• WebSocket connection UPG	**6AV6355-1CA31-8ET2**

	Article No.
V3.17	
WinCC OA – RDB V3.17	
For connecting the Oracle database to WinCC OA Server (Oracle licenses not included).	
• RDB	**6AV6355-1AA31-7EA0**
• RDB UPG	**6AV6355-1CA31-7EA0**
WinCC OA – DB Logger V3.17	
Allows export of data from WinCC OA to external databases.	
• DB Logger	**6AV6355-1AA31-7EA1**
• DB Logger UPG	**6AV6355-1CA31-7EA1**
WinCC OA – CommCenter 1 V3.17	
Remote alarming basic package 25 alarms. Output as SMS or email possible.	
• CommCenter 1	**6AV6355-1AA31-7EC0**
• CommCenter 1 UPG	**6AV6355-1CA31-7EC0**
WinCC OA – CommCenter 2 V3.17	
Remote alarming basic package 250 alarms. Output as SMS or email possible.	
• CommCenter 2	**6AV6355-1AA31-7EC1**
• CommCenter 2 UPG	**6AV6355-1CA31-7EC1**
WinCC OA – CommCenter 3 V3.17	
Remote alarming basic package 2500 alarms. Output as SMS or email possible.	
• CommCenter 3	**6AV6355-1AA31-7EC2**
• CommCenter 3 UPG	**6AV6355-1CA31-7EC2**
WinCC OA – CommCenter 4 V3.17	
Remote alarming basic package unlimited alarms. Output as SMS or email possible.	
• CommCenter 4	**6AV6355-1AA31-7EC3**
• CommCenter 4 UPG	**6AV6355-1CA31-7EC3**
WinCC OA – Custom Component V3.17	
Integration of a customer-specific manager, driver, script or graphic extension.	
• Custom Comp	**6AV6355-1AA31-7ED2**
• Custom Comp UPG	**6AV6355-1CA31-7ED2**
WinCC OA – Custom Component REDU V3.17	
Integration of a customer-specific manager, driver, script or graphic extension for REDU system.	
• Custom Comp REDU	**6AV6355-1AA31-7ED3**
• Custom Comp REDU UPG	**6AV6355-1CA31-7ED3**
WinCC OA – Dist System V3.17	
Extends a WinCC OA Server with the Multiserver option (up to 2048 servers).	
• Dist System	**6AV6355-1AA31-7EE0**
• Dist System UPG	**6AV6355-1CA31-7EE0**
WinCC OA – Redundancy V3.17	
High availability with bumpless switchover. Both servers need a license in REDU systems.	
• Redundancy	**6AV6355-1AA31-7EF0**
• Redundancy UPG	**6AV6355-1CA31-7EF0**

Ordering data	Article No.
WinCC OA – DRS V3.17	
Disaster Recovery System, remote Backup Control Center. 2 redundant systems (4 servers in total).	
• DRS	**6AV6355-1AA31-7EF1**
• DRS UPG	**6AV6355-1CA31-7EF1**
WinCC OA – Secure V3.17	
Extended protection with Kerberos. Increases IT security level by using ticket-based authentication.	
• Secure	**6AV6355-1AA31-7EG0**
• Secure UPG	**6AV6355-1CA31-7EG0**
WinCC OA – Map V3.17	
Display of maps in WinCC OA. Open Street Map as well as own map material are supported.	
• Map	**6AV6355-1AA31-7EH5**
• Map UPG	**6AV6355-1CA31-7EH5**
WinCC OA – Maintenance V3.17	
Simple maintenance management. Operating hours, switching cycles, message handling and notepad function.	
• Maintenance	**6AV6355-1AA31-7EJ0**
• Maintenance UPG	**6AV6355-1CA31-7EJ0**
WinCC OA – OPC UA Server V3.17	
OPC Foundation-compliant server for WinCC OA Server allows OPC UA Clients to query data.	
• OPC UA Server	**6AV6355-1AA31-7EK0**
• OPC UA Server UPG	**6AV6355-1CA31-7EK0**
WinCC OA – MindSphere V3.17	
Enables connection of WinCC OA Server to MindSphere. Requires operation of a valid MindSphere Tenant.	
• MindSphere	**6AV6355-1AA31-7EK1**
• MindSphere UPG	**6AV6355-1CA31-7EK1**
WinCC OA – Modbus Server V3.17	
Enables data of a WinCC OA System to be queried by Modbus/TCP clients.	
• Modbus Server	**6AV6355-1AA31-7EK2**
• Modbus Server UPG	**6AV6355-1CA31-7EK2**
WinCC OA – Recipe V3.17	
Creation of any recipe types and instances, transfer of the current process values as recipe.	
• Recipe	**6AV6355-1AA31-7EL0**
• Recipe UPG	**6AV6355-1CA31-7EL0**

	Article No.
WinCC OA – Report V3.17	
Defined number of reporting clients for evaluation of WinCC OA data using a third-party tool.	
• 1 Reporting Client	**6AV6355-1AA31-7EM0**
• 1 Reporting Client UPG	**6AV6355-1CA31-7EM0**
• 2 Reporting Clients	**6AV6355-1AA31-7EM1**
• 2 Reporting Clients UPG	**6AV6355-1CA31-7EM1**
• 5 Reporting Clients	**6AV6355-1AA31-7EM2**
• 5 Reporting Clients UPG	**6AV6355-1CA31-7EM2**
• 10 Reporting Clients	**6AV6355-1AA31-7EM3**
• 10 Reporting Clients UPG	**6AV6355-1CA31-7EM3**
WinCC OA – Report REDU V3.17	
Defined number of reporting clients for evaluation of WinCC OA data using a third-party tool for REDU systems.	
• 1 Reporting Client REDU	**6AV6355-1AA31-7EM5**
• 1 Reporting Client REDU UPG	**6AV6355-1CA31-7EM5**
• 2 Reporting Clients REDU	**6AV6355-1AA31-7EM6**
• 2 Reporting Clients REDU UPG	**6AV6355-1CA31-7EM6**
• 5 Reporting Clients REDU	**6AV6355-1AA31-7EM7**
• 5 Reporting Clients REDU UPG	**6AV6355-1CA31-7EM7**
• 10 Reporting Clients REDU	**6AV6355-1AA31-7EM8**
• 10 Reporting Clients REDU UPG	**6AV6355-1CA31-7EM8**
WinCC OA – Scheduler V3.17	
Scheduling of daily, weekly and monthly programs, non-periodic events, priority assignment, override function.	
• Scheduler	**6AV6355-1AA31-7EN0**
• Scheduler UPG	**6AV6355-1CA31-7EN0**
WinCC OA – SmartSCADA Toolbox V3.17	
Allows creation of key figure definitions and instances via formula editor or CONTROL. Contains 20 KPI instances.	
• SmartSCADA Toolbox	**6AV6355-1AA31-7EP0**
• SmartSCADA Toolbox UPG	**6AV6355-1CA31-7EP0**
WinCC OA – SmartSCADA KPI Ext. V3.17	
Extends Toolbox by 100 KPI instances	
• SmartSCADA KPI Ext.	**6AV6355-1AA31-7EP1**
• SmartSCADA KPI Ext. UPG	**6AV6355-1CA31-7EP1**
WinCC OA – SmartSCADA Analytics V3.17	
Time-limited license (1 year) for data analysis and learning of statistical models. Contains statistical toolbox "R".	
• SmartSCADA Analytics	**6AV6355-1AA31-7EP2**
• SmartSCADA Analytics UPG	**6AV6355-1CA31-7EP2**

WinCC Open Architecture Add-ons

Ordering data	Article No.
WinCC OA – Video Light V3.17	
Allows connection of 4 cameras/sources and an external video display. Cannot be extended.	
• Video Light	**6AV6355-1AA31-7EQ0**
• Video Light UPG	**6AV6355-1CA31-7EQ0**
WinCC OA – Video Basic V3.17	
Enables native connection (ONVIF) of cameras/sources to a WinCC OA System. Includes all streaming, recording and playback functions.	
• Video Basic	**6AV6355-1AA31-7EQ1**
• Video Basic UPG	**6AV6355-1CA31-7EQ1**
WinCC OA – Video Display V3.17	
Extends the Video Basic system by an external display. A Video Display license is included in the basic package.	
• Video Display	**6AV6355-1AA31-7EQ2**
• Video Display UPG	**6AV6355-1CA31-7EQ2**
WinCC OA – Video V3.17	
Extends Video Basic by a defined number of sources/cameras.	
• 1 Extension	**6AV6355-1AA31-7ER0**
• 1 Extension UPG	**6AV6355-1CA31-7ER0**
• 10 Extensions	**6AV6355-1AA31-7ER1**
• 10 Extensions UPG	**6AV6355-1CA31-7ER1**
• 25 Extensions	**6AV6355-1AA31-7ER2**
• 25 Extensions UPG	**6AV6355-1CA31-7ER2**
• 50 Extensions	**6AV6355-1AA31-7ER3**
• 50 Extensions UPG	**6AV6355-1CA31-7ER3**
• 100 Extensions	**6AV6355-1AA31-7ER4**
• 100 Extensions UPG	**6AV6355-1CA31-7ER4**
• 250 Extensions	**6AV6355-1AA31-7ER5**
• 250 Extensions UPG	**6AV6355-1CA31-7ER5**
• 500 Extensions	**6AV6355-1AA31-7ER6**
• 500 Extensions UPG	**6AV6355-1CA31-7ER6**
WinCC OA – Video REDU V3.17	
Extends Video Basic in a REDU system by a defined number of sources/cameras.	
• 1 Extension REDU	**6AV6355-1AA31-7ES0**
• 1 Extension REDU UPG	**6AV6355-1CA31-7ES0**
• 10 Extensions REDU	**6AV6355-1AA31-7ES1**
• 10 Extensions REDU UPG	**6AV6355-1CA31-7ES1**
• 25 Extensions REDU	**6AV6355-1AA31-7ES2**
• 25 Extensions REDU UPG	**6AV6355-1CA31-7ES2**
• 50 Extensions REDU	**6AV6355-1AA31-7ES3**
• 50 Extensions REDU UPG	**6AV6355-1CA31-7ES3**
• 100 Extensions REDU	**6AV6355-1AA31-7ES4**
• 100 Extensions REDU UPG	**6AV6355-1CA31-7ES4**
• 250 Extensions REDU	**6AV6355-1AA31-7ES5**
• 250 Extensions REDU UPG	**6AV6355-1CA31-7ES5**
• 500 Extensions REDU	**6AV6355-1AA31-7ES6**
• 500 Extensions REDU UPG	**6AV6355-1CA31-7ES6**
WinCC OA – Web Server V3.17	
Enables management of connections between WinCC OA Servers and WinCC OA ULC UX clients.	
• Web Server	**6AV6355-1AA31-7ET0**
• Web Server UPG	**6AV6355-1CA31-7ET0**

Software Services - version-independent	Article No.
WinCC OA – RDB	
• RDB SUS	**6AV6355-1DA00-0EA0**
• RDB SMS	**6AV6355-1FA00-0EA0**
• RDB POS	**6AV6355-1GA00-0EA0**
WinCC OA – DB Logger	
• DB Logger SUS	**6AV6355-1DA00-0EA1**
• DB Logger SMS	**6AV6355-1FA00-0EA1**
• DB Logger POS	**6AV6355-1GA00-0EA1**
WinCC OA – NGA Standard	
• NGA Standard SUS	**6AV6355-1DA00-0EA2**
• NGA Standard SMS	**6AV6355-1FA00-0EA2**
• NGA Standard POS	**6AV6355-1GA00-0EA2**
WinCC OA – NGA Premium	
• NGA Premium SUS	**6AV6355-1DA00-0EA3**
• NGA Premium SMS	**6AV6355-1FA00-0EA3**
• NGA Premium POS	**6AV6355-1GA00-0EA3**
WinCC OA – NGA backend connection	
• NGA backend connection SUS	**6AV6355-1DA00-0EA4**
• NGA backend connection SMS	**6AV6355-1FA00-0EA4**
• NGA backend connection POS	**6AV6355-1GA00-0EA4**
WinCC OA – CommCenter	
• CommCenter 1 SUS	**6AV6355-1DA00-0EC0**
• CommCenter 1 SMS	**6AV6355-1FA00-0EC0**
• CommCenter 1 POS	**6AV6355-1GA00-0EC0**
WinCC OA – CommCenter 2	
• CommCenter 2 SUS	**6AV6355-1DA00-0EC1**
• CommCenter 2 SMS	**6AV6355-1FA00-0EC1**
• CommCenter 2 POS	**6AV6355-1GA00-0EC1**
WinCC OA – CommCenter 3	
• CommCenter 3 SUS	**6AV6355-1DA00-0EC2**
• CommCenter 3 SMS	**6AV6355-1FA00-0EC2**
• CommCenter 3 POS	**6AV6355-1GA00-0EC2**
WinCC OA – CommCenter 4	
• CommCenter 4 SUS	**6AV6355-1DA00-0EC3**
• CommCenter 4 SMS	**6AV6355-1FA00-0EC3**
• CommCenter 4 POS	**6AV6355-1GA00-0EC3**
WinCC OA – Custom Component	
• Custom Comp SUS	**6AV6355-1DA00-0ED2**
• Custom Comp SMS	**6AV6355-1FA00-0ED2**
• Custom Comp POS	**6AV6355-1GA00-0ED2**
WinCC OA – Custom Component REDU	
• Custom Comp REDU SUS	**6AV6355-1DA00-0ED3**
• Custom Comp REDU SMS	**6AV6355-1FA00-0ED3**
• Custom Comp REDU POS	**6AV6355-1GA00-0ED3**
WinCC OA – Dist System	
• Dist System SUS	**6AV6355-1DA00-0EE0**
• Dist System SMS	**6AV6355-1FA00-0EE0**
• Dist System POS	**6AV6355-1GA00-0EE0**
WinCC OA – Redundancy	
• Redundancy SUS	**6AV6355-1DA00-0EF0**
• Redundancy SMS	**6AV6355-1FA00-0EF0**
• Redundancy POS	**6AV6355-1GA00-0EF0**

Ordering data	Article No.
WinCC OA – DRS	
• DRS SUS	**6AV6355-1DA00-0EF1**
• DRS SMS	**6AV6355-1FA00-0EF1**
• DRS POS	**6AV6355-1GA00-0EF1**
WinCC OA – Secure	
• Secure SUS	**6AV6355-1DA00-0EG0**
• Secure SMS	**6AV6355-1FA00-0EG0**
• Secure POS	**6AV6355-1GA00-0EG0**
WinCC OA – Map	
• Map SUS	**6AV6355-1DA00-0EH5**
• Map SMS	**6AV6355-1FA00-0EH5**
• Map POS	**6AV6355-1GA00-0EH5**
WinCC OA – Maintenance	
• Maintenance SUS	**6AV6355-1DA00-0EJ0**
• Maintenance SMS	**6AV6355-1FA00-0EJ0**
• Maintenance POS	**6AV6355-1GA00-0EJ0**
WinCC OA – OPC UA Server	
• OPC UA Server SUS	**6AV6355-1DA00-0EK0**
• OPC UA Server SMS	**6AV6355-1FA00-0EK0**
• OPC UA Server POS	**6AV6355-1GA00-0EK0**
WinCC OA – MindSphere	
• MindSphere SUS	**6AV6355-1DA00-0EK1**
• MindSphere SMS	**6AV6355-1FA00-0EK1**
• MindSphere POS	**6AV6355-1GA00-0EK1**
WinCC OA – Modbus Server	
• Modbus Server SUS	**6AV6355-1DA00-0EK2**
• Modbus Server SMS	**6AV6355-1FA00-0EK2**
• Modbus Server POS	**6AV6355-1GA00-0EK2**
WinCC OA – Recipe	
• Recipe SUS	**6AV6355-1DA00-0EL0**
• Recipe SMS	**6AV6355-1FA00-0EL0**
• Recipe POS	**6AV6355-1GA00-0EL0**
WinCC OA – Report	
• 1 Reporting Client SUS	**6AV6355-1DA00-0EM0**
• 1 Reporting Client SMS	**6AV6355-1FA00-0EM0**
• 1 Reporting Client POS	**6AV6355-1GA00-0EM0**
• 2 Reporting Clients SUS	**6AV6355-1DA00-0EM1**
• 2 Reporting Clients SMS	**6AV6355-1FA00-0EM1**
• 2 Reporting Clients POS	**6AV6355-1GA00-0EM1**
• 5 Reporting Clients SUS	**6AV6355-1DA00-0EM2**
• 5 Reporting Clients SMS	**6AV6355-1FA00-0EM2**
• 5 Reporting Clients POS	**6AV6355-1GA00-0EM2**
• 10 Reporting Clients SUS	**6AV6355-1DA00-0EM3**
• 10 Reporting Clients SMS	**6AV6355-1FA00-0EM3**
• 10 Reporting Clients POS	**6AV6355-1GA00-0EM3**
WinCC OA – Report REDU	
• 1 Reporting Client REDU SUS	**6AV6355-1DA00-0EM5**
• 1 Reporting Client REDU SMS	**6AV6355-1FA00-0EM5**
• 1 Reporting Client REDU POS	**6AV6355-1GA00-0EM5**
• 2 Reporting Clients REDU SUS	**6AV6355-1DA00-0EM6**
• 2 Reporting Clients REDU SMS	**6AV6355-1FA00-0EM6**
• 2 Reporting Clients REDU POS	**6AV6355-1GA00-0EM6**
• 5 Reporting Clients REDU SUS	**6AV6355-1DA00-0EM7**
• 5 Reporting Clients REDU SMS	**6AV6355-1FA00-0EM7**
• 5 Reporting Clients REDU POS	**6AV6355-1GA00-0EM7**
• 10 Reporting Clients REDU SUS	**6AV6355-1DA00-0EM8**
• 10 Reporting Clients REDU SMS	**6AV6355-1FA00-0EM8**
• 10 Reporting Clients REDU POS	**6AV6355-1GA00-0EM8**

	Article No.
WinCC OA – Scheduler	
• Scheduler SUS	**6AV6355-1DA00-0EN0**
• Scheduler SMS	**6AV6355-1FA00-0EN0**
• Scheduler POS	**6AV6355-1GA00-0EN0**
WinCC OA – SmartSCADA Toolbox	
• SmartSCADA Toolbox SUS	**6AV6355-1DA00-0EP0**
• SmartSCADA Toolbox SMS	**6AV6355-1FA00-0EP0**
• SmartSCADA Toolbox POS	**6AV6355-1GA00-0EP0**
WinCC OA – SmartSCADA KPI Ext.	
• SmartSCADA KPI Ext. SUS	**6AV6355-1DA00-0EP1**
• SmartSCADA KPI Ext. SMS	**6AV6355-1FA00-0EP1**
• SmartSCADA KPI Ext. POS	**6AV6355-1GA00-0EP1**
WinCC OA – SmartSCADA Analytics	
• SmartSCADA Analytics SUS	**6AV6355-1DA00-0EP2**
• SmartSCADA Analytics SMS	**6AV6355-1FA00-0EP2**
• SmartSCADA Analytics POS	**6AV6355-1GA00-0EP2**
WinCC OA – Video Light	
• Video Light SUS	**6AV6355-1DA00-0EQ0**
• Video Light SMS	**6AV6355-1FA00-0EQ0**
• Video Light POS	**6AV6355-1GA00-0EQ0**
WinCC OA – Video Basic	
• Video Basic SUS	**6AV6355-1DA00-0EQ1**
• Video Basic SMS	**6AV6355-1FA00-0EQ1**
• Video Basic POS	**6AV6355-1GA00-0EQ1**
WinCC OA – Video Display	
• Video Display SUS	**6AV6355-1DA00-0EQ2**
• Video Display SMS	**6AV6355-1FA00-0EQ2**
• Video Display POS	**6AV6355-1GA00-0EQ2**
WinCC OA – Video Basic REDU	
• Video Basic REDU SUS	**6AV6355-1DA00-0EU0**
• Video Basic REDU SMS	**6AV6355-1FA00-0EU0**
• Video Basic REDU POS	**6AV6355-1GA00-0EU0**
WinCC OA – Video Display REDU	
• Video Display REDU SUS	**6AV6355-1DA00-0EU1**
• Video Display REDU SMS	**6AV6355-1FA00-0EU1**
• Video Display REDU POS	**6AV6355-1GA00-0EU1**
WinCC OA – Video Display DIST	
• Video Display DIST SUS	**6AV6355-1DA00-0EQ3**
• Video Display DIST SMS	**6AV6355-1FA00-0EQ3**
• Video Display DIST POS	**6AV6355-1GA00-0EQ3**

WinCC Open Architecture Add-ons

Ordering data	Article No.
WinCC OA – Video Cameras	
• 1 Extension SUS	**6AV6355-1DA00-0ER0**
• 1 Extension SMS	**6AV6355-1FA00-0ER0**
• 1 Extension POS	**6AV6355-1GA00-0ER0**
• 10 Extensions SUS	**6AV6355-1DA00-0ER1**
• 10 Extensions SMS	**6AV6355-1FA00-0ER1**
• 10 Extensions POS	**6AV6355-1GA00-0ER1**
• 25 Extensions SUS	**6AV6355-1DA00-0ER2**
• 25 Extensions SMS	**6AV6355-1FA00-0ER2**
• 25 Extensions POS	**6AV6355-1GA00-0ER2**
• 50 Extensions SUS	**6AV6355-1DA00-0ER3**
• 50 Extensions SMS	**6AV6355-1FA00-0ER3**
• 50 Extensions POS	**6AV6355-1GA00-0ER3**
• 100 Extensions SUS	**6AV6355-1DA00-0ER4**
• 100 Extensions SMS	**6AV6355-1FA00-0ER4**
• 100 Extensions POS	**6AV6355-1GA00-0ER4**
• 250 Extensions SUS	**6AV6355-1DA00-0ER5**
• 250 Extensions SMS	**6AV6355-1FA00-0ER5**
• 250 Extensions POS	**6AV6355-1GA00-0ER5**
• 500 Extensions SUS	**6AV6355-1DA00-0ER6**
• 500 Extensions SMS	**6AV6355-1FA00-0ER6**
• 500 Extensions POS	**6AV6355-1GA00-0ER6**
WinCC OA – Video Cameras REDU	
• 1 Extension REDU SUS	**6AV6355-1DA00-0ES0**
• 1 Extension REDU SMS	**6AV6355-1FA00-0ES0**
• 1 Extension REDU POS	**6AV6355-1GA00-0ES0**
• 10 Extensions REDU SUS	**6AV6355-1DA00-0ES1**
• 10 Extensions REDU SMS	**6AV6355-1FA00-0ES1**
• 10 Extensions REDU POS	**6AV6355-1GA00-0ES1**
• 25 Extensions REDU SUS	**6AV6355-1DA00-0ES2**
• 25 Extensions REDU SMS	**6AV6355-1FA00-0ES2**
• 25 Extensions REDU POS	**6AV6355-1GA00-0ES2**
• 50 Extensions REDU SUS	**6AV6355-1DA00-0ES3**
• 50 Extensions REDU SMS	**6AV6355-1FA00-0ES3**
• 50 Extensions REDU POS	**6AV6355-1GA00-0ES3**
• 100 Extensions REDU SUS	**6AV6355-1DA00-0ES4**
• 100 Extensions REDU SMS	**6AV6355-1FA00-0ES4**
• 100 Extensions REDU POS	**6AV6355-1GA00-0ES4**
• 250 Extensions REDU SUS	**6AV6355-1DA00-0ES5**
• 250 Extensions REDU SMS	**6AV6355-1FA00-0ES5**
• 250 Extensions REDU POS	**6AV6355-1GA00-0ES5**
• 500 Extensions REDU SUS	**6AV6355-1DA00-0ES6**
• 500 Extensions REDU SMS	**6AV6355-1FA00-0ES6**
• 500 Extensions REDU POS	**6AV6355-1GA00-0ES6**

	Article No.
WinCC OA – Video Workstation	
• WinCC OA – Video Workstation SUS	**6AV6355-1DA00-0EQ4**
• WinCC OA – Video Workstation SMS	**6AV6355-1FA00-0EQ4**
• WinCC OA – Video Workstation POS	**6AV6355-1GA00-0EQ4**
WinCC OA – Web Server	
• Web Server SUS	**6AV6355-1DA00-0ET0**
• Web Server SMS	**6AV6355-1FA00-0ET0**
• Web Server POS	**6AV6355-1GA00-0ET0**
WinCC OA – Load Balancing	
• Load Balancing SUS	**6AV6355-1DA00-0ET1**
• Load Balancing SMS	**6AV6355-1FA00-0ET1**
• Load Balancing POS	**6AV6355-1GA00-0ET1**
WinCC OA – WebSocket connection	
• WebSocket connection SUS	**6AV6355-1DA00-0ET2**
• WebSocket connection SMS	**6AV6355-1FA00-0ET2**
• WebSocket connection POS	**6AV6355-1GA00-0ET2**

More information

More information is available on the internet at
http://www.siemens.com/wincc-open-architecture

Overview

WinCC Open Architecture (WinCC OA) IPC Packages are compact WinCC OA functional units designed for SIMATIC IPC hardware. They are sophisticated solutions which are offered as a bundle with corresponding Nanobox PCs, perfect for fast deployment.

The licenses allow the use of WinCC OA on SIMATIC IPCs of the 127, 227, and 277 series and on IOT2050. These packages cannot be extended with further WinCC OA options, except the option with 4096 PowerTags.

The general WinCC OA Software or hardware requirements apply to the IPC Packages specified above.

These packages can only be ordered in combination with the corresponding additional hardware item.

SUS contracts can be purchased for IPC Packages, but no SMS.

Benefits

- Quick to order
- Proven package concept based on numerous customer requests
- Common protocols are immediately available – without extra charge
- Lower licensing costs through product bundles

Application

In the course of the joint product lines of the SIMATIC family, an optimized ordering process was made possible for the Nanoboxes. When hardware and license are ordered at the same time, a combination package has been put together which includes as a product bundle common product extensions for small but flexible and open solutions and can therefore be used without major product configuration.

Since these are special bundled products, extension with additional services is not possible. A support extension cannot be used in this case either.

The application is suitable for single station solutions as well as for standardized extensions in an architecture network as a remote unit or subsystem.

Design

PowerTags/BACnet objects

IPC Packages are offered with different PowerTag Packages. The staggering allows 128, 256, 512, 2048 or 4096 PowerTags.

If the BACnet driver is used, 200 BACnet objects are available in each IPC Package.
In contrast to Server Basic licenses, Runtime package licenses **cannot** be extended with additional PowerTag packages or BACnet objects, except for the 4096 PowerTags option.

The PowerTags or BACnet objects purchased here also cannot be moved to other servers. A whole range of common options is provided by ordering a package.

UIs

The package includes a UI license (WinCC OA version <= 3.19, Desktop UI, WinCC OA version from 3.20: UI Client).
More information on this can be found in the <User Interfaces> section

Drivers

PowerTags	128	256	512	2 048	4 096
Included options	OPC UA / DA Server, DIST, NGA Standard	OPC UA / DA Server, DIST, RDB [3], NGA Standard	OPC UA / DA Server, DIST, RDB [3], NGA Standard	OPC UA / DA Server, DIST, RDB [3], NGA Standard	OPC UA / DA Server, DIST, RDB, NGA Standard
Included drivers	Selection of 2 desired WinCC OA Drivers [1)2)]	Selection of 3 desired WinCC OA Drivers [1)]	Selection of 3 desired WinCC OA Drivers [1)]	Selection of 3 desired WinCC OA Drivers [1)]	S7, OPC UA Client, OPC DA Client
Extendable	No	No	No	No	With all WinCC OA options
IPCs	IOT2050	IOT2050, IPC127E / IPC2x7E / IPC2x7G / ET 200SP	IOT2050, IPC127E / IPC2x7E / IPC2x7G / ET 200SP	IOT2050, IPC127E / IPC2x7E / IPC2x7G / ET 200SP	IPC127E / IPC2x7E / IPC2x7G / ET 200SP

1) 3 instances of each available WinCC OA Driver without any additional option. Example: S7 + MQTT + IEC104

2) Only on IOT 2050 supported drivers

3) RDB cannot be used on IOT2050 devices

More information on drivers can be found under <Drivers>.

WinCC Open Architecture IPC Packages

Design

Add-ons

IPC Packages include a Dist option, an RDB option (except for 128 package) and an NGA standard.
More information on options can be found under <Add-ons>.

Hardware

The following hardware versions are supported by WinCC OA:

SIMATIC IPC2x7E

Hardware components	Specification
OS	Windows 10 Enterprise 2019 LTSC, 64-bit
Processor	Intel Celeron (N2807 / N2930)
RAM	2/4/8 GB
Hard disk	SSD / HDD
Graphics	Intel HD Graphics / DisplayPort
Network adapter	2x 10/100/1000 Mbps, RJ45

SIMATIC IPC2x7G

Hardware components	Specification
OS	Windows 10 Enterprise 2019 LTSC, 64-bit
Processor	Atom X6413E (4-core)
RAM	4/8/16 GB
Hard disk	SSD
Graphics	Intel HD Graphics / DisplayPort
Network adapter	3x 10/100/1000 Mbps

SIMATIC IPC127E

Hardware components	Specification
OS	Windows 10 Enterprise 2016 LTSB, 64-bit
Processor	Intel Atom (E3930 / E3940)
RAM	2/4 GB
Hard disk	SSD
Graphics	Intel HD Graphics / DisplayPort
Network adapter	2/3x Ethernet RJ45

SIMATIC IOT2050

Hardware components	Specification
OS	Industrial OS 2.1/2.2
Processor	ARM TI AM6548 HS
RAM	1/2 GB
Hard disk	SSD
Graphics	DisplayPort
Network adapter	2x Ethernet RJ45

[1] Detailed information about installation of WinCC OA on IOT2050 hardware can be viewed in the online documentation.

SIMATIC ET 200SP

Hardware components	Specification
OS	WES 7E 32-bit/ WES 7P 64-bit, Windows 10 Enterprise LTSB 2016
RAM	4/8 GB
Memory	CFast card
Network adapter	1x Ethernet RJ45

Ordering data

	Article No.
V3.20	
WinCC OA IPC Package V3.20	
• 128 PowerTags	**6AV6355-1AA50-0FA4**
• 256 PowerTags	**6AV6355-1AA50-0FA0**
• 512 PowerTags	**6AV6355-1AA50-0FA1**
• 2 048 PowerTags	**6AV6355-1AA50-0FA2**
• 4 096 PowerTags	**6AV6355-1AA50-0FA3**
V3.19	
WinCC OA IPC Package V3.19	
• 128 PowerTags	**6AV6355-1AA47-7FA4**
• 256 PowerTags	**6AV6355-1AA47-7FA0**
• 512 PowerTags	**6AV6355-1AA47-7FA1**
• 2 048 PowerTags	**6AV6355-1AA47-7FA2**
• 4 096 PowerTags	**6AV6355-1AA47-7FA3**
V3.18	
WinCC OA IPC Package V3.18	
• 128 PowerTags	**6AV6355-1AA31-8FA4**
• 256 PowerTags	**6AV6355-1AA31-8FA0**
• 512 PowerTags	**6AV6355-1AA31-8FA1**
• 2 048 PowerTags	**6AV6355-1AA31-8FA2**
• 4 096 PowerTags	**6AV6355-1AA31-8FA3**
V3.17	
WinCC OA IPC Package V3.17	
• 256 PowerTags	**6AV6355-1AA31-7FA0**
• 512 PowerTags	**6AV6355-1AA31-7FA1**
• 2 048 PowerTags	**6AV6355-1AA31-7FA2**
• 4 096 PowerTags	**6AV6355-1AA31-7FA3**
Software Services - version-independent	
WinCC OA IPC Package	
• 128 PowerTags SUS	**6AV6355-1DA00-0FA4**
• 128 PowerTags POS	**6AV6355-1GA00-0FA4**
• 256 PowerTags SUS	**6AV6355-1DA00-0FA0**
• 256 PowerTags POS	**6AV6355-1GA00-0FA0**
• 512 PowerTags SUS	**6AV6355-1DA00-0FA1**
• 512 PowerTags POS	**6AV6355-1GA00-0FA1**
• 2 048 PowerTags SUS	**6AV6355-1DA00-0FA2**
• 2 048 PowerTags POS	**6AV6355-1GA00-0FA2**
• 4 096 PowerTags SUS	**6AV6355-1DA00-0FA3**
• 4 096 PowerTags POS	**6AV6355-1GA00-0FA3**

More information

More information is available on the internet at

http://www.siemens.com/wincc-open-architecture

Overview

WinCC Open Architecture inhouse licenses

WinCC Open Architecture (WinCC OA) inhouse licenses are time-limited developer licenses recommended for certified partners.

This license comprises a one-year right of usage under the following conditions:

- ETM provides a WinCC Open Architecture (WinCC OA) license with unlimited PowerTags and all license options (excluding SmartSCADA, Video and BACnet).
  Two development licenses are required to create a redundant system.
  The extensions listed above can also be purchased separately.
  - This development license is for internal use and cannot be forwarded to third parties.
  - This development license cannot be used either for customer tests (e.g. SAT, FAT) or in productive plants.
- Support and problem solution, as well as remote maintenance during office hours, up to the number of hours per year included in the license package for customer's employees on WinCC OA.
  Remark
  The workload for resolving product faults that were reported and reproducible is not deducted from this number of hours.
- The license is invoiced each year in advance. The agreement is valid for one year and is then extended by a further year if neither of the contract parties cancels the contract 3 months before its expiry.

Upgrade of inhouse Development licenses

WinCC OA Inhouse Development licenses are version-independent. They can therefore be used even after a version change.
To use new license features, customers need to upgrade their Inhouse Development licenses.

Upgrades and updates of the WinCC OA Inhouse Development license to new WinCC OA versions during the contract period must be performed by the customers themselves. They receive an email notification relating to this.

To perform the update, customers need to log into the WinCC OA license portal with their license key and upgrade the desired licenses there. They can do this any time after receiving the email notification.

Benefits

Flexible development possibilities for new solutions through open configurability of contents and interfaces

- Annual renewal and included software upgrades at no additional cost
- Included telephone support

Application

These licenses are designed for, but not limited to, developments by partners.

Innovative additional services such as video or Smart SCADA can also be used with the appropriate extensions.

Design

Inhouse DEV PARA

Extension for the Inhouse DEV Package by another full PARA license. With graphical editor (incl. symbol catalogs), script development environment and test framework.

Inhouse DEV BACnet

Extension of the WinCC OA Inhouse DEV Package by the complete BACnet development environment including EDE tool, EDE file interface, BACnet object library, BACnet driver and BACnet browser.

Inhouse DEV Video

Extension of the WinCC OA Inhouse DEV Package by a complete developer video package with unlimited video sources (cameras).

Inhouse DEV SmartSCADA

Extension of the WinCC OA Inhouse DEV Package by a complete developer package for SmartSCADA for use of the KPI framework with unlimited KPI instances.
Notice: Analytics model is not included and is not sold as a developer license. The standard Analytics Toolbox package can be added for an additional charge.

API Interface

Application programming interface. The API offers a series of functions that enable WinCC OA to be extended with special managers. A manager is a program that communicates with the system via a protocol defined by WinCC OA. The license allows the development of own drivers using C++. One license is required for each WinCC OA Para Standard for development based on API interface. For first-time orders, participation in a WinCC OA WS - Developer Workshop is strongly recommended.

WinCC Open Architecture Development Packages

Ordering data	Article No.
WinCC OA – Inhouse DEV Package 1 WinCC OA Server license (functionally unlimited) with almost all options (except Video, BACnet, SmartSCADA), 10 hotline hours, automatically extended after one year	
• 1 Inhouse DEV Package	**6AV6355-1EA00-0GA0**
• 2 Inhouse DEV Packages	**6AV6355-1EA00-0GA1**
• 5 Inhouse DEV Packages	**6AV6355-1EA00-0GA2**
• 10 Inhouse DEV Packages	**6AV6355-1EA00-0GA3**
WinCC OA – Inhouse DEV PARA Extends WinCC OA Inhouse DEV Package by additional PARA licenses. Automatically extended after 1 year.	
• 1 Inhouse DEV PARA	**6AV6355-1EA00-0GB0**
• 2 Inhouse DEV PARA	**6AV6355-1EA00-0GB1**
• 5 Inhouse DEV PARA	**6AV6355-1EA00-0GB2**
• 10 Inhouse DEV PARA	**6AV6355-1EA00-0GB3**
WinCC OA – Inhouse DEV BACnet BACnet development environment including EDE tool, EDE file interface, BACnet object library, BACnet driver, BACnet browser, automatically extended after 1 year.	**6AV6355-1EA00-0GC0**
WinCC OA – Inhouse DEV Video Developer video package, unlimited sources/cameras, automatically extended after 1 year.	**6AV6355-1EA00-0GC1**
WinCC OA – Inhouse DEV SmartSCADA SmartSCADA developer package, KPI framework with unlimited KPI instances, automatically extended after 1 year.	**6AV6355-1EA00-0GC2**
WinCC OA – API Interface Application programming interfaces for the development of own drivers (C++).	**6AV6355-1EA00-0GD0**

More information

More information is available on the internet at
http://www.siemens.com/wincc-open-architecture

Overview

Solution Frameworks are license packages for the implementation of specific applications at the customer. Each package contains a quota of consulting hours.

Design

Topology Package

The Topology package is an application framework for topological coloring of network representations. A qualitative statement is made as to which parts (nodes, line sections etc.) of a network are directly connected to specific feeders. This package includes one day of consulting services (WinCC Open Architecture - Consulting 8h) for project-specific integration.

APM Package

The Advanced Playback Manager software offers the possibility to play back the system status of a real-time system in a test simulation system. Snapshot (time), playback (time range) and training sequence are included functions. The APM package does not include simulation of the process or the connected PLCs.

This package includes one day of consulting services (WinCC Open Architecture - Consulting 8h) for project integration.

A WinCC Open Architecture RDB license (ORACLE connection) is required for the application.

AMS Packages

The Advanced Maintenance Suite (AMS) Package includes the application with a maximum number of alarm/event DPs to assigned checklists, AMS Reports and AMS Importers. All I/O DPs that are linked to a list and trigger work orders are counted. AMS Reports also requires a license for Crystal Reports 2016 (RT V13.0) or the use of AMS BIRT Reports. One day consulting service (WinCC Open Architecture - Consulting 8h) is included.

AMS Reports and Importer are not available for Linux distributions.

As of WinCC OA version 3.20, Advanced Maintenance Suite no longer differentiates according to the number of alarms.

AMS Packages of different sizes are available up to and including WinCC OA version 3.19 (see table below). An existing WinCC Open Architecture Server is required for the application. The package does not include further support.

AMS Package	Qty. alarm/ event DP	License validity	Extendable
Starter	20	90 days	No
Entry	20	Unlimited	No
Small	100	Unlimited	No
Medium	1 000	Unlimited	No
Large	5000	Unlimited	Yes, via WinCC OA AMS Package Extension
Unlimited	Unlimited	Unlimited	No

The WinCC Open Architecture AMS Package Extension includes an upgrade for Advanced Maintenance Station packages by 1,000 I/O each. It is only applicable to the WinCC Open Architecture - AMS Package Large.

Ordering data

	Article No.
V3.20	
WinCC OA – Topology V3.20	
Application framework for topological coloring of network representations + consulting	
• Topology Package	**6AV6355-1AA50-0HA0**
• Topology Package UPG	**6AV6355-1CA50-0HA0**
• Topology Software	**6AV6355-1AA50-0HA1**
• Topology Software UPG	**6AV6355-1CA50-0HA1**
WinCC OA – APM V3.20	
Playback of real-time system status in test simulation system + consulting	
• APM Package	**6AV6355-1AA50-0HB0**
• APM Package UPG	**6AV6355-1CA50-0HB0**
• APM SW	**6AV6355-1AA50-0HB1**
• APM SW UPG	**6AV6355-1CA50-0HB1**
WinCC OA – AMS V3.20	
• AMS Package	**6AV6355-1AA47-7HC6**
• AMS Package UPG	**6AV6355-1CA47-7HC6**
• AMS Package SUS	**6AV6355-1DA00-0HC7**
• AMS Package SMS	**6AV6355-1FA00-0HC7**
• AMS Package POS	**6AV6355-1GA00-0HC7**
• AMS SW	**6AV6355-1AA50-0HD7**
• AMS SW UPG	**6AV6355-1CA50-0HD7**
• AMS SW SUS	**6AV6355-1DA00-0HC7**
• AMS SW SMS	**6AV6355-1FA00-0HC7**
• AMS SW POS	**6AV6355-1GA00-0HD7**
V3.19	
WinCC OA – Topology Package V3.19	
Application framework for topological coloring of network representations + consulting	
• Topology Package	**6AV6355-1AA47-7HA0**
• Topology Package UPG	**6AV6355-1CA47-7HA0**
WinCC OA – APM Package V3.19	
Playback of real-time system status in test simulation system + consulting.	
• APM Package	**6AV6355-1AA47-7HB0**
• APM Package UPG	**6AV6355-1CA47-7HB0**
AMS Package Starter V3.19	**6AV6355-1AA47-7HC0**
90-day trial license for Advanced Maintenance Suite + consulting	
WinCC OA – AMS Package Entry V3.19	
Advanced Maintenance Suite with max. 20 alarm/event DP + consulting	
• AMS Package Entry	**6AV6355-1AA47-7HC1**
• AMS Package Entry UPG	**6AV6355-1CA47-7HC1**

WinCC Open Architecture Solution Frameworks

Ordering data	Article No.
WinCC OA – AMS Package Small V3.19	
Advanced Maintenance Suite with max. 100 alarm/event DP + consulting	
• AMS Package Small	**6AV6355-1AA47-7HC2**
• AMS Package Small UPG	**6AV6355-1CA47-7HC2**
WinCC OA – AMS Package Medium V3.19	
Advanced Maintenance Suite with max. 1000 alarm/event DP + consulting	
• AMS Package Medium	**6AV6355-1AA47-7HC3**
• AMS Package Medium UPG	**6AV6355-1CA47-7HC3**
WinCC OA – AMS Package Large V3.19	
Advanced Maintenance Suite with max. 5000 alarm/event DP + consulting	
• AMS Package Large	**6AV6355-1AA47-7HC4**
• AMS Package Large UPG	**6AV6355-1CA47-7HC4**
WinCC OA – AMS Package Unlimited V3.19	
Advanced Maintenance Suite with unlimited alarm/event DP + consulting	
• AMS Package Unlimited	**6AV6355-1AA47-7HC5**
• AMS Package Unlimited UPG	**6AV6355-1CA47-7HC5**
WinCC OA – AMS Package Extension V3.19	
Upgrade for Advanced Maintenance Suite Package Large by 1,000 alarm/event DPs	
• AMS Package Extension	**6AV6355-1AA47-7HC6**
• AMS Package Extension UPG	**6AV6355-1CA47-7HC6**

	Article No.
V3.18	
WinCC OA – Topology Package V3.18	
Application framework for topological coloring of network representations + consulting.	
• Topology Package	**6AV6355-1AA31-8HA0**
• Topology Package UPG	**6AV6355-1CA31-8HA0**
WinCC OA – APM Package V3.18	
Playback of real-time system status in test simulation system + consulting.	
• APM Package	**6AV6355-1AA31-8HB0**
• APM Package UPG	**6AV6355-1CA31-8HB0**
AMS Package Starter	**6AV6355-1AA31-8HC0**
90-day trial license for Advanced Maintenance Suite	
WinCC OA – AMS Package Entry V3.18	
Advanced Maintenance Suite with max. 20 alarm/event DP + consulting.	
• AMS Package Entry	**6AV6355-1AA31-8HC1**
• AMS Package Entry UPG	**6AV6355-1CA31-8HC1**
WinCC OA – AMS Package Small V3.18	
Advanced Maintenance Suite with max. 100 alarm/event DP + consulting.	
• AMS Package Small	**6AV6355-1AA31-8HC2**
• AMS Package Small UPG	**6AV6355-1CA31-8HC2**
WinCC OA – AMS Package Medium V3.18	
Advanced Maintenance Suite with max. 1000 alarm/event DP + consulting.	
• AMS Package Medium	**6AV6355-1AA31-8HC3**
• AMS Package Medium UPG	**6AV6355-1CA31-8HC3**
WinCC OA – AMS Package Large V3.18	
Advanced Maintenance Suite with max. 5000 alarm/event DP + consulting	
• AMS Package Large	**6AV6355-1AA31-8HC4**
• AMS Package Large UPG	**6AV6355-1CA31-8HC4**
WinCC OA – AMS Package Unlimited V3.18	
Advanced Maintenance Suite with unlimited alarm/event DP + consulting.	
• AMS Package Unlimited	**6AV6355-1AA31-8HC5**
• AMS Package Unlimited UPG	**6AV6355-1CA31-8HC5**
WinCC OA – AMS Package Extension V3.18	
Upgrade for Advanced Maintenance Suite Package Large by 1 000 alarm/event DP.	
• AMS Package Extension	**6AV6355-1AA31-8HC6**
• AMS Package Extension UPG	**6AV6355-1CA31-8HC6**

Ordering data

	Article No.
V3.17	
WinCC OA – Topology Package V3.17	
Application framework for topological coloring of network representations + consulting.	
• Topology Package	**6AV6355-1AA31-7HA0**
• Topology Package UPG	**6AV6355-1CA31-7HA0**
WinCC OA – APM Package V3.17	
Playback of real-time system status in test simulation system + consulting.	
• APM Package	**6AV6355-1AA31-7HB0**
• APM Package UPG	**6AV6355-1CA31-7HB0**
WinCC OA – AMS Package Starter V3.17	**6AV6355-1AA31-7HC0**
90-day trial license for Advanced Maintenance Suite + consulting.	
WinCC OA – AMS Package Entry V3.17	
Advanced Maintenance Suite with max. 20 alarm/event DP + consulting.	
• AMS Package Entry	**6AV6355-1AA31-7HC1**
• AMS Package Entry UPG	**6AV6355-1CA31-7HC1**
WinCC OA – AMS Package Small V3.17	
Advanced Maintenance Suite with max. 100 alarm/event DP + consulting.	
• AMS Package Small	**6AV6355-1AA31-7HC2**
• AMS Package Small UPG	**6AV6355-1CA31-7HC2**
WinCC OA – AMS Package Medium V3.17	
Advanced Maintenance Suite with max. 1000 alarm/event DP + consulting.	
• AMS Package Medium	**6AV6355-1AA31-7HC3**
• AMS Package Medium UPG	**6AV6355-1CA31-7HC3**
WinCC OA – AMS Package Large V3.17	
Advanced Maintenance Suite with max. 5000 alarm/event DP + consulting	
• AMS Package Large	**6AV6355-1AA31-7HC4**
• AMS Package Large UPG	**6AV6355-1CA31-7HC4**
WinCC OA – AMS Package Unlimited V3.17	
Advanced Maintenance Suite with unlimited alarm/event DP + consulting.	
• AMS Package Unlimited	**6AV6355-1AA31-7HC5**
• AMS Package Unlimited UPG	**6AV6355-1CA31-7HC5**
WinCC OA – AMS Package Extension V3.17	
Upgrade for Advanced Maintenance Suite Package Large by 1 000 alarm/event DP.	
• AMS Package Extension	**6AV6355-1AA31-7HC6**
• AMS Package Extension UPG	**6AV6355-1CA31-7HC6**

	Article No.
Software Services - version-independent	
WinCC OA – Topology Package	
• Topology Package SUS	**6AV6355-1DA00-0HA0**
• Topology Package SMS	**6AV6355-1FA00-0HA0**
• Topology Package POS	**6AV6355-1GA00-0HA0**
WinCC OA – APM Package	
• APM Package SUS	**6AV6355-1DA00-0HB0**
• APM Package SMS	**6AV6355-1FA00-0HB0**
• APM Package POS	**6AV6355-1GA00-0HB0**
WinCC OA – AMS Package Entry	
• AMS Package Entry SUS	**6AV6355-1DA00-0HC1**
• AMS Package Entry SMS	**6AV6355-1FA00-0HC1**
• AMS Package Entry POS	**6AV6355-1GA00-0HC1**
WinCC OA – AMS Package Small	
• AMS Package Small SUS	**6AV6355-1DA00-0HC2**
• AMS Package Small SMS	**6AV6355-1FA00-0HC2**
• AMS Package Small POS	**6AV6355-1GA00-0HC2**
WinCC OA – AMS Package Medium	
• AMS Package Medium SUS	**6AV6355-1DA00-0HC3**
• AMS Package Medium SMS	**6AV6355-1FA00-0HC3**
• AMS Package Medium POS	**6AV6355-1GA00-0HC3**
WinCC OA – AMS Package Large	
• AMS Package Large SUS	**6AV6355-1DA00-0HC4**
• AMS Package Large SMS	**6AV6355-1FA00-0HC4**
• AMS Package Large POS	**6AV6355-1GA00-0HC4**
WinCC OA – AMS Package Unlimited	
• AMS Package Unlimited SUS	**6AV6355-1DA00-0HC5**
• AMS Package Unlimited SMS	**6AV6355-1FA00-0HC5**
• AMS Package Unlimited POS	**6AV6355-1GA00-0HC5**
WinCC OA – AMS Package Extension	
• AMS Package Extension SUS	**6AV6355-1DA00-0HC6**
• AMS Package Extension SMS	**6AV6355-1FA00-0HC6**
• AMS Package Extension POS	**6AV6355-1GA00-0HC6**

More information

More information is available on the internet at

http://www.siemens.com/wincc-open-architecture

SIMATIC WinCC Open Architecture Services

Overview

SIMATIC WinCC Open Architecture Services

SIMATIC WinCC Open Architecture (WinCC OA) is a SCADA system for visualizing and operating processes, production flows, machines and plants in all industrial sectors.

This high degree of flexibility requires comprehensive support for our customers and especially our partners. WinCC OA staff are happy to provide support for a wide range of challenges.

Services are offered in the following categories:

- Support: Support for errors within the scope of maintenance and update contracts
- Consulting: Consulting and configuration activities
- Solution: Development activities based on precise, technical specifications
- Trainings: Defined trainings and hands-on trainings
- Travel costs: For consulting or trainings on site
- Trade goods: Third-party goods sold through WinCC OA

Note:

These are services of the product supplier.

More information

More information is available on the internet at

http://www.winccoa.com

Information about the training courses and booking training courses at

https://www.winccoa.com/support/training.html

Information about WinCC OA Support at

https://www.winccoa.com/support.html

Overview

WinCC Open Architecture Support

The WinCC Open Architecture (WinCC OA) support can only be purchased in addition to a currently valid Software Maintenance Service (SMS) or Inhouse Development Package.
Support requests can be submitted online around the clock, 365 days a year. Service requests cannot be submitted by email.

The customer request is received by Siemens Industry Support (1st level), further processing is performed by the WinCC OA Product Support specialists (2nd level), who are available during Austrian normal working hours, Monday to Friday 9 am to 5 pm CEST/CET.

A support agreement is concluded for 12 months and must be renewed thereafter.
The corresponding pool of hours is also available for this period. Unused hours expire and will be charged for 12 months from the date of purchase.
Support hours are for general product information and product related support.
"WinCC OA Consulting" handles specific, project-related information.

Benefits

- Competent advice on product questions from the product supplier
- Solution-oriented fault diagnostics
- Correction of the error based on best practice experience
- Possibility of future adoption through product maintenance of WinCC OA patches

Design

Online Support Requests can be made directly to the Online Support Portal via the link https://support.industry.siemens.com/My/ww/en/requests#createRequest. Further communication in this regard take places via email. You will be contacted by WinCC OA Product Support via email when they are working on your service request. You can reply to this email if you wish to send additional information.

During the initial contact, registration of the customer master data may take some time.
A member of the WinCC OA Product Support team will then perform further processing of your support request.

You can check the status of your service request and edit your service requests on the Siemens Support Portal (http://www.siemens.com/industry/supportrequest).

What information is required for a service request to WinCC OA Support?

When making a service request to WinCC OA Support, the following information must always be included:

- WinCC OA version: Version number and service pack (if applicable)
- List of the installed WinCC OA patches
- Operating system
- System configuration: Single system, redundant system, distributed system
- Detailed problem description and/or step-by-step description, steps for reproducing the reported problem.
- Example:
  - WinCC OA version 3.19
    Patch level: P10
    Operating system: Windows10 64-bit
    System configuration: Redundant system

Problem classifications:

Only registered requests can be processed with appropriate priority. WinCC OA Product Support classifies each case according to its urgency.
Information about WinCC OA versions and operating systems used is required for this.
The following problem classifications exist:

Priority	High (A)	Medium (B)	Low (C)
Problem type	Crash of a WinCC OA Core process, Inoperable system and similar	Limited functionality, operation only possible with time-/cost-intensive workaround solutions	Standard questions on the product and product properties, minor malfunctions
Average reaction time [1]	3 workdays	8 workdays	14 workdays

[1] The reaction time is the time between the receipt of the product support request and the first response from ETM Customer Care. Please note that the reaction times are average processing times that only apply during Austrian working hours from Monday to Friday, 9 am to 5 pm CEST, unless your contract states otherwise.

WinCC Open Architecture Support

Design

Support for current and past versions:

Standard product support for SIMATIC WinCC Open Architecture includes the current as well as the last two versions. This does not apply to customers with a corresponding maintenance agreement concluded with ETM. If required, please contact us to discuss a possible migration to a higher version.
WinCC OA Product Support supports the following versions (including Service Packs SP1 and SP2 and all official patches):

Date	Release	Supported versions		
		Current	Current-1	Current-2
May 2018	V3.16	V3.16	V3.15	V3.14
January 2020	V3.17	V3.17	V3.16	V3.15
May 2021	V3.18	V3.18	V3.17	V3.16
November 2022	V3.19	V3.19	V3.18	V3.17
June 2024	V3.20	V3.20	V3.19	V3.18

Notes on fault reporting:

Faults must be reported and delivered to WinCC OA Product Support in a reproducible manner - see https://www.winccoa.com/support.html.

If WinCC OA Product Support receives too little information, or if the type of the fault makes it unlikely that the fault can be reproduced by WinCC OA Product Support using the WinCC OA Product Support standard test capabilities, WinCC OA Product Support may refuse to take steps to reproduce the fault.

If WinCC OA Product Support does not receive a response to a support request within 3 months, the request will be closed. If WinCC OA Product Support does not receive any further feedback from the customer on a solution provided by WinCC OA Product Support within 28 days, the request will be closed automatically.

Total times for reproduction of faults by WinCC OA Product Support are limited by the total number of support hours. The customer must report the fault and make it reproducible on a supported WinCC OA version with all patches installed on an operating system supported by WinCC OA. If the fault originates from a WinCC OA third-party software component, WinCC OA Product Support notifies the relevant supplier of the fault and the respective support conditions of the supplier apply. Discontinuation of third-party software (e.g. database system) and/or operating system (e.g. Windows version) supported by WinCC OA leads automatically and immediately to the discontinuation of WinCC OA in combination with the discontinued third-party software and/or the operating system.

Access to Customer Care is reserved for customer employees trained on WinCC OA.
Support is provided by WinCC OA product specialists without customer-specific project know-how. (Specific project consulting can be provided by a WinCC OA consultant via a separate consulting agreement).

Ordering data

	Article No.
WinCC OA – Hotline Support Use of the hotline support to the extent of the hours ordered.	
• 10 h	**6AV6355-2AA00-0BC1**
• 15 h	**6AV6355-2AA00-0BC2**
• 20 h	**6AV6355-2AA00-0BC3**
WinCC OA replacement license issue Flat fee for issuing a replacement license.	**6AV6355-2AA00-0BC4**

More information

More information is available on the internet at

http://www.siemens.com/wincc-open-architecture

Overview

Consulting refers to pure consulting activities with optional configuration support within the scope of the agreements as well as within the scope of special products ("Solution Frameworks"), which are to be adapted to individual customer requirements according to existing routines.

Consulting is a service provided by WinCC Open Architecture (WinCC OA). This is calculated at an hourly rate. It is based on 8 hours per working day during normal working hours, defined according to Austrian working days, Monday to Friday from 9 am to 5 pm CET. If this time is exceeded, the following surcharges apply:

- 50% outside of normal working hours (6 pm until 8 am) and on Saturdays
- 100% on Sundays and Austrian holidays

In the course of ordering a project, it is also possible to order a pool of hours of consulting services. Corresponding working hours are then removed from the pool.

The hourly rate refers to project-related, location-independent work – it does not require travel to the customer or to a location. If travel is desired, it must be ordered as <Travel costs>.

Travel time is viewed as working time and, if not agreed separately, is invoiced accordingly by ETM. The hours actually used, according to the timesheet, are invoiced.

"Trainings" as well as development of adapted product components ("Solutions") can be ordered separately.

Likewise, any telephone support within the scope of a maintenance contract is not linked to this contingent, but must be ordered separately (for details, see: "UPG", "SUS", "SMS"). Additional ordering of "Support" services is also possible, but is not automatically included in the consulting services.

Before making your order, please coordinate the availability of the WinCC OA trainers and consultants with ETM in good time at the email address: wincc_oa.at@siemens.com

Benefits

Consulting services help to put the finishing touches to your solution. With years of experience and the corresponding expert knowledge, we are available to provide advice and support for development of new, creative projects as well as advice on data security and optimization potential.

This cooperation can save valuable time and therefore money – faster implementation is possible. Faster go-to-market enables decisive advantages for your offer to the end customer.

Application

- Sector-independent
- Consulting for complex project requirements
- Consulting for new partners with little practice based on WinCC OA
- Configurations for specific solutions
- Individual packages for customer-specific topics

Ordering data

Ordering data	Article No.
WinCC OA - Consulting	
Includes staggered number of hours of consulting services	
• Consulting 1h	**6AV6355-3AA00-0BA0**
• Consulting 8h	**6AV6355-3AA00-0BA1**
• Consulting 25h	**6AV6355-3AA00-0BA4**
• Consulting 50h	**6AV6355-3AA00-0BA2**
• Consulting 100h	**6AV6355-3AA00-0BA3**

More information

More information is available on the internet at

http://www.siemens.com/wincc-open-architecture

WinCC Open Architecture Solution

Overview

Solution is a customer-specific software development based on precise technical specifications.
Whether this development is positioned in the product, its effects on maintenance responsibility and handover to the customer must be clarified before the order is placed.
Solutions are a service provided by WinCC Open Architecture (WinCC OA).

This is calculated at an hourly rate. It is based on 8 hours per working day during normal working hours, defined according to Austrian working days, Monday to Friday from 9 am to 5 pm CET. Exceeding this time and activities outside normal working hours will be invoiced proportionately with increased costs.
The hourly rate refers to project-related, location-independent work – it does not require travel to the customer or to a location. Trainings, as well as pure consulting and configuration activities (consulting), can be ordered separately.
In the course of project implementation, it makes sense to make use of the various services (consulting) that are available as part of the support services.

Application

Contractor's activities:

- Participation in the regular team meetings (e.g. standup, sprint planning, sprint review, etc.)
- Implementation of the features/tasks assigned by the client

The client must have a corresponding concept (requirement definition) for the feature to be developed and the exact technical specifications must be clarified.

Obligations of the client:

- The client has the role of project manager and product owner and also bears the risk for the technical implementation
- Definition of requirement by the client
- ETM suggests how a feature is technically possible before implementing it. The actual implementation then takes place in agreement with the client
- The client assumes total responsibility for the implementation
- The client must provide the test environment required for the implementation
- The client must provide a contact person for the duration of the project (project manager and technical contact persons)
- Provision of all information/documents (including system architecture and quantity structure, etc.), hardware and software licenses relevant for the contractor to carry out the project. ETM provides WinCC OA development licenses and hardware for its own employees.
- The period in which the service is to be provided shall be agreed with the contractor
- Conducting of reviews and the acceptance. A task implemented by the contractor is automatically accepted once the status has been set to "Done" for the first time by the client or the task enters productive operation

General limitations:

- The amount of hours offered is not related to the actual effort required to implement the desired features, as not all necessary requirements are known to the client at the time of commissioning.
- Any warranty expenses incurred will also be billed to the existing pool or a new pool must be assigned.

Ordering data

	Article No.
WinCC OA – Solution Custom Customer-specific, individually offered software development according to specification.	**6AV6355-3CA00-0BB1**
WinCC OA – Solution 1 hour 1 hour hourly rate for software development according to specification.	**6AV6355-3CA00-0BB0**

More information

More information is available on the internet at

http://www.siemens.com/wincc-open-architecture

Overview

Trainings for handling WinCC Open Architecture (WinCC OA) and various WinCC OA features in detail. Trainings are conducted by certified WinCC OA trainers. Price per participant.

Training courses can be booked directly via https://www.winccoa.com/support/training.html.
Via the link, current requirements as well as additional detailed information regarding minimum hardware and software requirements can be accessed at any time.

The training courses normally take place at ETM in Eisenstadt however it is also possible to book trainings on-site at the customer's location.
The following applies for such on-site trainings:

- Longer lead times must be planned
- Minimum number of participants for trainings on site at the customer's location has increased
  - within the EU +2 (E.g. basic training minimum 5 instead of 3)
  - within the EU +3 (E.g. basic training minimum 6 instead of 3)
- Travel costs, accommodations and meals for the trainer are covered by the customer.
  More information on booking is available under <Travel costs>.

Customers can also book personal online training sessions.
In this case, the minimum number of participants always increases by +2.
Travel costs, accommodations and meals for trainers do not have to be provided for online training courses.

Lunch is included in the price for trainings held at ETM in Eisenstadt. If possible, participants should bring their own notebooks to the training (64-bit operating system).

ETM reserves the right to postpone training courses to the next possible date if the minimum number of registrations is not reached.
Individual training can also be requested in addition to the training offer provided by ETM.

Cancellation conditions

The customer may withdraw from the contract in writing at any time before the agreed start of a course.
If the cancellation is not made at least 10 calendar days before the start of the course, the customer will be charged 80% of the agreed total price for the course.
If the cancellation is made earlier, the cancellation is free of charge for the customer.
If a participant does not show up for the agreed training course without prior cancellation, 100% of the order value will be charged.
The termination of a training course is possible at any time.
In this case we charge 100% of the order value.

All mandatory ECC examinations (including late registrations or changes of training participants) must be performed by the SIEMENS unit responsible for the order (if AWV category 1).

Benefits

- Proven product knowledge of WinCC Open Architecture
- In-depth knowledge of specific areas of expertise such as security, architecture
- Development opportunities through partner program and ongoing support
- Exchange of project experience of other WinCC OA partners
- Certifications prove corresponding knowledge of the employees

Application

Valuable starting points for using the software are offered for employees. As knowledge progresses, there are always opportunities to accumulate further knowledge and expand on it. Topics that are particularly in demand are also covered by our own training courses.

The standard training courses are all part of a certification and training strategy from which both partners and customers benefit and which is put together and recommended in cooperation with WinCC OA employees and years of experience.

Some partner contracts also include obligations for each partner to participate in certain training courses. Depending on the milestones achieved, various models are available for in-depth cooperation. These development paths must be agreed with the Sales department.

In the course of consulting activities in special cases, there is, of course, the possibility of organizing individual trainings and workshops tailored to the customer. In this case, this is to be clarified with "Consulting"

Design

Certified WinCC OA Basic Training

This trainer-led course provides the participants with the necessary knowledge to successfully design and create a WinCC OA application within one week. This course is aimed at employees who want to gain initial experience in WinCC OA. Course participants require computer skills (MS Windows, keyboard and mouse) as well as knowledge of PLCs and networks. Basic knowledge in programming is advantageous. Participants should bring along a suitable laptop on which a WinCC OA Training version will be installed for practice purposes.
Minimum of 3 registrations. The training is limited to a maximum of 10 participants.
The following group packages are available:
Certified WinCC OA Basic Training, 3 participants
Certified WinCC OA Basic Training up to 5 participants
Certified WinCC OA Basic Training as of 5 participants
Requirements for the use of these discounted group packages:
Training participants of a company
Same training date

Certified WinCC OA Extended Engineer Workshop

In this three-day course, participants will gain a deeper insight into the internal mechanisms and details of WinCC OA. Topics include debugging, performance, communication between the individual managers and "Do's and Don'ts" in scripting. To get the maximum benefits from these topics, a current customer project is used as a basis for discussion and the mechanisms are shown and discussed. Additional topics (e.g. Add-ons of WinCC OA or special functions) can be selected and have to be agreed with the trainer in advance.
We recommend attending the Engineer Workshop only after initial project experiences – at the earliest 3 months after WinCC OA Basic Training.
Minimum 2 registrations.
The training is limited to a maximum of 8 participants.
The following group packages are available:
Certified WinCC OA Engineer Workshop, 3 participants
Certified WinCC OA Engineer Workshop, up to 5 participants
Requirements for the use of these discounted group packages:
Training participants of a company
Same training date

Certified WinCC OA Consultant

Over three days in this course, participants will gain the knowledge and skills required to create complex and large WinCC OA projects. Data structures, graphical references and system architectures of large, distributed and redundant systems are built, among other things. Troubleshooting and error analysis are further topics of this course. Here, too, further topics (e.g. Add-ons of WinCC OA or special functions) can be agreed with the trainer in advance.
Minimum 2 registrations.
The training is limited to max. 8 participants.

Certified WinCC OA Developer Workshop

In this three-day course, the participants obtain specialized knowledge and the skills required to use the WinCC OA API Toolkit. It shows how to design customer drivers, managers and/or CTRL extensions (dlls).

Certified WinCC OA Extended Developer Workshop

This trainer-led course provides experienced participants with the knowledge and skills necessary to use the WinCC OA API Toolkit in one week. In this course, participants will learn how to create special CTRL extensions (DLLs), managers and/or simple drivers.
Minimum 2 registrations
Training is limited to a maximum of 6 participants.

Certified WinCC OA Security Workshop

In this three-day, trainer-led workshop, experienced participants will gain the knowledge and skills required to use WinCC OA as a process control system in a secure network environment as described in the WinCC OA Security Guideline. This course offers participants an introduction to the security mechanisms available in WinCC OA.
Minimum 2 registrations.
Training is limited to a maximum of 8 participants.

Certified WinCC OA Safety Engineer Workshop

In this two-day trainer-led workshop, experienced participants will gain the specialist knowledge and the skills required to set up safety-relevant WinCC OA projects.
The specified framework and operating conditions are discussed in detail and the resulting effects on the customer project are discussed.
Minimum 2 registrations.

WinCC OA Update Training

This one-day course led by a trainer gives experienced WinCC OA specialists an insight into the latest performance features and functions of the current WinCC OA version.
This course is obligatory for "Certified Engineer" or "Certified Consultant" in order to maintain the certification status already achieved.
Minimum of 5 registrations.

WinCC OA Object-oriented Programming

This trainer-led course over 2 days provides participants with the knowledge required to successfully use the script language CTRL++ integrated in WinCC OA for realizing object-oriented concepts as well as the concept of object-oriented Panel references. This course is thus aimed at employees who autonomously program in WinCC OA, both Panel-dependent and Panel-independent.
Minimum of 2 registrations.

WinCC OA Video Training

One-day training to learn the Video option of WinCC OA.

WinCC OA Video Expert Training

This trainer-led course over 2 days provides participants with the knowledge required to plan and successfully commission plants with video cameras using WinCC OA VIDEO.
In presentations and practical exercises, the course teaches the technical basics for installing distributed video systems, installing cameras and optimizing bandwidth requirements.
This course is aimed both at technical project managers who plan SCADA systems with video and at employees who use WinCC OA to program, set up and commission such systems.

Design

WinCC OA SmartSCADA Training

The two-day training course, led by a lecturer, offers experienced participants the opportunity to acquire the knowledge and skills required to use the WinCC OA SmartSCADA assistants (KPIs, data mining and classification) included in the scope of delivery of the SmartSCADA Add-on. A demo project with data for analysis serves as a training basis including exercises for participants. Minimum of 2 registrations. Training is limited to a maximum of 8 participants.

WinCC OA BACnet Workshop

In this one and a half day training, experienced WinCC OA engineers will be familiarized with using the WinCC OA BACnet development environment. The topics covered are development environment, library, drivers and similar.

WinCC OA AMS Workshop

This three-day workshop covers the administration and customization of the Advanced Maintenance Suite (AMS), how trouble tickets are dispatched and their status can be tracked, as well as the evaluation of the achieved results using reports.

WinCC OA - Project Specific Start Up Workshop

This startup workshop supports WinCC OA beginners in efficient project startup and enables participants to use the WinCC OA tool environment securely and with confidence.

Under the guidance of a WinCC OA consultant, the right procedures and basic settings are selected at the beginning of the project to ensure success.
The scope of the workshop is a combination of 2 days of workshop and 16 hours of consulting (unused hours expire 12 months after ordering).

Ordering data

	Article No.
Certified WinCC OA Basic Training Training for getting started with WinCC OA. Duration: 5 days	**6AV6355-3BA00-0BA0**
Certified WinCC OA Basic Training 3 P Training for getting started with WinCC OA. Duration: 5 days	**6AV6355-3BA00-0BA1**
Certified WinCC OA Basic Training <=5 P Training for getting started with WinCC OA. Duration: 5 days	**6AV6355-3BA00-0BA2**
Certified WinCC OA Basic Training >5 P Training for getting started with WinCC OA. Duration: 5 days	**6AV6355-3BA00-0BA3**
Certified WinCC OA Engineer Workshop Training for future engineers of WinCC OA. Duration: 3 days	**6AV6355-3BA00-0BB0**
Certified WinCC OA Engineer Workshop 3 P Training for future engineers of WinCC OA. Duration: 3 days	**6AV6355-3BA00-0BB1**
Certified WinCC OA Engineer Workshop 5 P Training for future engineers of WinCC OA. Duration: 3 days	**6AV6355-3BA00-0BB2**
Certified WinCC OA Consultant Training for creating complex systems with WinCC OA. Duration: 3 days.	**6AV6355-3BA00-0BC0**
Certified WinCC OA Developer Workshop Training to obtain basic knowledge for development with WinCC OA. Duration: 3 days.	**6AV6355-3BA00-0BC1**
Certified WinCC OA Extended Developer Workshop Training for detailed knowledge of the WinCC OA API. Duration: 3 days.	**6AV6355-3BA00-0BC2**
Certified WinCC OA Security Workshop Training to learn security mechanisms in WinCC OA. Duration: 3 days.	**6AV6355-3BA00-0BC3**
Certified WinCC OA Safety Engineer Workshop Training for future SAFETY engineers of WinCC OA. Duration: 2 days	**6AV6355-3BA00-0BC4**
WinCC OA – Update Training Training for new functionalities in WinCC OA. Duration: 1 day.	**6AV6355-3BA00-0BD0**
WinCC OA – Object-oriented Programming Training for object-oriented programming and Panels. Duration: 2 days	**6AV6355-3BA00-0BE0**

WinCC Open Architecture Trainings

Ordering data

	Article No.
WinCC OA – Video Training Training to learn the Video option of WinCC OA. Duration: 1 day.	**6AV6355-3BA00-0BE1**
WinCC OA –Video Expert Training Training to expand knowledge on the Video option of WinCC OA. Duration: 2 days	**6AV6355-3BA00-0BE2**
WinCC OA – SmartSCADA Training Training for the use and handling of WinCC OA Add-on SmartSCADA. Duration: 2 days.	**6AV6355-3BA00-0BE3**
WinCC OA – BACnet Workshop Training to learn the BACNet option. Duration: 1.5 days	**6AV6355-3BA00-0BE4**
WinCC OA – AMS Workshop Training to learn the Advanced Maintenance Suite. Duration: 3 days	**6AV6355-3BA00-0BE5**
WinCC OA – Project specific start up Workshop Workshop for efficient project startup for WinCC OA beginners Duration: 2 days	**6AV6355-3BA00-0BF0**
WinCC OA – Training day Service during working hours from Monday to Friday from 8am-5pm; by appointment Duration: 1 day	**6AV6355-3BA00-0BY1**

More information

More information is available on the internet at
http://www.siemens.com/wincc-open-architecture

Overview

Services for "Consulting" and "Training" are charged at an hourly rate. The hourly rate refers to project-related, location-independent work – it does not require travel to the customer or to a location.

Travel costs are to be agreed upon additionally and include cost for both time and travel for WinCC Open Architecture (WinCC OA) employees involved.
A definite commitment for a trip must be agreed separately.

Depending on the distance and the agreed means of transport, flat-rate travel costs for arrival and departure or freely configurable contingents – also for longer stays and customizations – are offered.

Benefits

- Better interaction within the team through getting to know one another in person
- Reduction of travel costs on the customer side
- More precise assessment of the situation and the project through on-site cooperation
- Better planning of project costs through greater transparency
- Adapted travel packages for easier travel planning

Application

The order numbers **WinCC OA – Travel costs flight** include the travel allowance for an employee on a customer assignment when arriving by plane within the countries listed. Package includes travel time and travel costs incurred on the day of travel.

Breakdown of flight zones:

Flight zone 1: Albania (AL), Andorra (AD), Austria (AT), Belarus (BY), Belgium (BE), Bosnia and Herzegovina (BA), Bulgaria (BG), Croatia (HR), Cyprus (CY), Czech Republic (CZ), Denmark (DK), Estonia (EE), Finland (FI), France (FR), Germany (DE), Greece (GR), Hungary (HU), Iceland (IS), Ireland (IE), Italy (IT), Kosovo (XK), Latvia (LV), Liechtenstein (LI), Lithuania (LT), Luxembourg (LU), Malta (MT), Moldova (MD), Monaco (MC), Montenegro (ME), Netherlands (NL), North Macedonia (MK), Norway (NO), Poland (PL), Portugal (PT), Romania (RO), San Marino (SM), Serbia (RS), Slovakia (SK), Slovenia (SI), Spain (ES), Sweden (SE), Switzerland (CH), Turkey (TR), Ukraine (UA), United Kingdom (GB), Vatican City State (VA)

Flight zone 2: Afghanistan (AF), Algeria (DZ), Antigua and Barbuda (AG), Armenia (AM), Azerbaijan (AZ), Bahamas (BS), Bahrain (BH), Barbados (BB), Benin (BJ), Burkina Faso (BF), Cabo Verde (CV), Cameroon (CM), Canada (CA), Central African Republic (CF), Chad (TD), Comoros (KM), Côte d'Ivoire (CI), Cuba (CU), Djibouti (DJ), Dominica (DM), Dominican Republic (DO), Egypt (EC), Equatorial Guinea (GQ), Eritrea (ER), Eswatini (SZ), Ethiopia (ET), Gambia (GM), Georgia (GE), Ghana (GH), Grenada (GD), Guinea (GN), Guinea-Bissau (GW), Haiti (HT), India (IN), Iran (IR), Iraq (IQ), Israel (IL), Jamaica (JM), Jordan (JO), Kazakhstan (KZ), Kuwait (KW), Kyrgyzstan (KG), Lebanon (LB), Liberia (LR), Libya (LY), Maldives (MV), Mali (ML), Mauritania (MR), Mauritius (MU), Morocco (MA), Niger (NE), Nigeria (NG), Oman (OM), Pakistan (PK), Qatar (QA), Saint Kitts and Nevis (KN), Saint Lucia (LC), Saint Vincent and the Grenadines (VC), São Tomé and Príncipe (ST), Saudi Arabia (SA), Senegal (SN), Seychelles (SC), Sierra Leone (SL), Somalia (SO), South Sudan (SS), Sudan (SD), Syria (SY), Tajikistan (TJ), Togo (TG), Trinidad and Tobago (TT), Tunisia (TN), Turkmenistan (TM), Uganda (UG), Uzbekistan (UZ), United Arab Emirates (AE), United States (US), Yemen (YE)

Flight zone 3: Botswana (BW), Burundi (BI), Congo (CG), Congo, Dem. Rep. (CD), Gabon (GA), Kenya (KE), Lesotho (LS), Madagascar (MG), Malawi (MW), Mozambique (MZ), Namibia (NA), Rwanda (RW), South Africa (ZA), Tanzania (TZ), Zambia (ZM), Zimbabwe (ZW)

Flight zone 4: Alaska (US), Argentina (AR), Australia (AU), Bangladesh (BD), Belize (BZ), Bhutan (BT), Bolivia (BO), Brazil (BR), Brunei Darussalam (BN), Cambodia (KH), Chile (CL), China (CN), Colombia (CO), Costa Rica (CR), Ecuador (EC), El Salvador (SV), Fiji (FJ), Guatemala (GT), Guyana (GY), Honduras (HN), Indonesia (ID), Japan (JP), Kiribati (KI), Korea, Dem. PR (KP), Korea, Rep. (KR), Laos (LA), Malaysia (MY), Marshall Islands (MH), Mexico (MX), Micronesia (FM), Mongolia (MN), Myanmar (MM), Nauru (NR), Nepal (NP), New Zealand (NZ), Nicaragua (NI), Palau (PW), Panama (PA), Papua New Guinea (PG), Paraguay (PY), Peru (PE), Philippines (PH), Samoa (WS), Singapore (SG), Solomon Islands (SB), Sri Lanka (LK), Suriname (SR), Thailand (TH), Timor-Leste (TL), Tonga (TO), Tuvalu (TV), Uruguay (UY), Vanuatu (VU), Venezuela (VE), Vietnam (UN)

WinCC Open Architecture Travel costs

Ordering data

Ordering data	Article No.
WinCC OA – Travel costs Fixed price for travel allowance, including travel time and costs.	
• TC up to 100 km	**6AV6355-3DA00-0BF0**
• TC up to 300 km	**6AV6355-3DA00-0BF1**
• TC up to 500 km	**6AV6355-3DA00-0BF2**
WinCC OA – Travel costs flight Travel allowance for a flight within the defined zones	
Zone 1	**6AV6355-3DA00-0BF3**
Zone 2	**6AV6355-3DA00-0BF4**
Zone 3	**6AV6355-3DA00-0BF5**
Zone 4	**6AV6355-3DA00-0BF6**
WinCC OA – Travel costs journey time Hourly rate for travel time	**6AV6355-3DA00-0BG0**
WinCC OA – Travel costs rental car Fixed price travel allowance for a rental car per day	**6AV6355-3DA00-0BG1**
WinCC OA – Travel costs overnight accom. Fixed price travel allowance for one overnight stay	**6AV6355-3DA00-0BG2**
WinCC OA – Travel costs meals Fixed price for meals for one day	**6AV6355-3DA00-0BG3**

More information

More information is available on the internet at
http://www.siemens.com/wincc-open-architecture

Overview

Trade goods include WinCC **O**pen **A**rchitecture components that are purchased and distributed under the name WinCC Open Architecture (WinCC OA).
These include third-party products such as licenses for Oracle DB, as well as hardware dongles, data storage media and certificates.

More information about licenses and shipping under "More information".

Design

Oracle licenses

General

The WinCC OA Basic Package includes the HDB database (flat file DB). Alternatively, historical data can be archived in Oracle. The WinCC OA RDB Add-on is required for this purpose. In terms of hardware, separate computers must be provided for Oracle databases.
In the event that Oracle makes changes to the price list, availability or licensing conditions in the meantime, WinCC OA reserves the right to adjust all Oracle prices and licensing conditions stated in this offer accordingly.
This reserved right to adjustment is valid from the time the offer is made until an Oracle license agreement with the end customer is legally valid.
If the Oracle licenses are not obtained via WinCC OA, WinCC OA provides no Oracle support. WinCC OA Support services end at the RDB-Oracle interface. WinCC OA does not provide any services for Oracle installation or for setting up the WinCC OA RDB Manager.

Please observe the supported operating systems according to the WinCC OA documentation and the Oracle documentation.

ASFU

As an option, Oracle licenses can be obtained as so-called ASFU (Application Specific Full Use) licenses. However, the use of an ASFU license is subject to certain technical requirements. These are listed in the attached Oracle License Agreement. The obligations of this agreement must be passed on by WinCC OA to the complete supply chain and must therefore be signed by the end customer. Only an agreement signed by the end customer allows use as ASFU license.
WinCC OA cannot supply the ASFU license until the ASFU Oracle agreement signed by the end customer is available.
If, in exceptional cases, supply of the ASFU license by WinCC OA is necessary before a signed ASFU Oracle agreement is available, this must be communicated in writing.
If the ASFU Oracle agreement signed by the end customer is not submitted within 60 days after supply of the ASFU license via WinCC OA, 40% of the Oracle list price will be charged and the license will be upgraded to an Oracle FU license.
To be able to process the supply of the Oracle license, we need the following information with the order:
- End user name (company name)
- End user address, town, country
- End user contact details, email address
- Signed ASFU Oracle agreement

Note that Oracle Software Update License & Support is mandatory for the first year and is provided by WinCC OA. Oracle Software Update License & Support can be ordered directly for the subsequent years.

Full Use

As an option, Oracle licenses can be purchased as so-called FU (Full Use) licenses. Here, the end customer receives an email directly from Oracle with the download link. The contract (OLSA) between end customer and Oracle is confirmed by 1-click. However, the use of an FU license is subject to certain technical requirements.
To be able to process the supply of the Oracle license, we need the following information with the order:
- End user name (company name)
- End user address, town, country
- End user contact details, email address

Note that Oracle Software Update License & Support is mandatory for the first year and is provided by Oracle based on the CSI number of the license. For subsequent years, Oracle Software Update License & Support can be ordered directly from Oracle by the end customer.

Oracle configurations

All the following standard Oracle configurations are based on "Oracle Standard Edition 2" processor licenses in the selected license type (FU / ASFU).

One Single Oracle database server

Please note that the use of the "Oracle Standard Edition 2" is only permitted under the following hardware conditions:
Max. 2 CPU sockets and max. 2 CPUs per Oracle Server

Two Oracle database servers in a cluster configuration

Please note that the use of the "Oracle Standard Edition" is only permitted under the following hardware conditions:
Max. 4 CPU sockets and max. 2 CPUs per Oracle Server –
The offer includes licenses for max. 2 CPUs.
Please note that operation of a cluster database in the cluster configuration is no longer supported as of Oracle version 19c Standard Edition 2.
The database can be installed in a cluster configuration, but only operated as single instance database.
In this case, the higher availability is guaranteed by "Switchover" and "Failover" methods. The database is only active on one cluster node in the cluster configuration.

DRS with one Single Oracle database server per location

Please note that the use of the "Oracle Standard Edition 2" is only permitted under the following hardware conditions:
Max. 2 CPU sockets and max. 2 CPUs per Oracle Server –
The offer includes the license for 1 CPU.

Design

DRS with two Oracle database servers in a cluster configuration & one Single Oracle database server

Please note that the use of the "Oracle Standard Edition 2" is only permitted under the following hardware conditions:

- Single server: Max. 2 CPU sockets and max. 2 CPUs per Oracle Server
- Cluster: Max. 4 CPU sockets and max. 2 CPUs per Oracle Server

Please read the note in 4.2 for Oracle as of version 19c

DRS with two Oracle database servers in a cluster configuration per location

Please note that the use of the "Oracle Standard Edition 2" is only permitted under the following hardware conditions: Max. 4 CPU sockets and max. 2 CPUs per Oracle Server.
Please read the note in 4.2 for Oracle as of version 19c.

Hardware

Hardware dongles

WinCC OA offers USB hardware dongles for operation with a license bound to the dongle. Dongles can also be used to temporarily replace hardware-bound licenses of operator stations or servers.

Dongles can be purchased in three different types.

The standard and micro versions are compatible with the CodeMeter licensing procedure introduced in WinCC OA V3.17. The WIBU version must be selected to operate WinCC OA V3.16 and lower with a hardware dongle.

Data storage medium

WinCC OA installation software is available on DVD.

Other

Certificates

WinCC OA issues certificates for training graduates. Participation in WinCC OA Training conducted by a "Train-the-Trainer" certified trainer is a prerequisite.

Express delivery

A flat fee is charged for express delivery of WinCC OA goods (WinCC OA on data storage medium, WinCC OA dongle etc.).

Ordering data

Ordering data	Article No.
WinCC OA – ORACLE SE2 ASFU Oracle Standard Edition 2 Processor ASFU license including first year maintenance	**6AV6355-4AA00-0AA0**
WinCC OA – ORACLE SE2 ASFU SUS One year maintenance for Oracle Standard Edition 2 processor license ASFU	**6AV6355-4AA00-0AA1**
WinCC OA – ORACLE SE2 FU (full use) Oracle Standard Edition 2 Processor license SE2 full use including first year maintenance	**6AV6355-4AA00-0AA2**
WinCC OA – ORACLE SE2 FU SUS One year maintenance for Oracle Standard Edition 2 processor license full use	**6AV6355-4AA00-0AA3**
WinCC OA Dongle USB hardware dongle for dongle-bound licenses.	
• WinCC OA – Dongle Standard	**6AV6355-4BA00-0AB0**
• WinCC OA – Dongle Standard Micro	**6AV6355-4BA00-0AB1**
• WinCC OA – Dongle (Wibukey, outdated)	**6AV6355-4BA00-0AB2**
WinCC OA – on data storage medium V3.20 WinCC OA Software DVD – Version V3.20 on data storage medium	**6AV6355-4BA50-0AB3**
WinCC OA – On data storage medium V3.19 WinCC OA Software DVD – Version V3.19 on data storage medium	**6AV6355-4BA47-7AB3**
WinCC OA – On data storage medium V3.18 WinCC OA Software DVD – Version V3.18 on data storage medium	**6AV6355-4BA31-8AB3**
WinCC OA – On data storage medium V3.17 WinCC OA Software DVD – Version V3.17 on data storage medium	**6AV6355-4BA31-7AB3**
WinCC OA – Express delivery Flat fee for express delivery of WinCC OA Trade goods	**6AV6355-4BA00-0AB5**

More information

More information is available on the internet at

http://www.siemens.com/wincc-open-architecture

Overview

SIMATIC WinCC OA IOT Suite

SIMATIC WinCC OA IOT Suite is an IoT system consisting of an IOT Box on the machine for visualizing and analyzing processes, production sequences, machines and production lines in real-time and the IOT OPA as a maintenance service provider for all connected IOT Boxes, specially developed for the food and beverage industries.

The IOT Box is based on the SCADA system SIMATIC WinCC Open Architecture V3.16, which has been on the market for many years. A highly simplified user interface enables the machine operator without special previous knowledge and in a playful way to gain deeper insights into the process sequences and to generate a new level of transparency and analysis options for optimizing the processes of a machine by entering non-machine information.

Current version:

- SIMATIC IOT Suite V1.2

Benefits

The advantages result from the intelligent combination of direct, local function and central administration unit, coupled with the greatest possible ease of operation. This ensures a high level of acceptance by the user and the greatest possible central flexibility in maintenance and expandability.

Function

SIMATIC WinCC OA IOT Suite

The advantages result from the intelligent combination of direct, local function and central administration unit, coupled with the greatest possible ease of operation.
This ensures a high level of acceptance by the user and the greatest possible central flexibility in maintenance and expandability.

Runs on:

- SIEMENS Industrial OS V2

On the hardware platforms:

- SIMATIC IPC 2xx series (e.g. Nanobox),
  SIMATIC IPC 4xx series (e.g. Nanobox)

SIMATIC WinCC OA IOT Box

The IOT Box is a self-contained visualization system based on IPCs, Industrial OS and SIMATIC WinCC OA, which can be commissioned by the customer (maintenance or electrician) within a few hours. The currently available functionalities (apps) for connectivity, visualization or OEE (Overall Equipment Efficiency) are easy to configure and enable machine operators themselves to find the required insights for process optimization or to collect data and/or to exchange the data within the company using publish/subscribe mechanisms. A large number of apps are already available in the basic IOT Box.

Available apps	Task
S7 app	With the S7 app, nothing stands in the way of a connection to the conventional PLCs from SIEMENS. S7-300/-400 series, S7-1200/S7-1500 series and S5, as well as S7-200, LOGO 0BA7, LOGO 0BA8 and SINUMERIK PowerLine are supported. You only need to know the (IP) address of the PLC and the type of PLC to establish a connection. Data points of the selected PLC can be imported using the I/O address or, if available, a CSV file
S7 Plus app	In contrast to the S7 app, the S7 Plus app allows access to modern SIMATIC PLCs via browsing.
OPC UA Client app	The OPC UA Client app enables you to query any data of an OPC UA Server and transfer it to the data management of the IOT Box. After selecting a server, its data management is automatically queried and displayed. Here, too, the data and their updating can be transferred to the IOT Box by simple selection.
Subscribe app	The Subscribe app is used by the IOT Box to request and retrieve data from another IOT Box, if it has been published on the source device. In general, no data is exchanged between the devices without explicit permission. This is an internal system communication with the highest security standards.
Publish app	You can use the Publish app to publish recorded, calculated or mapped data of an IOT Box to other IOT Boxes. In general, no data is exchanged between the devices without explicit permission. This is an internal system communication with the highest security standards.
Data Mapping app	The Data Mapping app enables you to map or convert collected data into importable structures. This serves to standardize data communication within a company. Pre-defined standard formats, such as OMAC, are already available. Others can be easily defined and imported via CSV files. You can also define your own data structures within the app and link their data management.

Function

Rules app	Intelligent pre-processing of data is an essential part of data concentration. However, advanced logic can also be created and applied in the Rules app. A logical and arithmetic rule-based editor enables the creation of rules, which can also be instantiated at a later point in time. The basis is formed by a powerful scripting engine (CTRL), which executes any input of CRTL scripts. This means that not only logical or arithmetical logic operations can be realized.
OEE app	The OEE app is the heart of the IOT Box, as the first of many value-added applications to follow. Using input data from the Mapping app, this app calculates the efficiency of machines. A time reference can be introduced using a shift calendar and with the help of reasons for malfunctions (pre-defined or defined by the operator), information originating beyond the machine itself can also be included in an analysis. The user thus gains a new depth of analysis and optimization potential.
Dashboard app	The OEE app and the Dashboard app are used to display collected or calculated values. All available data can be displayed in specially structured display formats here. Using a tag browser, the data is simply dragged and dropped into the display areas, where a wide variety of display formats can be selected. The arrangement of the display elements is also freely selectable. The user is thus able to create and save required displays independently. Different images can also be created using several index tabs to allow quick access to all desired display formats and depths at runtime.
Update Center app	The Update Center manages the apps and system software on the IOT Box. Via a connection to a central IOT OPA, the latest app extensions can be easily downloaded and installed without any user interaction. The app provides information about the latest available versions and updates and also allows the user to extend or reduce functionality/apps on the IOT Box. In the system environment, user administration can be used to specify whether this should be done locally by the user or centrally by IT.
Snapshot app	The Snapshot app allows you to create snapshots of a collection of tags using various triggers. These tag snapshots are saved in the app itself and can be exported as CSV.
System Log app	The System Log app shows current and historical log entries on the IOT Box. These include system messages as well as update information and error messages.
System app	The network settings of an IOT Box and the configuration of the time synchronization servers can be performed in the System app. It is also possible to connect to the associated IOT OPA to be able to use all services such as app updates or the OPA Filestore. The entire User Management of the Box as well as the CERT Store can be found in the System app.
S5 app	The S5 app allows S5 PLCs to be connected to the IOT Suite via the H1 ISO protocol.
Ethernet IP app	The Ethernet IP app allows various PLCs that support the PCCC Standard or the Native EIP Standard to be connected to the IOT Suite.
MindSphere app	Data from the IOT Suite can be pushed to various MindSphere assets with the MindSphere app. The output data for this is individual IOT Suite tags.
Modbus app	A Modbus TCP/IP client is integrated in the IOT Suite with the Modbus app. In addition to individual registers, subindices can also be addressed.
MQTT Client app	The MQTT Client app enables the IOT Suite to connect to conventional MQTT brokers and subscribe to a wide range of topics.
MTConnect app	Data from supported CNC machines can be read out with the MTConnect app.

Function

SIMATIC WinCC OA IOT OPA

The IOT OPA is the central core of the IOT Suite and deals exclusively with the management, administration and maintenance of the connected IOT Boxes. It is possible to operate this web-based service both within a plant and in a cloud. An Internet connection is desirable, but not mandatory. Via the IOT OPA, new devices of the IOT Suite are integrated into the system or devices that are no longer needed are removed. It provides connected systems with the latest updates and app extensions. With an existing Internet connection to its central cloud storage, it can automatically download the latest apps and make them available to the system. This is also possible without an Internet connection, but requires the manual acquisition of this data. A status model of the IOT Box and the apps enables control of the specific data that can or may be distributed to specific IOT Boxes. An IOT OPA can also remotely update, functionally extend or reduce IOT Boxes within the administration. The initial installation of an IOT Box is also made possible by the IOT OPA, because all required applications and the system software are stored in its memory.

Runs on:

- Debian Buster

On the hardware platforms:

- All common PC platforms and virtualized environments

Functions	Task
Dashboard	The dashboard displays both the current status of the IOT OPA and the installed version.
Applications	You can find all available apps under Applications, including their version and status in the OPA store. From here, apps can be distributed to devices or their status can be changed.
Devices	The device view shows all connected IOT Boxes, including their status information. You can add new IOT Boxes and change their status here.
Device Configuration	The Device Configuration view displays detailed information about the connected IOT Box. This includes information about installed software (firmware, operating system, apps, etc.) as well as an update history, its name and local location.
Backup and Restore	From this display, you can upload configurations of a selected IOT Box to the IOT OPA or restore them to the IOT Box.
Files	The OPA Filestore describes a central data store that can be read and written both via the web server and via connected IOT Boxes. In this way, for example, an app can save data retentively and store it at a central storage location.
Settings	Different templates that relate to app installations can be configured in the properties of the IOT OPA. Here you can also find settings for synchronizing the IOT OPA with its central IOT repository on the Internet, so that you can obtain the latest updates and apps from it.
Log	This view shows the processes that have been executed on the IOT OPA. This allows the state of the IOT Box or actions performed with a connected IOT Box to be traced.

More information

Important:

All offered order numbers include only the SW licenses for operating an IOT Box and/or an IOT OPA.
Hardware and operating systems are not included and must be purchased separately.

More information about hardware can be found at

https://mall.industry.siemens.com/mall/en/WW/Catalog/Products/5101001?tree=CatalogTree

And about the operating system at

https://mall.industry.siemens.com/mall/en/WW/Catalog/Products/10355854?tree=CatalogTree

The IOT OPA can be understood as a maintenance contract of an IOT Box in the conventional sense. The maintenance of the Box and the purchase of the latest apps and updates is ensured by commissioning the IOT OPA.

However, the IOT Boxes can also be operated without the IOT OPA, in which case they only lose the infrastructural services such as automated maintenance and extendibility, as well as the backup of a Box at a central location.

From a sustainability point of view, an internet connection is recommended both on an IOT Box and on the IOT OPA. Above all, an internet connection on the IOT OPA in connection with a Linux Repository is strongly recommended.

More information is available on the internet at

http://www.siemens.com/wincc-oa-iot-suite

Overview

WinCC IOT Box

The IOT Box is a self-contained visualization system based on IPCs, Industrial OS and SIMATIC WinCC OA, which can be commissioned by the customer (maintenance or electrician) within a few hours. The currently available functionalities (apps) for connectivity, visualization or OEE (Overall Equipment Efficiency) are easy to configure and enable machine operators themselves to find the required insights for process optimization or to collect data and/or to exchange the data within the company using publish/subscribe mechanisms. A large number of apps are already available in the basic IOT Box.

Benefits

- Pre-processing of data in real-time
- Standardization and bundling of communication
- Automatic updates through connection to central storage (IOT-OPA)
- Extensions can be easily created by SIMATIC WinCC OA partners, for example
- Modular separation of connection management, display and formula creation increase the field of application

All required configurations can be made directly at the box or remotely via WinCC OA Desktop UI or Web UI.

Function

Available apps	Task
S7 app	With the S7 app, nothing stands in the way of a connection to the conventional PLCs from SIEMENS. S7-300/-400 series, S7-1200/S7-1500 series and S5, as well as S7-200, LOGO 0BA7, LOGO 0BA8 and SINUMERIK PowerLine are supported. You only need to know the (IP) address of the PLC and the type of PLC to establish a connection. Data points of the selected PLC can be imported using the I/O address or, if available, a CSV file.
S7 Plus app	In contrast to the S7 app, the S7 Plus app allows access to modern SIMATIC PLCs via browsing.
OPC UA Client app	The OPC UA Client app enables you to query any data of an OPC UA Server and transfer it to the data management of the IOT Box. After selecting a server, its data management is automatically queried and displayed. This can then be transferred to the box by simply selecting the data points.
Subscribe app	The Subscribe app is used by the IOT Box to request and retrieve data from another IOT Box, if it has been published on the source device. In general, no data is exchanged between the devices without explicit permission. This is an internal system communication with the highest security standards.
Publish app	You can use the Publish app to publish recorded, calculated or mapped data of an IOT Box to other IOT Boxes. In general, no data is exchanged between the devices without explicit permission. This is an internal system communication with the highest security standards.
Data Mapping app	The Data Mapping app enables you to map or convert collected data into importable structures. This serves to standardize data communication within a company. Pre-defined standard formats, such as OMAC, are already available. Others can be easily defined and imported via CSV files. You can also define your own data structures within the app and link their data management.

Function

Rules app	Intelligent pre-processing of data is an essential part of data concentration. However, advanced logic can also be created and applied in the Rules app. A logical and arithmetic rule-based editor enables the creation of rules, which can also be instantiated at a later point in time. The basis is formed by a powerful scripting engine (CTRL), which executes any input of CRTL scripts. This means that not only logical or arithmetical logic operations can be realized.
OEE app	The OEE app is the heart of the IOT Box, as the first of many value-added applications to follow. Using input data from the Mapping app, this app calculates the efficiency of machines. A time reference can be introduced using a shift calendar and with the help of reasons for malfunctions (pre-defined or defined by the operator), information originating beyond the machine itself can also be included in an analysis. The user thus gains a new depth of analysis and optimization potential.
Dashboard app	The OEE app and the Dashboard app are used to display collected or calculated values. All available data can be displayed in specially structured display formats here. Using a tag browser, the data is simply dragged and dropped into the display areas, where a wide variety of display formats can be selected. The arrangement of the display elements is also freely selectable. The user is thus able to create and save required displays independently. Different images can also be created using several index tabs to allow quick access to all desired display formats and depths at runtime.
Update Center app	The Update Center manages the apps and system software on the IOT Box. Via a connection to a central IOT OPA, the latest app extensions can be easily downloaded and installed without any user interaction. The app provides information about the latest available versions and updates and also allows the user to extend or reduce functionality/apps on the IOT Box. In the system environment, user administration can be used to specify whether this should be done locally by the user or centrally by IT.
Snapshot app	The Snapshot app allows you to create snapshots of a collection of tags using various triggers. These tag snapshots are saved in the app itself and can be exported as CSV.
System Log app	The System Log app shows current and historical log entries on the IOT Box. These include system messages as well as update information and error messages.
System app	The network settings of an IOT Box and the configuration of the time synchronization servers can be performed in the System app. It is also possible to connect to the associated IOT OPA to be able to use all services such as app updates or the OPA Filestore. The entire User Management of the Box as well as the CERT Store can be found in the System app.
S5 app	The S5 app allows S5 PLCs to be connected to the IOT Suite via the H1 ISO protocol.
Ethernet IP app	The Ethernet IP app allows various PLCs that support the PCCC Standard or the Native EIP Standard to be connected to the IOT Suite.
MindSphere app	Data from the IOT Suite can be pushed to various MindSphere assets with the MindSphere app. The output data for this is individual IOT Suite tags.
Modbus app	A Modbus TCP/IP client is integrated in the IOT Suite with the Modbus app. In addition to individual registers, subindices can also be addressed.
MQTT Client app	The MQTT Client app enables the IOT Suite to connect to conventional MQTT brokers and subscribe to a wide range of topics.
MTConnect app	Data from supported CNC machines can be read out with the MTConnect app.

Ordering data

	Article No.
WinCC OA IOT – IOT Box SW Licenses for running the IOT Box SW on SIMATIC Nanobox (IPC2XX) and Industrial Linux	
• 1x IOT Box SW	**6AV6356-1AA31-7AA0**
• 10x IOT Box SW	**6AV6356-1AA31-7AA1**
• 20x IOT Box SW	**6AV6356-1AA31-7AA2**

More information

More information is available on the internet at

http://www.siemens.com/wincc-open-architecture

WinCC OA IOT OPA

Overview

IOT OPA is the central core of the IOT Suite and deals exclusively with the management, administration and maintenance of the connected IOT Boxes.
It is possible to operate this web-based service both within a plant and in a cloud.

An Internet connection is desirable, but not mandatory.

Via the IOT OPA, new devices of the IOT Suite are integrated into the system or devices that are no longer needed are removed. It provides the connected systems with the latest updates and app extensions. With an existing Internet connection to its central cloud storage, it can automatically download the latest apps and make them available to the system. This is also possible without an Internet connection, but requires the manual acquisition of this data.

A status model of the IOT Box and the apps enables control of the specific data that can or may be distributed to specific IOT Boxes. An IOT OPA can also remotely update, functionally extend or reduce IOT Boxes within the administration. The initial installation of an IOT Box is also made possible by the IOT OPA, because all required applications and the system software are stored in its memory.

Runs on:

- Debian Buster
- On the hardware platforms:
  All common PC platforms and virtualized environments

OPA licenses are limited in time with a validity of 1 year from purchase. The validity of the license is automatically extended upon expiration, if not canceled 3 months before the end of the year.

Benefits

- Automatic distribution of apps and updates, including OS updates
- Simple and safe replacement of devices
- Centrally stores and manages apps and updates in the system
- Manages different statuses/versions of apps, updates and devices

Function

Functions	Task
Dashboard	The dashboard displays both the current status of the IOT OPA and the installed version.
Applications	You can find all available apps under Applications, including their version and status in the OPA store. From here, apps can be distributed to devices or their status can be changed.
Devices	The device view shows all connected IOT Boxes, including their status information. You can add new IOT Boxes and change their status here.
DeviceConfiguration	The Device Configuration view displays detailed information about the connected IOT Box. This includes information about installed software (firmware, operating system, apps, etc.) as well as an update history, its name and local location.
Backup and Restore	From this display, you can upload configurations of a selected IOT Box to the IOT OPA or restore them to the IOT Box.
Files	The OPA Filestore describes a central data store that can be read and written both via the web server and via connected IOT Boxes. In this way, for example, an app can save data retentively and store it at a central storage location.
Settings	Different templates that relate to app installations can be configured in the properties of the IOT OPA. Here you can also find settings for synchronizing the IOT OPA with its central IOT repository on the Internet, so that you can obtain the latest updates and apps from it.
Log	This view shows the processes that have been executed on the IOT OPA. This allows the state of the IOT Box or actions performed with a connected IOT Box to be traced.

Ordering data

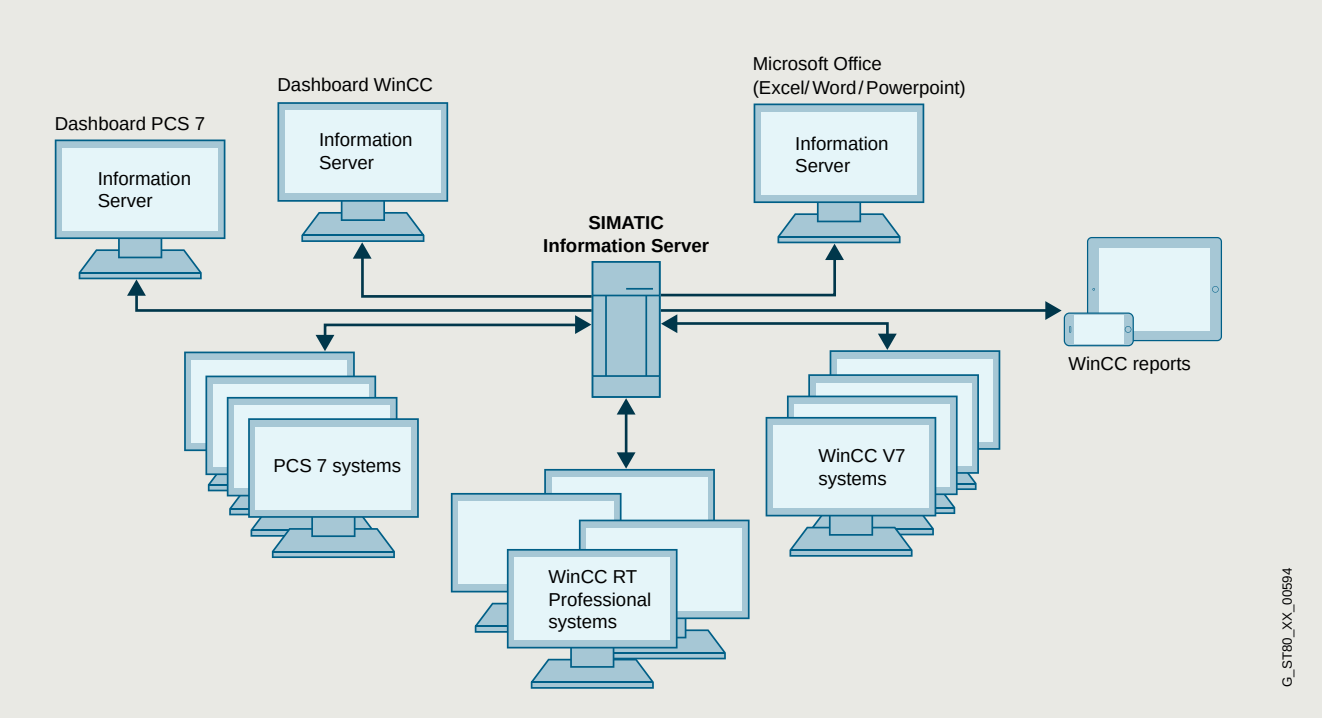
	Article No.
WinCC OA IOT – OPA Time-limited license (1 year). Secure administration of up to 10 WinCC OA IOT Box devices including updates	**6AV6356-1BA31-7BA0**
WinCC OA IOT – OPA Extension Time-limited license (1 year). Extension for secure administration of up to 10 additional IOT Boxes	**6AV6356-1BA31-7BA1**

More information

More information is available on the internet at

http://www.siemens.com/wincc-open-architecture

Overview



Information Server 2014 SP3

Information Server 2014 SP3 is an open, web-based reporting system for interactive areas.
Reports can be used in Internet Explorer, Excel, Word or PowerPoint, as well as for Adobe Reader (PDF).
The SIMATIC Information Server has access to archived process values and messages, and can be used either directly in conjunction with WinCC / WinCC/RT Professional / PCS 7 OS or with Process Historian 2014 SP3.

- Access to archived process values and messages from WinCC V7/V8, WinCC RT Professional and WinCC/PerformanceMonitor according to compatibility specifications
- Process Historian 2014 SP3
- Open reporting system with report templates in RDL or Excel format
- Through add-ins for Microsoft Office environments, direct access to the archived data of the Process Historian or WinCC can be easily established.
- Reports can be integrated directly in Word and Excel, thus greatly simplifying work steps.
- Process values can be displayed in tabular or graphic form depending on various filter functions
- Support of subscriptions for a cyclical or event-driven report generation, including sending of emails
- Web-based parameter assignment of the report templates
- Use of the standard tools MS Excel, MS Word and MS PowerPoint for individual report templates
- Reporting system based on MS Reporting Services for more complex individual report templates
- Can be used for HTML5-enabled tablet PCs larger than 10.5"
- Automatic cyclic and event-based reporting (PDF, Excel, Word, PowerPoint)
- Central storage and automatic transmission of reports created by email
- Data security thanks to access protection, user administration, SSL encryption and SMTP authentication

Licenses

- Basic Packages include the program software as well as three client access licenses and a data source license. This gives access to one data source for up to three clients.
- The number of simultaneous client access operations can be incremented at any time using Information Server client access licenses.
- Additional data sources can be integrated at any time using additive data source licenses.

You can find more information on the Software Update Service, license types, online software delivery and handling your SW licenses with the Automation License Manager here:
http://www.siemens.com/simatic-licenses

Benefits

- Central, web-based reporting system as an interface for all corporate areas up to the management level.
- Easy handling thanks to the use of standard tools such as MS Word, Excel and PowerPoint
- Provision of freely configurable reports via Web-based dashboards
- Import of data from any number of WinCC, WinCC RT Professional and PCS 7 applications
- Transparent access to WinCC tag and alarm archive and to the data of the SIMATIC Process Historian

Highlights

- Set of frequently used report templates for process values, messages and batches
- Open reporting system for creating any number of new report templates
- Storage of configured (parameterized) report templates for faster access
- Export of reports in common document formats
- Support of subscriptions for cyclic report generation including email service
- Creation and storage of application-specific dashboards
- Role management for Windows users; supports workgroups and Active Directory; user rights can be assigned for specific projects
- Generation of reports and inserting as graphics in Microsoft Office Word documents
- Creation of Microsoft Excel, Word and PowerPoint reports for historical process values and messages as well as storage of the Excel report templates on the Information Server
- Support of subscriptions for Excel report templates
- Mobile access to reports via HTML5-enabled web browser, also from tablets > 10.5”

Function

- Easy creation and individual design of own web pages
- No web page programming knowledge (html, asp) is necessary
- Creation of meaningful reports with Office knowledge
- Easy parameterization of predefined report templates
- Creation of your own report templates based on the Microsoft Reporting Services
- High flexibility due to access to numerous WinCC projects and the SIMATIC Process Historian
- Use of Microsoft Word and Excel for individual reports
- Consistent configuration of the access protection
- Installation-free in HTML5-enabled browsers on Web client or tablet > 10.5"

Ordering data

	Article No.
SIMATIC Information Server 2014 SP3 "Basic Package" • Information Server • Information Server - Client access (3) • Information Server - Data source access (1)	**6AV6361-2AA01-4AA0**
As download • Information Server • Information Server - Client access (3) • Information Server - Data source access (1)	**6AV6361-2AA01-4AH0**
SIMATIC Information Server Client and data source license, version-independent	
• 1 Client access	**6AV6361-2BD00-0AD0**
• 3 Client access	**6AV6361-2BE00-0AD0**
• 5 Client access	**6AV6361-2BF00-0AD0**
• 10 Client access	**6AV6361-2BG00-0AD0**
• 1 Data source access	**6AV6361-2CD00-0AD0**
• 3 Data source access	**6AV6361-2CE00-0AD0**
As download	
• 1 Client access	**6AV6361-2BD00-0AJ0**
• 3 Client access	**6AV6361-2BE00-0AJ0**
• 5 Client access	**6AV6361-2BF00-0AJ0**
• 10 Client access	**6AV6361-2BG00-0AJ0**
• 1 Data source access	**6AV6361-2CD00-0AJ0**
• 3 Data source access	**6AV6361-2CE00-0AJ0**
Upgrade	
Upgrade Information Server 2013 to Information Server 2014 SP3	**6AV6361-2AA01-4AE0**
As download	
Upgrade Information Server 2013 to Information Server 2014 SP3	**6AV6361-2AA01-4AK0**

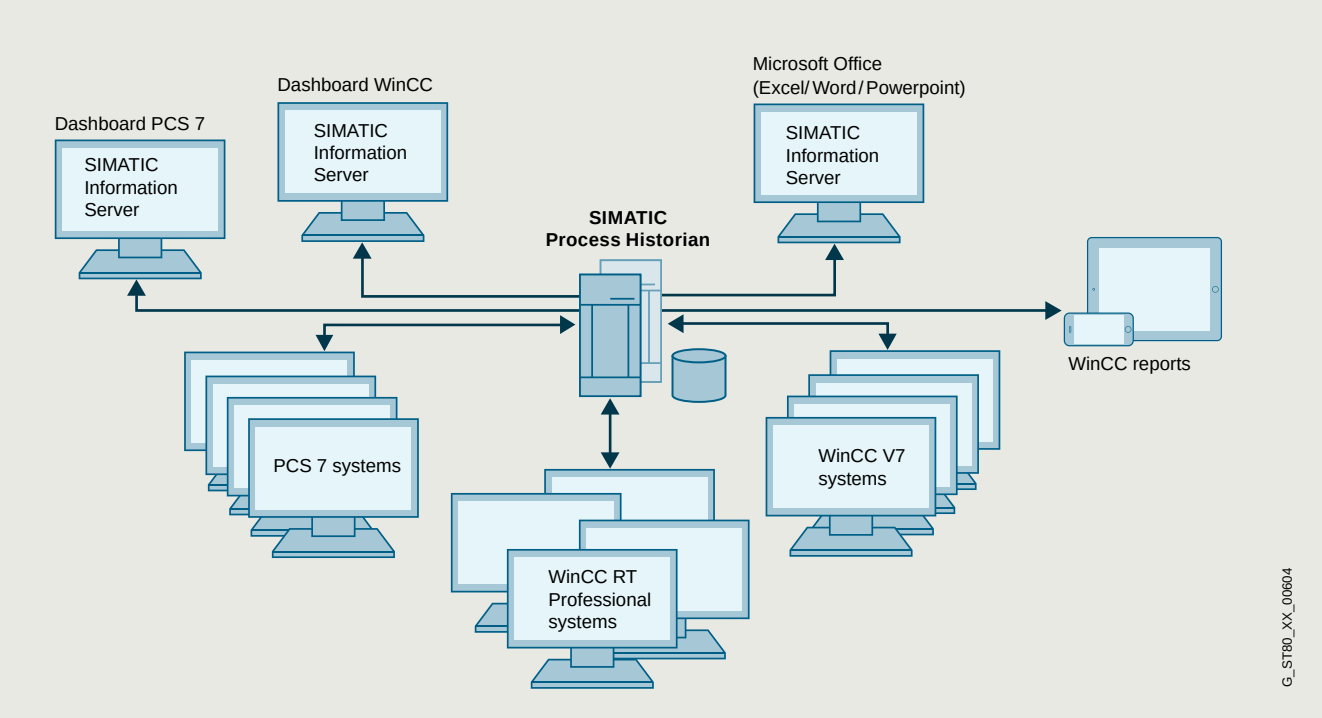
More information

More information is available at

http://www.siemens.com/simatic-information-server

You can find more information on the Software Update Service, license types, Online Software Delivery and handling your SW licenses with the Automation License Manager under http://www.siemens.com/simatic-licenses

Overview



SIMATIC Process Historian

The Process Historian is a high-performance, long-term archiving server solution that stores WinCC process values and messages in a central database. The system offers full scalability for performance and scope: It records and stores data from one or more WinCC, WinCC RT Professional and PCS 7 projects.
The number of connected single stations, servers, or redundant server pairs is unrestricted. SIMATIC Process Historian is designed for use throughout your plant, and is positioned below the corporate management level (ERP, MES).

The SIMATIC Information Server is used as a reporting system for the Process Historian. It accesses the central database of the Process Historian and visualizes the data in clear, user-friendly displays on WinCC stations or office PCs. The central Process Historian database provides access to real-time data throughout the plant.
This data is the key to sustainable plant optimization measures. Since the archive system can be fully integrated, no additional engineering is required. SIMATIC Process Historian uses the integrated relational database, SQL Server from Microsoft®. No complex reconfiguration is needed because the archive system is integrated into WinCC. Selected WinCC process values or messages are archived long-term on a time or event-driven basis.

The Process Historian is used for the long-term archiving of process values and messages.

SIMATIC Process Historian 2014 SP3

- Central, plant-wide long-term archive as corporate information hub
- Real-time archiving of process values and messages from WinCC V7/V8, WinCC RT Professional and WinCC/PerformanceMonitor according to compatibility specifications
- High performance with very large data volumes
- Data access via OPC UA server
- Migration support for data migration from WinCC/ Storage plus, CAS Storage plus and WinCC segments.
- High availability thanks to redundancy concept with observer/witness server for increasing data security
- High degree of security due to integrated, complete backup and restore of all segments (Disaster Recovery)
- Enhanced data security through store and forward mechanism
- Scalable without breaks in production
- Maximum data transparency
- High degree of security thanks to integrated backup system
- Simple and fast management and diagnostics with the Process Historian Management "Dashboard"
- Batch functionality in accordance with PCS 7 specifications

Overview

Licenses

- The Basic Package includes the runtime software and the single license for one installation.
- The SIMATIC Process Historian supports archiving of any amount of data.
  The archive data is licensed at the data source, for example, in WinCC systems (archive tags for WinCC V7 or logging tags of WinCC Logging for WinCC Professional RT).
- The redundancy package is required for the redundant Process Historian; existing Basic Package installations can be converted with the redundancy option.
- The OPC UA interface needs a separate license.

You can find more information on the Software Update Service, license types, online software delivery and handling your SW licenses with the Automation License Manager here:
http://www.siemens.com/simatic-licenses

Benefits

- Fully integrated archiving solution for large volumes of data
- Central, plant-wide long-term archive as corporate information hub
- Process data and messages from any number of subordinate WinCC systems can be archived
- Plant expansions can be implemented without interrupting the production process
- High availability in redundant mode
- High degree of security due to integrated backup system
- Database for analyses with the aim of optimizing the plant and thereby raising productivity

Function

- Real-time storage of the WinCC archive data (process values and messages) from any number of WinCC stations
- Visualization of the archive data on WinCC clients or WinCC single stations either directly or using the SIMATIC Information Server
- Process Historian configuration tool for fast, simple engineering
- The redundant Process Historian is based on the Microsoft SQL Server Mirroring (3rd system for controlling the availability of the redundancy)
- High degree of security due to integrated complete backup and restore of all segments
- During the initial configuration the database and the segmentation are set up
- The PH-Ready component is installed on the WinCC server for the process of archiving to the PH
- The PH automatically detects all connected WinCC server projects (via the PH-Ready component)
- The Process Historian Management "Dashboard" enables simple and fast management and diagnostics

Ordering data

Ordering data	Article No.
SIMATIC Process Historian 2014 SP3	
• Basic Package, single license Contents: Set (1x DVD + 1x USB)	**6AV6361-1AA01-4AA0**
• Redundancy Package, single license (Redundancy Complete) for 2 installations 2 x Process Historian Server 2 x Process Historian Server Redundancy contents: Set (1x DVD + 1x USB)	**6AV6361-1BA01-4AA0**
• Redundancy for BSC PCK, single license, license key on USB flash drive	**6AV6361-1CA00-0AD0**
As download	
Email address essential for delivery	
• Basic Package, single license, license key download	**6AV6361-1AA01-4AH0**
• Redundancy Package, single license (Redundancy Complete) for 2 installations 2 x Process Historian Server 2 x Process Historian Server Redundancy, license key download	**6AV6361-1BA01-4AH0**
• Redundancy for BSC PCK, single license, license key download	**6AV6361-1CA00-0AJ0**
Process Historian OPC UA Server	
• Runtime software, single license, license key on USB flash drive	**6AV6361-1HA01-4AB0**
• Runtime software, single license, SW and license key download, Email address essential for delivery	**6AV6361-1HA01-4AJ0**
Upgrades	
Upgrade of CAS (Central Archive Server)	
Upgrade of CAS V7.0 SP3 or Process Historian 2013 to Process Historian 2014 SP3	
• SW and documentation on DVD; license key on USB flash drive, contents: Set (1x DVD + 1x USB)	**6AV6361-1AA01-4AE0**
• SW and license key download, email address essential for delivery	**6AV6361-1AA01-4AK0**
SIMATIC WinCC/CAS Upgrade Central Archive Server V6.2-> V7.0 SP3	
• Upgrade from CAS V6.2 to V7.0 SP3	**6AV6371-1DQ17-0XX3**
• Upgrade from CAS V6.2 ASIA to V7.0 SP3 ASIA	**6AV6371-1DQ17-0XV3**

More information

More information is available at

http://www.siemens.com/simatic-process-historian

You can find more information on the Software Update Service, license types, Online Software Delivery and handling your SW licenses with the Automation License Manager under
http://www.siemens.com/simatic-licenses

Overview

WinCC IndustrialDataBridge

- The WinCC IndustrialDataBridge option uses standard interfaces in order to connect the automation world with the world of IT and to ensure a two-way information flow.
- Using the SIMATIC WinCC IndustrialDataBridge, communication links between different data sources and data targets can be created by means of simple configuration/ parameter assignment. The IndustrialDataBridge can either be integrated into WinCC or used as a stand-alone application (not in conjunction with WinCC).
- Its use is very flexible, due to the support of different database formats and standard interfaces. On top of this, it offers easy configuration instead of programming, which permits fast and secure deployment.
- Data sources for WinCC IndustrialDataBridge can include WinCC Runtime Professional (V13 SP1 or higher).

Licenses

- WinCC/IDB basic license for 100 tags (connections between data points corresponds to one tag)
- Depending on the amount of data, the number of IDB tags can be increased through additive PowerPacks
- The licenses are additive for the number of connections as of version 7.4 (countable).

Additional information is available on the Software Update Service, license types, online software delivery and handling your software licenses with the Automation License Manager here: http://www.siemens.com/simatic-licenses

Benefits

- Connection of the automation level to the IT world
- Integration of systems from different manufacturers via numerous standard interfaces (including OPC, OPC UA, OLE-DB, Office formats)
- Cost-effective and secure due to simple configuration by means of standard software without programming
- High-performance data exchange between several systems at the same time

Highlights

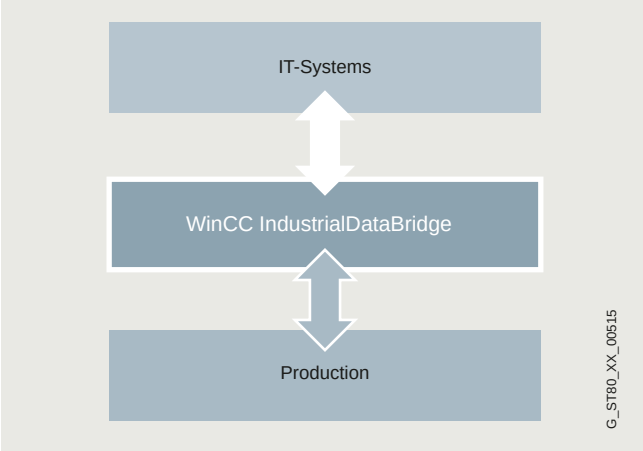
- No programming knowledge required
- Efficient due to transmission of individual data or block transfer (">", "<", "inside where…")
- Unicode support
- Support of Asian languages (Simplified Chinese, Japanese)
- Web Navigator; support of the WinCC IndustrialDataBridge controls in WinCC images
- WinCC IndustrialDataBridge runs as a system service, as an application in connection with WinCC Runtime Professional, or as a version-independent, standalone application

Design

The software comprises a configuration environment and a runtime environment. The different data interfaces are integrated via software modules. In each case, one module is required as the data source and one module as the data destination. The different modules can be combined in any way.

The connections between data source and data destination are created in the configuration environment. In the runtime environment, the IndustrialDataBridge establishes the connection autonomously and transfers the data of the linked variables.

Function



WinCC IndustrialDataBridge: Connection to databases and IT systems

- WinCC IndustrialDataBridge establishes a link between the source and destination interfaces and transfers data on the basis of a change in value once a configured period of time has elapsed, or when a defined event occurs.
- WinCC IndustrialDataBridge exchanges data between the automation systems of different manufacturers.
- In WinCC it is possible to support access to tags, tag logging, alarm logging and user archive data.
- Possible storage of process data in Office formats such as Excel or Access. Databases can also be integrated for the archiving of larger aggregates.
- One of the features of WinCC IndustrialDataBridge is a send/receive interface which also enables data transfer to SIMATIC S5 or S7-300 stations or other send/receive-compatible devices.
- WinCC IndustrialDataBridge likewise enables SCADA and control systems from a variety of manufacturers to be linked via the OPC interface. In addition, communication via RFC1006 or Send/Receive is also supported.

Function

- SQL databases are available as data destinations for production data acquisition. Data can be transferred from the data source on an event-driven basis with the OPC module or sent directly from the PLC with the Send/Receive module.
- Integration of the WinCC IndustrialDataBridge runtime control into WinCC screens when installing the WinCC IndustrialDataBridge on a WinCC station.
- Independent text-based csv, txt and HTML files are created on reaching a programmable number of entries or if the value of a WinCC tag changes.
- Block transfer for databases through the support of the operators "<" and ">" in the Select instruction.
- Available providers (data sources) can be connected to any consumers (data targets) via the WinCC IndustrialDataBridge (see table below).

Functions for configuration:

- Graphic design of links using drag & drop
- Import and export of links
- Highlighting of selected links
- Renaming of links is possible at any time
- Fast switch for the configuration of the graphic links

Interfaces:

The table below shows the possible data sources and destinations.

Provider (data sources)	Consumer (data destinations)
• MS Access 2003, 2007, 2010, 2013, 2016	• MS Access 2003, 2007, 2010, 2013, 2016
• MS SQL Server 2005, 2008, 2008 R2, 2012, 2014, 2016	• MS SQL Server 2005, 2008, 2008 R2, 2012, 2014, 2016
• MySQL 3.5, 5.1, 5.5, 5.6, 5.7	• MySQL 3.5, 5.1, 5.5, 5.6, 5.7
• Oracle 8i, 10g, 11g, 12c Release 2, 12c	• Oracle 8i, 10g, 11g, 12c Release 2, 12c
• OPC Access 3.0	• MS Excel 2003, 2007, 2010, 2013, 2016
• OPC XML 1.01	• OPC Data Access 3.0
• Send/Receive	• OPC XML 1.01
• WinCC OLE DB 7.2, 7.3, 7.4, 7.4 SP1, 7.5	• IDB OPC Server
• WinCC UserArchives 7.2, 7.3, 7.4, 7.4 SP1, 7.5	• Send/Receive
• WinCC RT Professional V13 SP1, V13 SP2, V14 SP1, V15, V15 SP1 (via OLE DB provider)	• WinCC User Archive 7.2, 7.3, 7.4, 7.4 SP1, 7.5 • Configurable file editor for TXT / HTML / XML
• OPC UA DA (1.0.3) client	• CSV, TXT file • OPC UA DA (1.0.3) server (incl. status messages) • OPC UA DA (1.0.3) client

Ordering data

	Article No.
SIMATIC WinCC IndustrialDataBridge 7.5 for WinCC	
For data exchange with databases and OPC servers; language versions: English, German, Simplified Chinese, Japanese	
• Basic package	**6AV6362-4AA07-5AA0**
• With 300 tags (countable)	**6AV6362-4AD00-0BB0**
• With 1 000 tags (countable)	**6AV6362-4AF00-0BB0**
• With 3 000 tags (countable)	**6AV6362-4AH00-0BB0**
As download	
• Basic package	**6AV6362-4AA07-5AH0**
• With 300 tags (countable)	**6AV6362-4AD00-0AH0**
• With 1 000 tags (countable)	**6AV6362-4AF00-0AH0**
• With 3 000 tags (countable)	**6AV6362-4AH00-0AH0**
SIMATIC WinCC IndustrialDataBridge 7.4 SP1 for WinCC	
For data exchange with databases and OPC servers; language versions: English, German, Simplified Chinese, Japanese	
• Basic package	**6AV6362-4AA07-4AA0**
• With 300 tags (countable)	**6AV6362-4AD00-0BB0**
• With 1 000 tags (countable)	**6AV6362-4AF00-0BB0**
• With 3 000 tags (countable)	**6AV6362-4AH00-0BB0**
As download	
• Basic package	**6AV6362-4AA07-4AH0**
• With 300 tags (countable)	**6AV6362-4AD00-0AH0**
• With 1 000 tags (countable)	**6AV6362-4AF00-0AH0**
• With 3 000 tags (countable)	**6AV6362-4AH00-0AH0**
SIMATIC WinCC IndustrialDataBridge upgrade	
• From V7.4 to V7.5	**6AV6362-4AA07-5AE1**
• From V7.2/7.3 to V7.5	**6AV6362-4AA07-5AE0**
• From V7.x to V7.4 SP1	**6AV6362-4AA07-4AE0**
• From V7.x to V7.3	**6AV6371-1DX07-3XX3**
As download	
• From V7.4 to V7.5	**6AV6362-4AA07-5AK1**
• From V7.2/7.3 to V7.5	**6AV6362-4AA07-5AK0**
• From V7.x to V7.4 SP1	**6AV6362-4AA07-4AK0**
• From V7.x to V7.3	**6AV6371-1KX07-3XX3**

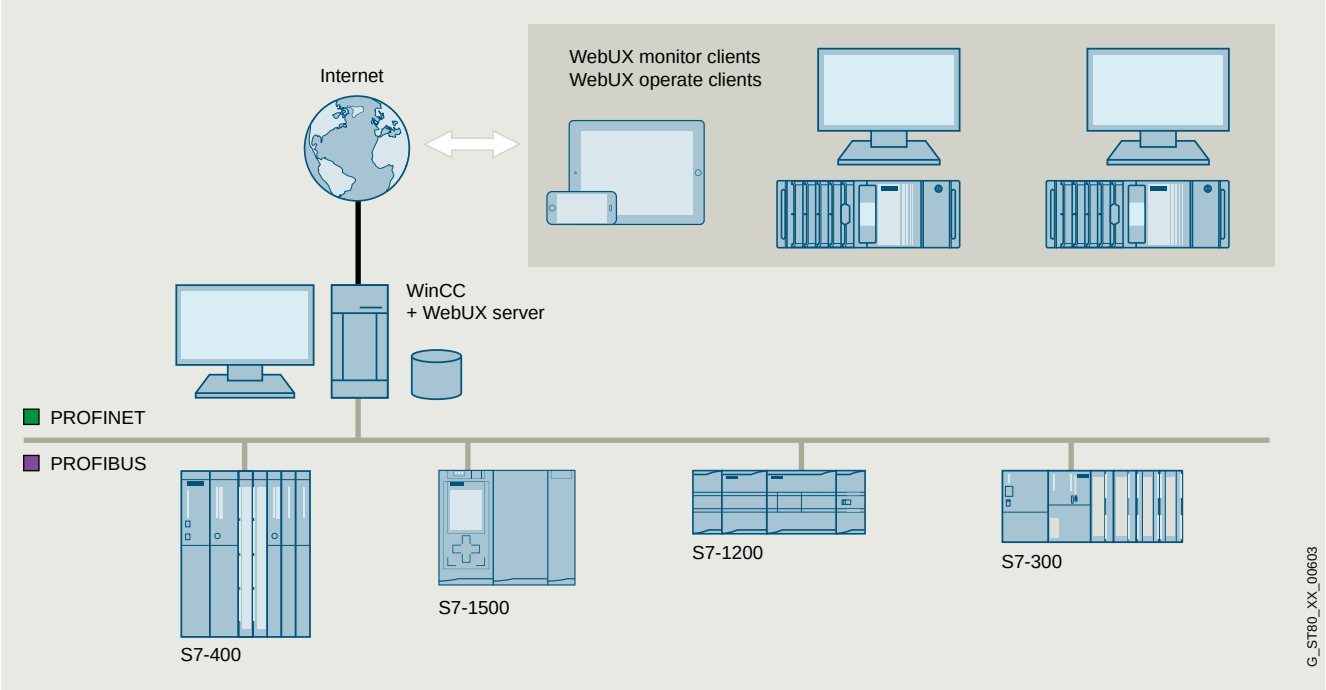
More information

More information is available at

http://www.siemens.com/idb

You can find more information on the Software Update Service, license types, Online Software Delivery and handling your SW licenses with the Automation License Manager under http://www.siemens.com/simatic-licenses

Overview



WinCC WebUX

The WinCC WebUX option permits mobile, platform and browser-independent operator control and monitoring via the Internet or the in-house intranet or LAN.

WinCC WebUX is delivered with the WinCC system. Following installation, the WinCC Runtime system operates as WinCC WebUX server.

The images for the WinCC WebUX are created using the graphic editor. The WinCC picture is stored in the corresponding format in the project through the "web-capable" picture property. Using the service platform IIS (Internet Information Server), the files are made available for the Internet.

No installation on the client is required for using the WebUX. WinCC WebUX can be used independent of the industrial sector, for example in service for the acknowledgment of alarm messages, in quality assurance for monitoring important production data, or in management for obtaining a quick overview of key production figures.

The WebUX server itself does not require a basic license. Clients that are simultaneously logged into the server are licensed. Regarding licensing, it is differentiated between Monitor Clients (read only) and Operate Clients (reading and writing of values). WinCC WebUX can be used immediately due to a free Monitor Client that is included in the WinCC package.

Licenses

- A (server-based) license is required to use the WebUX server. This is a graduated license based on the number of simultaneous web access operations and can be incremented at any time.
- We distinguish between Monitor and Operate Clients for licensing purposes.
- Flexible number of clients thanks to additive (countable) licenses (floating client)
- The WinCC/WebUX and WinCC/WebNavigator licenses can be combined, if necessary.
- The WinCC server version and version of the mobile clients do not have to be the same
- One free Monitor Client in the WinCC system

You can find more information on the Software Update Service, license types, online software delivery and handling your SW licenses with the Automation License Manager here:
http://www.siemens.com/simatic-licenses

Benefits

WinCC Engineering

- Fast configuration using the graphic editor
- No expensive training in web technologies is required due to the use of WinCC standard tools
- Can be used without complex additional configuration on the client

Maintenance, servicing and IT

- No WinCC-specific installation on the clients required
- No WinCC-specific maintenance at the data terminal equipment required
- The WinCC WebUX server version and version of the mobile clients do not have to be the same
- Standard user authorizations on the client suffice

Line management and plant operator

- Mobile operator control and monitoring using commercially available mobile devices
- Uniform look and feel both on the mobile devices and on the WinCC station
- Secure communication via HTTPS and SSL certificates
- No entry costs, since a Monitor client is included in the WinCC package
- Flexible licensing due to additive Floating Client licenses
- Secured plant data as a basis for decision-making

Highlights

- Can be used on HTML5-capable and SVG-capable data terminal equipment without installation on the client

Function

Supported functions in WebUX of WinCC V7.4/V14:

- Language selection by setting the Web language in the User Administrator
- Support of following WinCC objects:
  - Most WinCC standard objects and WinCC pipe objects
  - WinCC Smart objects (picture window, I/O field, graphic object, status display, text list, multi-line text, combo box, list box)
  - WinCC Windows objects
- The following WinCC controls are supported:
  - WinCC AlarmControl
  - WinCC OnlineTrendControl
  - OnlineTrend Web Control
  - OnlineTable Web Control
  - Ruler Web Control
  - Slider Control
  - Digital/Analog Clock Control
  - Gauge Control
  - WebBrowser Control
- Dynamizations by means of VB script or via the dynamics dialog
- User administration via SIMATIC Logon
- System events for user logon and logoff

Note:

Browser-dependent display is occasionally possible. Minor differences in display and behavior are possible for the different browser versions.

Please also note the supported functionalities in the respective documentations.

Ordering data

	Article No.
SIMATIC WinCC WebUX	
Monitor clients:	
• 1 client (countable)	**6AV6362-2AB00-0BB0**
• 3 clients (countable)	**6AV6362-2AD00-0BB0**
• 10 clients (countable)	**6AV6362-2AF00-0BB0**
• 30 clients (countable)	**6AV6362-2AJ00-0BB0**
• 100 clients (countable)	**6AV6362-2AM00-0BB0**
As download	
• 1 client (countable)	**6AV6362-2AB00-0AH0**
• 3 clients (countable)	**6AV6362-2AD00-0AH0**
• 10 clients (countable)	**6AV6362-2AF00-0AH0**
• 30 clients (countable)	**6AV6362-2AJ00-0AH0**
• 100 clients (countable)	**6AV6362-2AM00-0AH0**
Operate clients	
• 1 client (countable)	**6AV6362-2BB00-0BB0**
• 3 clients (countable)	**6AV6362-2BD00-0BB0**
• 10 clients (countable)	**6AV6362-2BF00-0BB0**
• 30 clients (countable)	**6AV6362-2BJ00-0BB0**
• 100 clients (countable)	**6AV6362-2BM00-0BB0**
As download	
• 1 client (countable)	**6AV6362-2BB00-0AH0**
• 3 clients (countable)	**6AV6362-2BD00-0AH0**
• 10 clients (countable)	**6AV6362-2BF00-0AH0**
• 30 clients (countable)	**6AV6362-2BJ00-0AH0**
• 100 clients (countable)	**6AV6362-2BM00-0AH0**

Note:

The licenses are cumulative, i.e. one 10-client license and one 30-client license permit access by 40 clients.

Operate licenses can be used as Monitor licenses as of V14/V7.4.

Licenses from V7.3 can continue to be used in V7.4 without upgrading.

More information

More information is available at

http://www.siemens.com/wincc-webux

Overview

WinCC Premium Add-ons

With the proven WinCC Premium Add-ons based on the SCADA software SIMATIC WinCC, Siemens offers a modularly expandable, complete solution for the optimum interaction of processes in production, quality assurance, maintenance and system integration. The products respond to a broad spectrum of today's challenges in digitalization and are consistently directed towards comprehensive and economical solutions based on standard software components.

The following Premium Add-ons are available:

- PM-CONTROL
  is a cross-industry recipe system for user-friendly creation and management of recipes with integrated order control
- PM-QUALITY
  is a modular and sector-independent archive system for order-related or batch-related acquisition of process and production data
- PM-ANALYZE
  is used for locating sources of error or weak spots in plants by analyzing messages and process values
- PM-MAINT
  is a sector and technology-neutral maintenance system for use in preventive maintenance.
- PM-MES Interface
  is a bidirectional communication interface between PM-CONTROL, PM-QUALITY and MES systems
- PM-LOGON
  offers the operator a convenient and fast logon to the operating system using a company ID card via a card reader
- PM-OPEN EXPORT
  offers a flexible, low-cost solution for exporting current process data and archive data from WinCC into freely formatted text files
- PM-OPEN IMPORT
  enables the WinCC flexible archives to be automatically read into the WinCC system
- PM-OPEN MINDCONNECT
  allows transparent access to production reports created by PM-QUALITY and/or PM-ANALYZE via the MindSphere app
- PM-AGENT
  enables the connection of several WinCC systems to the PM-products
- UNIVERSAL PM-PACKAGE
  in combination with a supplementary agreement, provides a cost-effective way to always work with the latest versions of the PM-products for testing and configuration purposes and is therefore aimed exclusively at resellers of PM-products and OEMs
- COPYPROJECT
  is used to duplicate a complete WinCC V7 project including all Runtime archive databases during runtime
- PM-GRID CONTROL
  enables display of data from different sources and is used wherever the flexible display of tables within the WinCC Runtime environment is required

More information

Siemens AG
Digital Industries
WinCC Competence Center Mannheim

Tel.: +49 (0)621 1723-1010

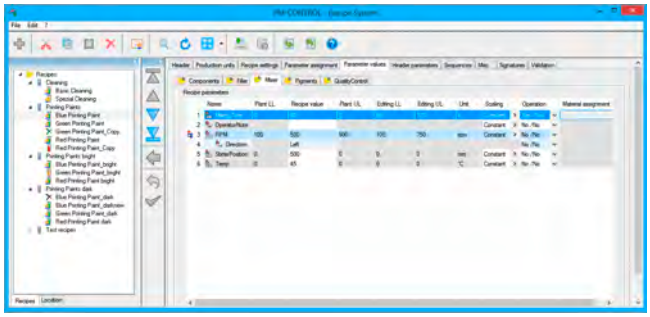
Email: winccaddon.automation@siemens.com

More information is available on the Internet at

http://www.siemens.com/process-management

PM-CONTROL

Overview



PM-CONTROL system software

Production rules, recipes or parameter data records are required as specifications for production in a wide variety of industries; they must be managed in a high-performance database, monitored for changes and clearly presented. These specifications result in production orders which are used to plan the production sequence.

With PM-CONTROL, the user has flexible parameter control at his disposal, with an operator interface that can be seamlessly integrated into the WinCC user interface.

Parameters of different types are saved in data records as recipes. The logging of recipe changes in an Audit Trail, the support of single or duplicate electronic signatures and the automatic versioning of recipe data records make PM-CONTROL an ideal tool in the regulated industry.

Integrated backup configurations provide the option of triggering an automatic backup of the databases either cyclically or via application events – such as a change in recipes. Using the restore options, the backups created in this way can then be restored if required.

PM-CONTROL is equipped for complex tasks with automatic scaling of quantities, dynamic calculation of recipe values combined with convenient order scheduling and including automatic transfer of scheduled orders to the production units.

Enhancements such as the graphic planning board for order display, the rule-based check of recipe parameters as well as the option for creating a completely customized recipe editor continue the trend toward more user-friendliness, transparency and flexibility. The openness of PM-CONTROL enables problem-free connection to higher-level host systems (e.g. MRP systems) at the plant and production management level.

Customized for simple use cases with manual retrieval of recipes from the recipe database, PM-CONTROL is offered in a compact variant.

Function

Integral "wizards" for setting up recipe data records and signing of production jobs, for example, provide the user with the best possible support for operation and reduce training time to an absolute minimum.

Configuration

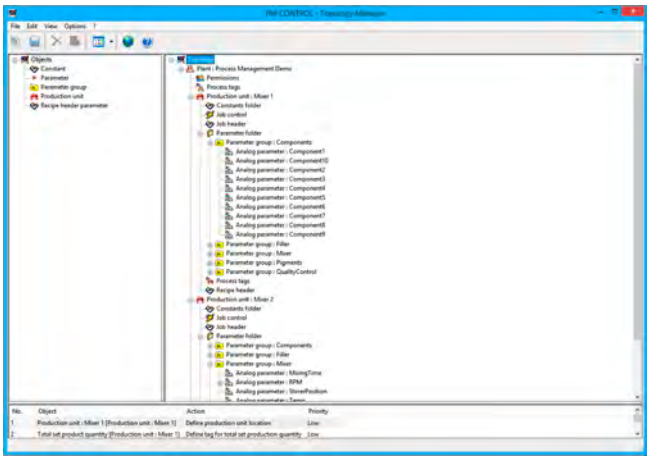
The production units for processing the orders are created in the Topology Manager with all the necessary parameters and the tag connections configured.

The settings for selecting the operating mode are determined by the input options in the job wizard:

- Jobs with / without target quantity
- Consideration of min. / max. limits
- Scheduled quantity for job distributed between multiple batches
- Individual parameter set or recipes comprise several steps

The defined authorizations and requirements for signatures have an effect on the operation of the recipe system and job control during runtime.

The integrated, central engineering library PM-LIBRARY allows the replacement and re-use of finished configurations.

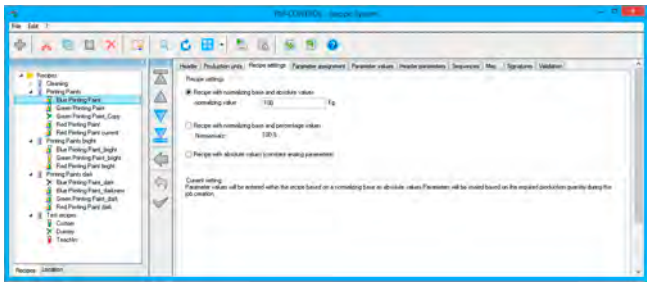


PM-CONTROL topology

Function

Recipe system

The recipe data records are created based on the previously defined parameters. The recipe values are kept absolute for simple applications. In connection with PM-CONTROL job control, the recipe values can be scaled in linear fashion depending on the quantity, or they can be calculated according to a formula or depending on other recipe values, job values or current measured values. Configurable validation rules check the consistency of the recipe data. Optional definable sequence criteria point to impermissible production sequences in job planning.



PM-CONTROL recipe system

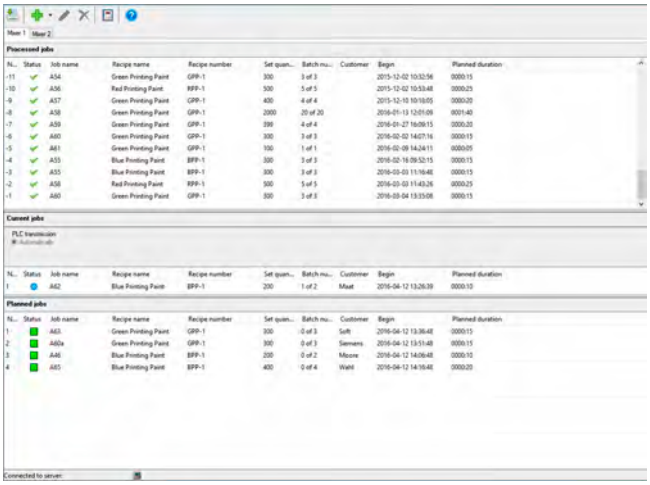
Job display

The job display provides an overview for each production unit regarding planned, current and completed jobs. New job creation is either based on a recipe or a production unit or generated from a template. A job comprises one or more batches or recipe steps.

The job data can be loaded automatically upon request by the production unit, with specification of a start time, or manually. Setpoints can be transferred to WinCC, PCS 7 as well as over OPC DA or OPC UA even if a job includes setpoints for more of these destinations in combination.

Recipe/job values can be modified not only for planned jobs but also for currently loaded jobs with the corresponding approval. If jobs are signed electronically, the signature is requested once again following any modification. The system's own Audit Trail records the change history with time stamp, logged-on user(s), parameter name, as well as old and new values for each batch or recipe step, making the process transparent and traceable.

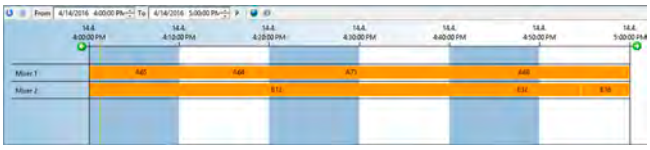
The setting of a retention period governs the deletion of processed jobs.



PM-CONTROL job display

Planning board

The planning board display is a graphical representation of the estimated runtime for planned jobs. The time period under consideration can be adjusted as needed from the surrounding process picture so that the time period relevant for planning is always shown, for example, one day, one week, one month or only the next hour.



PM-CONTROL planning board

PM-CONTROL

Ordering data	Article No.
PM-CONTROL system software Type S "Compact" version Single-user/multi-user system server that runs on interconnected WinCC system and comprises a topology manager, recipe system, and ActiveX Control for recipe preselection (several autonomous production units)	**9AE7110-2SS10-1AA0**
PM-CONTROL system software Type S "Standard" version Single-user/multi-user system server that runs on interconnected WinCC system and comprises a topology manager, recipe system, and order control (one production unit)	**9AE7110-2SS20-1AA0**
PM-CONTROL system software Type S "Professional" version Single-user/multi-user system server that runs on interconnected WinCC system and comprises a topology manager, recipe system, and order control (several autonomous and interlinked production units)	**9AE7110-2SS30-1AA0**
PM-CONTROL system software Type C Multi-user system client that runs with Type S system package (Compact, Standard, Professional) on an interconnected WinCC system or as installable client (without WinCC) with a recipe system and order control	**9AE7110-4SC03-1AA0**
PM-CONTROL system software Type C with WinCC Unified Multi-user system client Runs with system package Type S (Compact, Standard, Professional) in connection with WinCC Unified or WinCC V8, licenses can be cumulated. License for:	
• 1 Unified Client	**9AE7110-4SW00-1AA0**
• 3 Unified Clients	**9AE7110-4SW00-1AA1**
• 10 Unified Clients	**9AE7110-4SW00-1AA2**
• 30 Unified Clients	**9AE7110-4SW00-1AA3**
• 100 Unified Clients	**9AE7110-4SW00-1AA4**
Upgrade packages for Type S system package	
• Upgrade from Standard to Professional	**9AE7 110-0SH11-0AA0**
• Upgrade from Compact to Professional	**9AE7 110-0SH21-0AA0**
Upgrades	
Upgrade package from V11 to V12	
• For system package Type S	**9AE7110-4SU01-8AA3**
• For system package Type C	**9AE7110-4SU02-8AA3**
Upgrade package from V08...10 to V12	
• For system package Type S	**9AE7110-4SU03-8AA3**
• For system package Type C	**9AE7110-4SU04-8AA3**

Note:

Additional PM-CONTROL configurations available on request

More information

Siemens AG
Digital Industries
WinCC Competence Center Mannheim

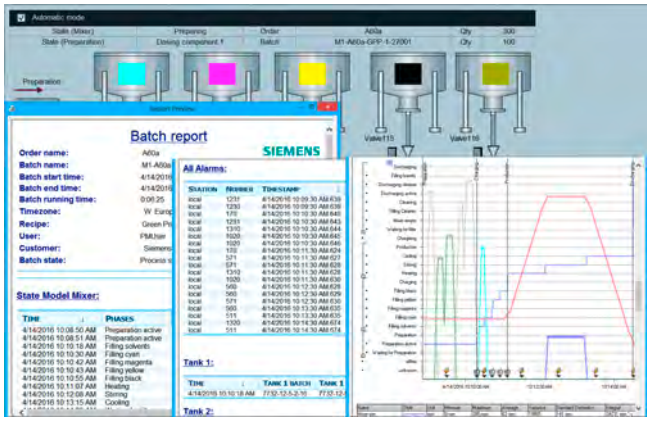
Tel.: +49 (0)621 1723-1010

Email: winccaddon.automation@siemens.com

More information is available on the Internet at

http://www.siemens.com/process-management

Overview



PM-QUALITY system software

The proof of quality in the form of a manufacturing report, which is obligatory for FDA-regulated industries, is now a standard requirement in almost all industries.

The strengths of PM-QUALITY are the core functions of a comprehensive quality management system such as the complete acquisition, preparation and archiving of batch-related data such as trend curves, messages, production setpoint and actual values, Audit Trails and laboratory values.

Data from WinCC, PCS 7, WinCC Unified, WinCC (TIA) RT Professional and Advanced, via text import, OPC/DA and OPC/UA can be combined from various sources, compiled into meaningful reports and archived over a long period. PM-QUALITY ensures the required transparency, both if seamlessly integrated into the user interface of WinCC, PCS 7, WinCC Unified or WinCC RT Professional and Advanced (TIA Portal) and as a stand-alone application.

The integrated backup configurations provide the option of triggering an automatic backup of the databases either cyclically or via application events – such as saving the topology. Using the restore options, the backups created in this way can then be restored if required.

The processing of measured values with the aid of graphical calculation rules, the integration of day, week and shift logs with an integrated shift calendar, and the creating of reports in Microsoft Excel are consistent expansions of the proven functionality of PM-QUALITY.

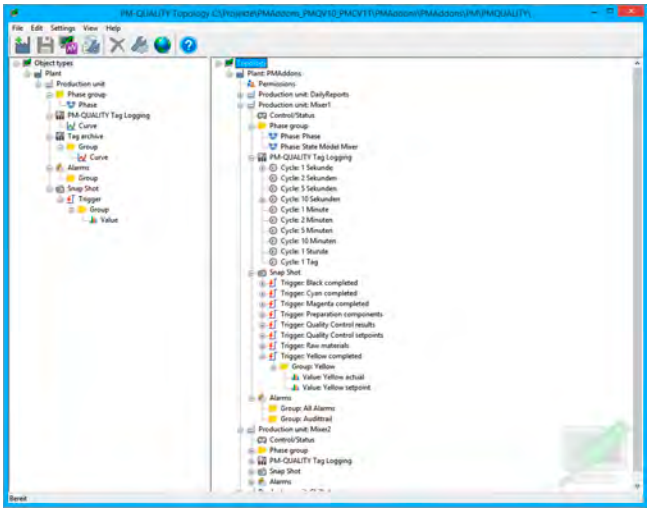
Function

Configuration

The production units are configured in a topology manager with all data to be recorded that are relevant for the report generation. These are process value logs used for continuous acquisition of process values, snap shot triggers used for event-driven acquisition of process values, and alarm logs used exclusively for alarms and Audit Trail entries.

The production process can be structured using phases and state models. The individual phases or states are archived with time stamps. For complex processes that extend over several production units, the production units can be linked to form a plant unit. The reports include the data for a production unit or for the complete plant unit.

The integrated, central engineering library PM-LIBRARY allows the replacement and re-use of finished configurations.



PM-QUALITY Topology Manager

PM-QUALITY

Function

Data acquisition

Data acquisition is started either with a batch start or time-dependent, e.g. at the beginning of a shift, and finished after the batch or shift has been completed. A unique batch number is generated, under which the data is logged in the PM-QUALITY database.

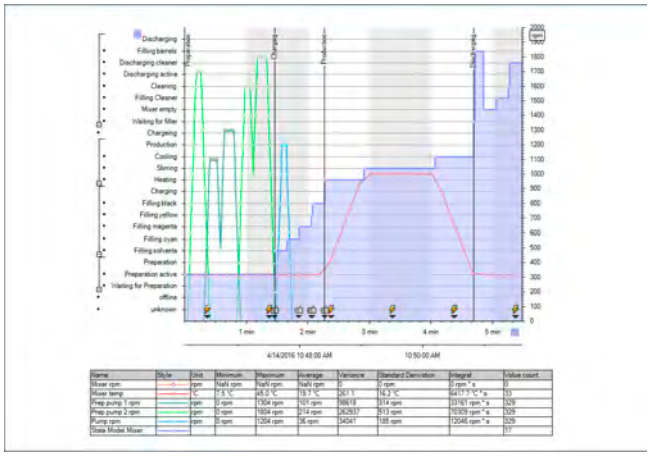
Data logging

Completed and released batches can be automatically exported for long-term archiving. Placeholders integrated in the export path ensure clear data storage. The Data View application or the PM-QUALITY Client is used to display the exported data. After the report is automatically exported, the batch is automatically completed to protect the batch data from subsequent changes.

Trend display in the process picture

The display of trends in which even several batch sequences can be compared becomes a comprehensive analysis tool with maximum operating convenience thanks to the simultaneous display of alarms, triggered recordings of measured values, phase lines, state models and comments. The integrated zoom function, the shifting of the axes and the display of specific time ranges enable precise evaluation of individual measuring points. Detailed information about each event is displayed in a tooltip. Comments can be subsequently inserted in time-based trend curves

The extremely flexible configuration of curve diagrams also offers the configuration of trend directions in the form f(x). The various configurations are stored in templates and can be called up again at any time. The ActiveX control is integrated in the process picture.

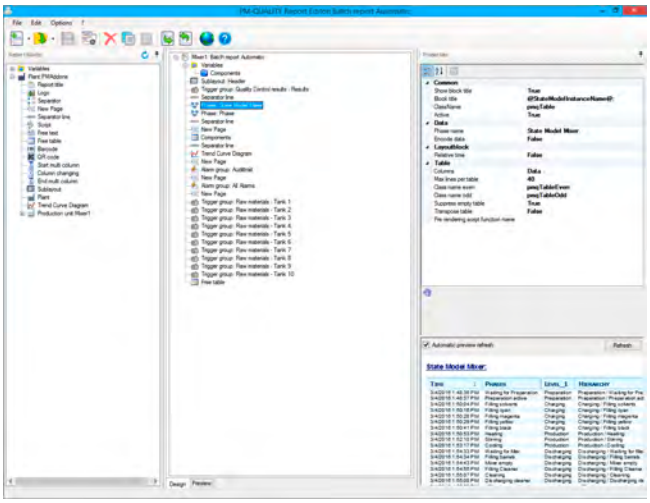


PM-QUALITY Trend Curve Control

Reporting

With the Report Layout Editor, different views of the batch archives can be conveniently implemented, conformant to existing design guidelines.

A large number of report blocks are available for design, which can be simply dragged and dropped into the report and configured. An integrated preview shows at any time the data of a selected batch based on the configured report. In addition to the standard report blocks offered, data evaluation can be inserted into the report using a VB script. A variety of style sheets is included in the scope of scope of supply, custom style sheets can be easily added.

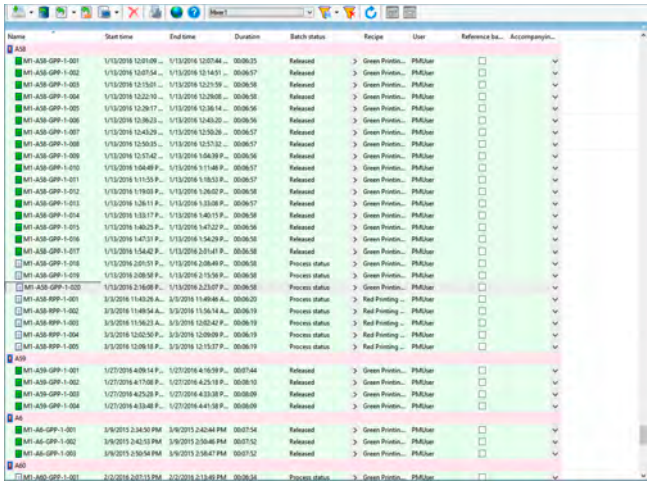


PM-QUALITY Report Editor

Function

Batch table in the process picture

Batches can be found again at any time thanks to individually configurable filters. The batch data can be displayed on the screen based on the selected report, output to a printer or exported in PDF, HTML, XML or database format. In the WinCC or WinCC RT Professional / RT Advanced environment, an ActiveX control is available to integrate the batch table into a process picture. When using WinCC Unified, the installation of PM-QUALITY comes with a web control.



PM-QUALITY Batch Table Control

Redundancy option

PM-QUALITY features a redundancy function with the Data Center option. The batch data is recorded on two separate computers, each with one PM-QUALITY Server. After completion of a batch, the Data Center compares the data recorded by both PM-QUALITY Servers and exports the result to an export database.

Ordering data

	Article No.
PM-QUALITY system software Type S "Standard" version Single-user/multi-user system server that runs on an interconnected WinCC system for one production unit	**9AE7111-2SS20-1AA0**
PM-QUALITY system software Type S "Professional" version without Data Center Single-user/multi-user system server that runs on an interconnected WinCC system for multiple autonomous and interlinked production units.	**9AE7111-2SS30-1AA0**
PM-QUALITY system software Type S "Professional" version with Data Center For data redundancy synchronization. The system package is to be installed on both redundant computers.	**9AE7111-2SS30-1BA0**
PM-QUALITY system software Type C Multi-user system client Runs with the Type S system package on an interconnected WinCC system or as installable Client (without WinCC)	**9AE7111-4SC01-1AA0**
PM-QUALITY system software Type C with WinCC Unified Multi-user system client, runs with WinCC Unified or WinCC V8, licenses can be cumulated. License for:	
• 1 Unified Client	**9AE7111-4SW00-1AA0**
• 3 Unified Clients	**9AE7111-4SW00-1AA1**
• 10 Unified Clients	**9AE7111-4SW00-1AA2**
• 30 Unified Clients	**9AE7111-4SW00-1AA3**
• 100 Unified Clients	**9AE7111-4SW00-1AA4**
Upgrade packages for Type S system package	
• Upgrade from Standard to Professional	**9AE7111-0SH11-0AA0**
• Upgrade from Professional without Data Center to Professional with Data Center	**9AE7111-0SH11-0BA0**
Upgrades	
Upgrade package from V10 to V11	
• For system package Type S	**9AE7111-4SU01-8AA2**
• For system package Type C	**9AE7111-4SU02-8AA2**
Upgrade package from V7..9 to V11	
• For system package Type S	**9AE7111-4SU03-8AA2**
• For system package Type C	**9AE7111-4SU04-8AA2**

Note:

Additional PM-QUALITY configurations available on request.

More information

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More information is available on the Internet at

http://www.siemens.com/process-management

PM-ANALYZE

Overview

PM-ANALYZE

Recorded process values as well as hardware interrupts, fault, status and operation messages from various sources contain a wealth of information which often only becomes visible by means of computer-aided analysis. Reduced downtime and maintenance times, early detection of signs of wear and tear, localization of error sources or weak points are just a few examples. Problems in the production plant are signaled by alarms which are the starting point for evaluations and analyses with PM-ANALYZE.

PM-ANALYZE not only enables chronological display of process values and messages from different sources, but also offers an optimal overview with its convenient filters and analysis options, even with large amounts of data.

The process values represent the basis for the analysis and optimization of the production process. The extensive selection of charts for mapping the process values in PM-ANALYZE offers new perspectives for the representation and analysis of the production process. Problems in the production plant are signaled by alarms. Convenient filter settings limit the message display to the essential information.

One particular strength of PM-ANALYZE is simultaneous display of charts and messages in a single workspace. Alarms in tables and in statistical evaluations parallel to process values in charts show the spectrum of production data at a glance. Workspaces can either be integrated directly into process pictures or displayed and evaluated using a separate client application.

In addition, analysis events can be transferred directly to Microsoft Excel for further processing. This enables reports to be generated via Microsoft Excel, for example, where a report is generated daily and filled with data. Manual input forms can be used to add manual and laboratory values.

Function

By combining and centrally archiving of process values and messages from PCS 7, WinCC, WinCC (TIA) RT Professional and WinCC Unified, the event log of the Windows operating system, as well as any other sources by means of text import, PM-ANALYZE makes it possible to localize complex interrelations.

Configuration

The process value and alarm logs in the PM-SERVER application software included in the scope of supply are the basis for evaluation. PM-SERVER provides the structure to merge process values and messages from different HMI systems in their own process value and alarm logs in the correct sequence or to enter them in the process value and alarm logs via text import.

Preparations for filtering in the PM-ANALYZE Client are made and the colors of the messages in the display area are configured in the PM-ANALYZE topology manager for the alarm logs.

Process value display

The graphical representation of the process values in charts shows the course of the production process in a clear and concise manner. This can be either the process currently running or a process in the past. The process values are simply selected in a menu for display. The selection menu lists only those process values that are recorded in the configured process value log. The process values can be displayed in different charts. This includes points, lines, areas, bars and columns. A Gantt diagram can also be generated.

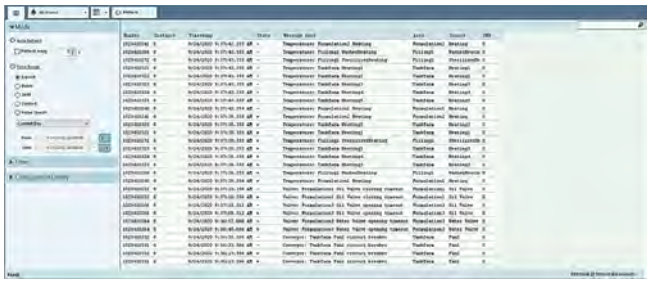
Configuration of the process value display

In addition to direct display of process values, PM-ANALYZE is also able to perform aggregations and display the aggregated value. To do this, the process values are grouped over a definable period of time and the selected value is calculated. PM-ANALYZE offers the following aggregations: Minimum, maximum, average, total, first value or last value.

Function

Message display

All current messages in a selected alarm log, for example, can be displayed in a control center for monitoring. This display is updated automatically.



WinCC Add-on PM-ANALYZE reports

Filter library

PM-ANALYZE offers a convenient filter library for backup of simple or hierarchical filter settings. Hierarchical filter settings with up to four levels facilitate faster localization of relevant messages. PM-ANALYZE determines the available filter values independently from the underlying database.
Configured filter settings can either be saved globally for all users or specifically for the user that is logged in.
The list of messages can be limited even further with the integrated quick search.

Analyses

The integrated statistical analysis functions which are conducted for the selected alarm log provide support in the analysis of errors or weak points. Messages are grouped with the optional grouping function and the analysis results are displayed in a clear structure.

- Frequency analysis for determining the most frequently occurring messages; results can be listed by specifying grouping criteria, such as origin, for message columns. This way you expand the traditional range of a Top X analysis (number) to a technological Top X analysis (origin). A score is assigned according to the frequency with which a message occurs.
- Frequency analysis for analyzing message traffic within a period of time, divided into smaller intervals to localize accumulations at a specific time; this way you can break down an entire month, for example, into days.
- Message duration analysis determines the message duration of the archived messages.

Flickering analysis for localization of messages that occur very frequently within a short period of time (bursts) and then do not occur again for a longer period of time; such burst packets can be reliably determined with the flickering analysis by means of an adjustable threshold value.
The PM-ANALYZE add-in for Microsoft Excel enables access to all process values and messages. Depending on the selected time range, the defined values can be output either as unformatted raw data for further processing or directly in a desired dynamic report format. Individual Excel files can serve as template for different reports here. This allows, for example, daily, weekly, annual or event reports to be generated.

Ordering data

Ordering data	Article No.
PM-ANALYZE Type S system software Single-user/multi-user system server that runs on an interconnected WinCC system	**9AE7112-1SS01-1AA0**
PM-ANALYZE Type C system software Multi-user system client that runs with system package Type S on an interconnected WinCC system or as thin client (without WinCC)	**9AE7112-4SC01-1AA0**
PM-ANALYZE Type C system software with WinCC Unified Multi-user system client runs with WinCC Unified or WinCC V8, licenses can be cumulated.	
License for:	
• 1 Unified Client	**9AE7 112-4SW00-1AA0**
• 3 Unified Clients	**9AE7 112-4SW00-1AA1**
• 10 Unified Clients	**9AE7 112-4SW00-1AA2**
• 30 Unified Clients	**9AE7 112-4SW00-1AA3**
• 100 Unified Clients	**9AE7 112-4SW00-1AA4**
Upgrade package for upgrading the system software from V9 to V10	
• Upgrade for system package Type S	**9AE7112-4SU01-8AA0**
• Upgrade for system package Type C	**9AE7112-4SU02-8AA0**
Upgrade package for upgrading the system software from V7/V8 to V10	
• Upgrade for system package Type S	**9AE7112-4SU03-8AA0**
• Upgrade for system package Type C	**9AE7112-4SU04-8AA0**

Note:

Additional PM-ANALYZE configurations available on request.

More information

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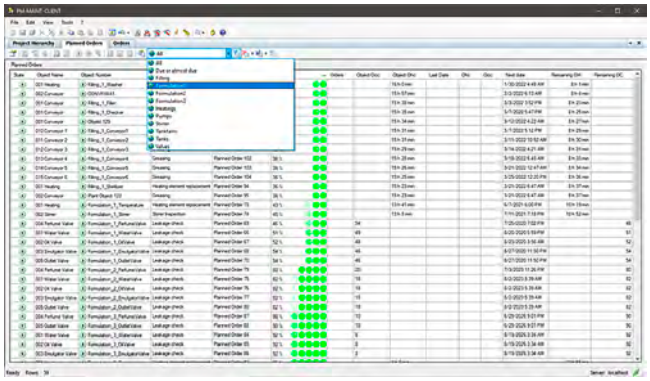
More information is available on the Internet at

http://www.siemens.com/process-management

PM-MAINT

Overview



PM-MAINT

Efficient maintenance planning is of crucial importance to ensure and maintain the maximum availability of a plant.

PM-MAINT is a maintenance management system for all industries and is designed for use on the production level. By providing various connection options to the existing automation landscape, PM-MAINT enables performance-based planning that is based on real machine runtimes and machining cycles in addition to purely calendar-based planning.

PM-MAINT supports maintenance in the recording and complete documentation of unplanned repairs by means of easy and comprehensible work sequences with a high level of user-friendliness.

Maintenance information calculated by PM-MAINT, such as recommended maintenance dates, can be displayed in the existing HMI user interface for the respective aggregates. Repair requests can easily be created directly by the machine operator.

All operator actions are recorded in a log and can be traced at any time.

Function

The innovative user interface permits easy access to all maintenance-relevant information.

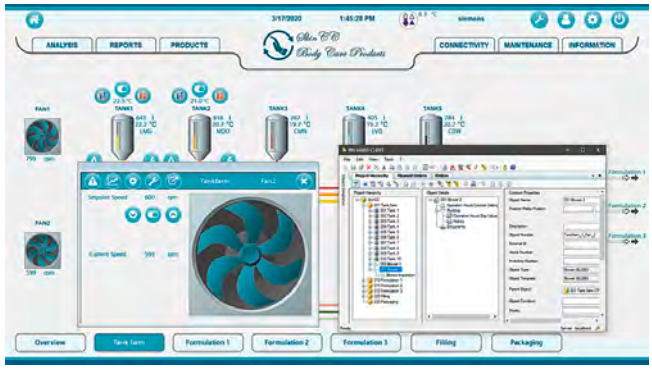
The convenient selection and filter options in the different views can be customized and adapted to suit your mode of operation. Views can be created for all users, individual user groups or separately for each user.

Configuration

An image of the maintenance-relevant units is created in the form of a tree topology in PM-MAINT. You can add your own object types to the available object types including properties. This means PM-MAINT perfectly adapts to your environment. Required actions, personnel, material, as well as special instructions are bundled into a unit in the planned task.

The maintenance interval can also be determined in parallel by runtime, number of switching cycles and/or a calendar interval. Evaluation is based on the current process values. The earliest calculated date is shown as the recommended maintenance date.

PM-MAINT comes with its own document management for backup of documents with maintenance-related information, such as technical data sheets, exploded views, photos, etc. The information can be assigned to the units and thus can be retrieved at any time.

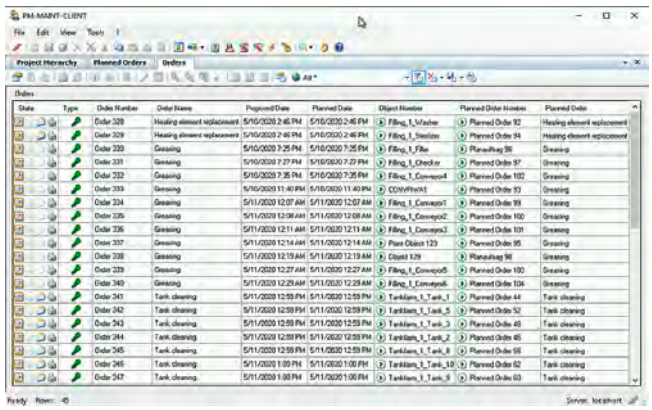


WinCC PM-MAINT 1

Operation

The "Orders" view shows a list of all pending maintenance orders that were generated from the planned orders when the recommended maintenance date was reached. For better maintenance planning, an announcement can be created in due time prior to the order. All announcements are listed in a separate view.

The operator assigns a status to the individual orders depending on the progress of the maintenance work (in progress, feedback provided, completed). Information on the object status, the work done, expenses for personnel and material are documented in the order feedback which can also be created multiple times for any order. Formatting rules, such as the color of the different processing states increase the transparency of the view.

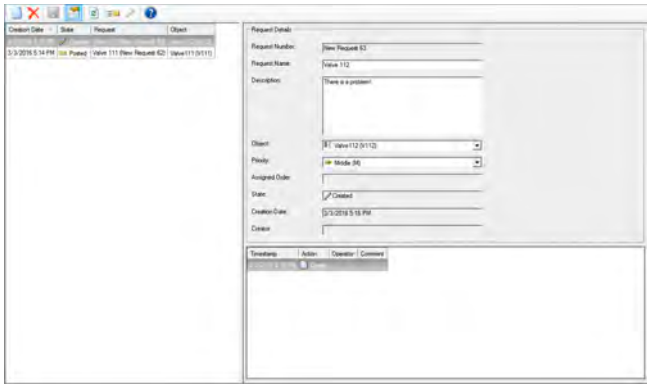


WinCC PM Maint jobs

Function

Repair requests

Repair requirements of the operators on site can be documented through seamless integration into the WinCC user interface, saved centrally and synchronized with maintenance. Information from maintenance, such as remaining operating hours until the next scheduled maintenance, can be displayed directly in WinCC.



PM-Maint Request

Transparency and ease of use

The content of the different views shown here can be defined with convenient filter and formatting rules that are saved for individual users, user groups or globally. This means the familiar work environment is available every time you access PM-MAINT. Navigation between linked objects (e.g. from the maintenance object, to the planned order, to completed maintenance orders all the way to individual order feedback) offers access to all information in seconds thanks to context-dependent hyperlinks. Operating hours and switching cycles can be integrated from WinCC, PCS 7, WinCC flexible, WinCC (TIA) or via text import and OPC DA / OPC UA from additional sources for performance-based maintenance. All lists available in PM-MAINT can be forwarded directly to Microsoft Excel to make it easy to transfer maintenance information.

Ordering data

Ordering data	Article No.
PM-MAINT Type S system software Single-user/multi-user system server that runs on an interconnected WinCC system	**9AE7104-2SS30-1AA0**
PM-MAINT Type C system software Multi-user system client that runs with system package Type S on an interconnected WinCC system or as Thin Client (without WinCC)	**9AE7104-4SC00-1AA0**
Upgrades	
Upgrade from V9 to V10	
• For system package Type S	**9AE7104-4SU01-8AA2**
• For system package Type C	**9AE7104-4SU02-8AA2**
Upgrade from V8 to V10	
• For system package Type S	**9AE7104-4SU03-8AA2**
• For system package Type C	**9AE7104-4SU04-8AA2**

Note:

Additional PM-MAINT configurations available on request.

More information

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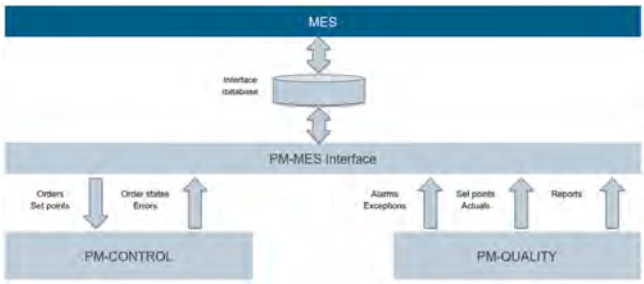
http://www.siemens.com/process-management

PM-MES Interface

Overview

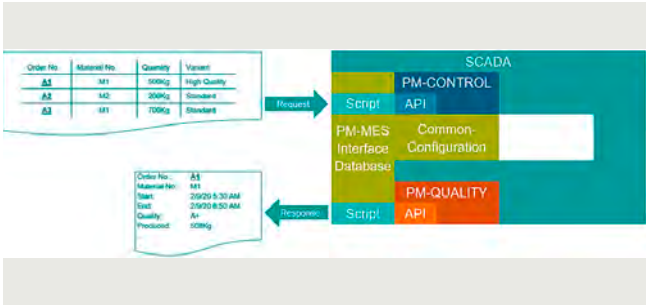


PM-MES Interface

The PM-MES interface enables seamless integration of the SCADA level with MES systems. It builds on the functionality of PM-CONTROL and PM-QUALITY to create a standardized API layer that can be used from the MES side without the need to create custom scripts on the SCADA side.

The PM-MES interface is a bidirectional communication interface between PM-CONTROL, PM-QUALITY and MES systems. Communication is implemented via a Microsoft SQL Server interface database.

Function



WinCC PM MES 1

With PM-MES Interface, a MES system can create orders in PM-CONTROL, for example, override individual parameters in PM-CONTROL for each order (version management), retrieve batch records such as trends and snapshots from PM-QUALITY or request batch reporting from PM-QUALITY to retrieve the results for embedding in the Master Batch Record.

With this approach, the fundamental differences between the concepts on the planning side and the operational SCADA level can be standardized and aligned by using proven components instead of customer-specific programming.

Ordering data

	Article No.
PM-MES Interface Single-user / multi-user system, can be run in conjunction with PM-CONTROL and PM-QUALITY	**9AE7110-2SX30-1AA0**

More information

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http://www.siemens.com/process-management

Overview

PM-LOGON

The PM-LOGON software product offers the operator a user-friendly and fast logon to the operating system with the company ID card via a card reader. PM-LOGON assigns an RFID card to an operator and logs the operator on to the target system as soon as the operator's RFID card enters the reader field of the connected RFID reader. In this way, PM-LOGON automates manual entry of user name and password at the target system.

Function

The distributed-designed PM-LOGON supports a wide range of readers that read the Unique ID (UID) of an RFID card. Each UID is assigned to a user either in an Active Directory (domain controller) or in the Windows user administration or the User Management Component (UMC). The user can log on to different logon services / target systems depending on the operator panel used. SIMATIC Logon, OPC DA/UA, SOAP and UMC are available among others. The logon procedure can also be configured depending on the selected logon service.
This also enables logon to be performed in the background or the logon dialog to be automatically filled out with user name/password.

Ordering data

	Article No.
PM-LOGON system software Type S Unified	**9AE7123-1SS00-1AA0**
PM-LOGON system software Type S configurator	**9AE7123-1SS01-1AA0**
PM-LOGON system software Type S server	**9AE7123-1SS02-1AA0**
PM-LOGON system software Type C	
License file for:	
• 10 users	**9AE7123-1SC00-1AA0**
• 50 users	**9AE7123-1SC01-1AA0**
• 100 users	**9AE7123-1SC02-1AA0**
• 500 users	**9AE7123-1SC03-1AA0**
• 1 000 users	**9AE7123-1SC04-1AA0**
• 2 000 users	**9AE7123-1SC05-1AA0**
• 5 000 users	**9AE7123-1SC06-1AA0**
• 10 000 users	**9AE7123-1SC07-1AA0**
PM-LOGON key dongle	**9AE7123-1SS01-1AA1**
Upgrade package for system package Type S For upgrading from PM-LOGON configurator to PM-LOGON server	**9AE7123-0SH01-0AA0**
Upgrade package	**9AE7123-4SU01-0AA0**

More information

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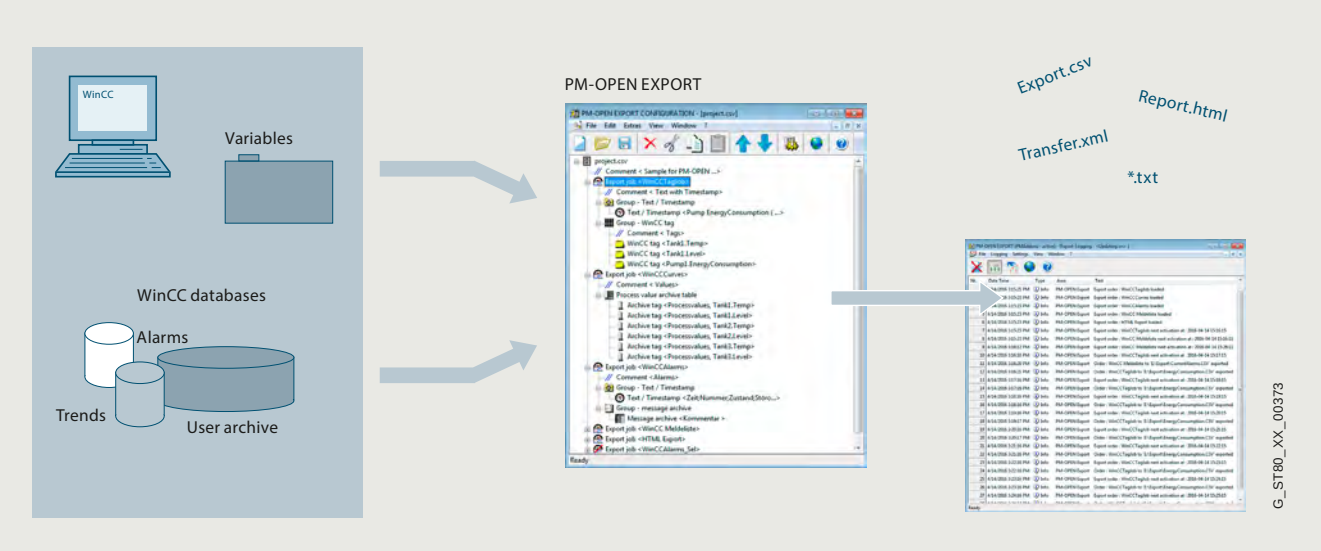
More information is available on the Internet at

http://www.siemens.com/process-management

PM-OPEN EXPORT

Overview



PM-OPEN EXPORT

Flexible and low-cost solution, for exporting current process data (tags) and archive data (alarm log, process value log, user log) from WinCC / PCS 7 / WinCC RT Professional (TIA Portal) into freely formatted text files (ASCII, CSV, HTML/XML format).

Function

PM-OPEN EXPORT can export to any local memory media or to memory media shared on the network. For example, it can be used to make data available on a network server for further processing or analysis.

The configured export jobs are processed automatically in the "background". Triggering of the data export can be cyclical, time-controlled, or event-driven.

Flexible and individual structuring of the destination file is a significant benefit. As well as the exported data, the destination file can also contain, for example, static text and time stamps.

Another advantage of PM-OPEN EXPORT is the possibility of using it in redundant WinCC configurations.

Ordering data

Ordering data	Article No.
PM-OPEN EXPORT system software	
Single-user system; can run on interconnected WinCC system, supplied as DVD incl. USB dongle	**9AE7106-1SS01-1AA0**
Single-user system; can run on interconnected WinCC system, supplied as download incl. software license	**9AE7106-1SS01-1AA1**
Upgrade package	
Upgrade from V7/V8 to V9	**9AE7106-4SU01-8AA0**

Note:

Additional PM-OPEN EXPORT configurations available on request.

More information

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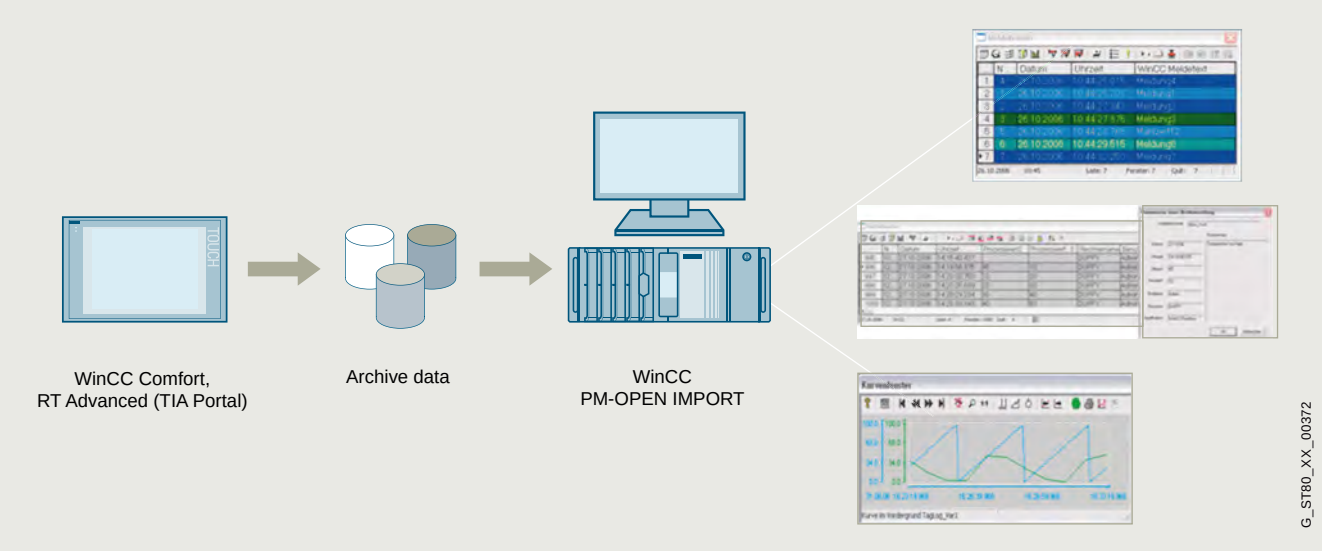
More information is available on the Internet at

http://www.siemens.com/process-management

Overview



Process data (tags and messages) and operator actions (Audit Trail) are archived locally as CSV files on SIMATIC WinCC Comfort Panels or systems with WinCC RT Advanced (TIA Portal). With PM-OPEN IMPORT, this data can be centrally and chronologically compiled on a higher-level system and also be safely saved there in database format for the long term. The original time stamps are, of course, retained when importing the data into the WinCC system. The standard resources of the higher-level WinCC system (WinCC RT Professional (TIA Portal), WinCC, PCS 7) are used for display and evaluation.

With PM-OPEN IMPORT, the requirements for the safe, central and long-term archiving of relevant data in the overall automation landscape (from the panel to the higher-level SCADA system) are satisfied as per the guidelines of the Food and Drug Administration (FDA) 21 CFR Part 11 and the EU directive 178/2002.

Function

PM-OPEN IMPORT offers the following import functions:

- Import of WinCC Comfort / WinCC RT Advanced data logs
  The data logs in CSV format are imported into the WinCC Tag Logging or into the WinCC RT Professional archives and can be displayed as a table or as a trend using the standard controls.
- Import of WinCC Comfort / WinCC RT Advanced alarm logs
  The alarm logs in CSV format are imported into the WinCC Alarm Logging or into the WinCC RT Professional Messages and can be displayed as a table using the standard control
- Import of WinCC Comfort / WinCC RT Advanced Audit Trails
  Audit Trail logs in CSV format are imported into the WinCC Alarm Logging or into the WinCC RT Professional Messages and can be displayed like WinCC operating messages using the standard control. The data "User name," "Comment" and, if applicable, "Tag name," "Old value" and "New value" are also imported.

Configuration

Only one PM-OPEN IMPORT is required per WinCC PC. There is no software restriction on the number of systems that can be connected. Access on the WinCC side takes place exclusively via Ethernet on a Panel or PC Runtime with WinCC RT Advanced.

Ordering data

	Article No.
PM-OPEN IMPORT system software Single-user system; can run on interconnected WinCC system	**9AE7114-1SS01-1AA0**

Note:

Additional PM-OPEN IMPORT configurations available on request.

More information

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More information is available on the Internet at

http://www.siemens.com/process-management

PM-OPEN MINDCONNECT

Overview

PM-OPEN MINDCONNECT

PM-OPEN MINDCONNECT automatically and securely uploads production reports generated by PM-QUALITY or PM-ANALYZE into the Siemens MindSphere Cloud. To facilitate this, a communication channel is established between a virtual asset defined in MindSphere and PM-OPEN MINDCONNECT. This enables a fully customizable solution where, for example, the distribution of reports is organized according to plant area, location or other suitable criteria.

Function

To access the uploaded reports from anywhere, the MindSphere application PM-REPORT BROWSER, which is available for PM-OPEN MINDCONNECT, can be used.

PM-REPORT BROWSER

PM-REPORT BROWSER provides user-friendly access to reports that have been created on site, e.g. with PM-QUALITY and/or PM-ANALYZE, and uploaded to MindSphere and ensures an optimal overview of the production. Reports are available on any device that can display a PDF file in a standard web browser. This provides seamless global access to PM-QUALITY or PM-ANALYZE production reports.

PM-OPEN MINDCONNECT is therefore a secure and ideal extension for existing PM-QUALITY or PM-ANALYZE installations on site and represents a cost-effective solution.

Ordering data

	Article No.
PM-OPEN MINDCONNECT Single-user system, running on interconnected WinCC system with PM-ANALYZE or PM-QUALITY	**9AE7124-1SS01-1AA0**

More information

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More information is available on the Internet at

http://www.siemens.com/process-management

Overview

PM-AGENT

PM-AGENT Unified is used for communication between PM-QUALITY, PM-CONTROL, PM-MAINT and PM-ANALYZE and the SIMATIC WinCC / RT Professional / Unified / PCS 7 systems. Data from the above systems (tags, messages) can be sent and received.

Function

PM-CONTROL, PM-QUALITY, PM-MAINT and PM-ANALYZE are all based on the same infrastructure PM-SERVER, which performs the acquisition, pre-processing and distribution of all production relevant information, such as hardware interrupts, process values etc.

This enables the installation structure to be extended from a WinCC single station system to a centralized management infrastructure connected to several WinCC systems, even if different SCADA system versions are used.

The PM-AGENT Unified is required to provide a uniform interface for communication with different SCADA systems via the network with services such as the coordination of a redundant server pair that, viewed from the outside, represent a single logical communication partner or the buffering of data in the event of network interruption.

PM-AGENT Unified is available for WinCC V7 and V8, PCS 7, WinCC Runtime Professional, WinCC OA, and WinCC Runtime Unified.

Ordering data

	Article No.
PM-AGENT	
Single-user station system; runs on interconnected WinCC system	
• Copy protection delivery: Dongle	**9AE7117-2SS01-1AA0**
• Copy protection delivery: License file	**9AE7117-2SS01-1AA1**
Upgrade package	
• Copy protection delivery: Dongle	**9AE7117-4SU01-6AA0**
• Copy protection delivery: License file	**9AE7117-4SU01-6AA1**

More information

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More information is available on the Internet at

http://www.siemens.com/process-management

UNIVERSAL PM-PACKAGE

Overview

UNIVERSAL PM-PACKAGE

The UNIVERSAL PM-PACKAGE, in combination with a supplementary agreement, provides a cost-effective way to always work with the latest versions of the PM-products for testing and configuration purposes and is therefore aimed exclusively at resellers of PM-products and OEMs.

Function

The UPP consists of a USB dongle which, together with a license file on the respective product data medium, unlocks the version of the PM-product on the data storage medium for configuration, test and presentation purposes in all configuration versions.

The right of use is unlimited in time, non-exclusive and not transferable to third parties.

The UPP basic package contains single licenses for the products:

- PM-CONTROL as of V11
- PM-QUALITY as of V10
- PM-MAINT as of V10
- PM-ANALYZE as of V8
- PM-OPEN EXPORT as of V8
- PM-OPEN IMPORT as of V7
- PM-OPEN TCP/IP as of V9
- PM-OPEN HOST/S as of V8
- PM-LOGON as of V1
- PM-OPEN MINDCONNECT as of V1

This applies to all available versions, "Compact", "Standard" and "Professional".

Ordering data

	Article No.
UNIVERSAL PM-PACKAGE	**9AE7121-1AB01-0AA0**

More information

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More information is available on the Internet at

http://www.siemens.com/process-management

Overview

COPYPROJECT

COPYPROJECT is used to duplicate a complete WinCC V7 or WinCC V8 project including all runtime archive databases without exiting runtime.

Backups can be made in the background either manually or automatically, e.g. according to a daily schedule, whereby COPYPROJECT dynamically adapts the names of the destination directories to indicate the time of the backup.

Function

COPYPROJECT supports three different copy modes. The main function is to copy a complete active WinCC project. However, individual Microsoft SQL Server databases or individual directories can also be copied.

Ordering data

	Article No.
COPYPROJECT	
Single-user station system; runs on interconnected WinCC system	
• Sent by email	**9AE7141-2SS01-1AA0**
• Shipped by mail	**9AE7141-2SS01-1AA1**

More information

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More information is available on the Internet at

http://www.siemens.com/process-management

PM-GRID CONTROL

Overview

PM-GRID CONTROL

PM-GRID CONTROL enables display of data from different sources and is used wherever the flexible display of tables within the WinCC Runtime environment is required

Function

Data can be prepared for display in various formats within the PM-GRID CONTROL. These include the display of a value together with a physical unit, a precisely definable number of digits before and after the decimal point, and a wide variety of date and time formats, which can also be automatically adapted depending on the country.

In addition, the control allows the setting of font sizes, foreground and background colors as well as the display of graphics for displaying indicators depending on the contained column values. Each table cell can also be individually formatted using VB script. The table contents can be sorted in ascending/descending order by clicking on the column header and columns that remain an integral part of the table view can be made static when scrolling.

Ordering data

	Article No.
PM-GRID CONTROL Single station system; can run on interconnected WinCC system	**9AE7141-2SS03-1AA0**

More information

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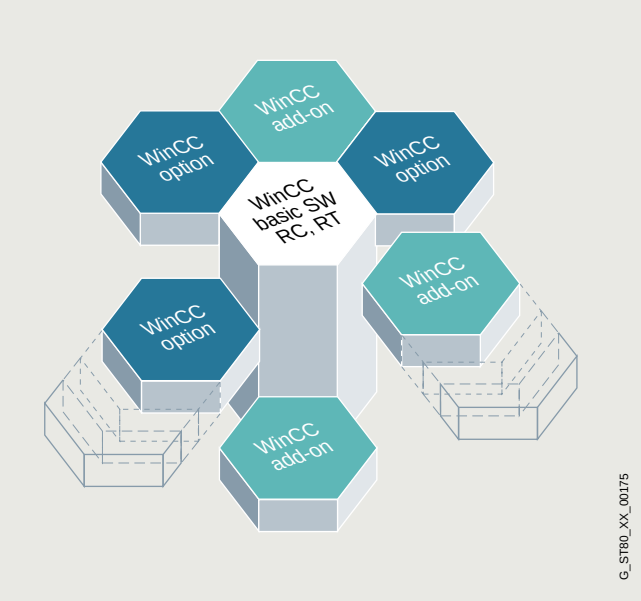
More information is available on the Internet at

http://www.siemens.com/process-management

Overview



WinCC Premium Add-ons – Solutions for all sectors and technologies

The basic system is designed to be independent of any specific technology or industrial sector, to be modular and flexibly expandable and to permit not only simple single-user applications in mechanical engineering, but also complex multi-user solutions or even distributed systems with several servers and clients in plant engineering. WinCC Premium Add-ons are supplementary products that have been created by competent partners working in the specific sectors and technologies and represent interesting expansions for WinCC.

WinCC Premium Add-ons are not DF (Siemens) products, but the products of partners who are committed to complying with certain quality features and boundary conditions. The Premium Add-ons are checked, for example, in the Siemens Test Center for their compatibility with the basic WinCC system and supported in the first instance by the central hotline. As they are important application- and sector-specific add-on products for SIMATIC WinCC, they are marketed jointly by Siemens and the respective add-on suppliers. The WinCC Premium Add-on products can be found on the Internet (see More information) and in the "Online WinCC Premium Add-on Catalog".

Premium Add-ons for Connectivity:

- **PM-OPEN IMPORT system software**
  enables the WinCC flexible archives to be automatically read into the WinCC system.
- **PM-OPEN EXPORT system software**
  offers a flexible, low-cost solution for exporting current process data and archive data from WinCC into freely formatted text files.
- **PM-OPEN MINDCONNECT**
  allows transparent access to production reports created by PM-QUALITY and/or PM-ANALYZE via the MindSphere app.
- **TOP Server**
  is a proven OPC data integration platform with a large number of OPC device drivers.
- **TOP Server UCON**
  enables separate OPC device drivers to be created by Point-Click configuration.

Premium Add-on for process management:

- **PM-ANALYZE**
  is used for locating sources of error or weak spots in plants by analyzing messages and process values**.**
- **PM-CONTROL system software**
  is a cross-industry recipe system for user-friendly creation and management of recipes with integrated order control.
- **PM-QUALITY system software**
  is a modular and sector-independent archive system for order-related or batch-related acquisition of process and production data.
- **PM-MES Interface**
  Configurable bi-directional interface between WinCC in combination with PM-CONTROL/PM-QUALITY and MES systems for cost-effective implementation of vertical integration solutions without programming workload.

Premium Add-on for sector products:

- **ACRON 7 for WinCC**
  is used for long-term archiving and logging of process data for small to medium-sized plants, specifically in the water supply and treatment industry.
- **Sm@rtlib function library**
  provides function blocks for S7-300/400 as well as faceplates and icons for WinCC and WinCC flexible from the areas of process industry, HVAC, pharmaceuticals and energy.

Premium Add-on for configuration tools:

- **DCC TranslationEditor**
  for the efficient, secure translation of multilingual visualizations with in-built features for quality assurance.

Premium Add-on for diagnostics and maintenance:

- **ACC Alarm Management System**
  enables messages to be passed from the visualization system to mobile radio call receivers, such as cell phones or pagers, etc**.**
- **PM-MAINT system software**
  is a sector and technology-neutral maintenance system for use in preventive maintenance.

Overview

Competent partners

With SIMATIC WinCC, you not only get excellent products to suit your requirements, but we will also support you with selecting a partner for your automation solution. In our global network of Siemens Automation Solution Providers you will always find competent contacts in your area. In addition, Siemens-internal WinCC Competence Centers and WinCC Specialists support external system integrators with WinCC customer and industry-specific implementation of efficient solutions.

WinCC Competence Centers

Mannheim: Process management

- Sector-independent solutions and products in the fields of production, environment, maintenance and diagnostics
- Connectivity tools, system integration, connection to SAP R/3
- Support of FDA validation and WinCC ODK

Stuttgart: Production technology

- Solutions for maintenance management
- Alarm management

Plano, Texas (USA)

Migration of FactoryLink to SIMATIC WinCC

- Support for customers with migration projects
- Optimization of automated migration tools
- Support for FactoryLink customers with CSS contracts

More information

WinCC Competence Centers

More information is available on the Internet at
http://www.siemens.com/process-management

Siemens Solution Partners Automation

More information is available on the Internet at:
http://www.siemens.com/automation/solutionpartner

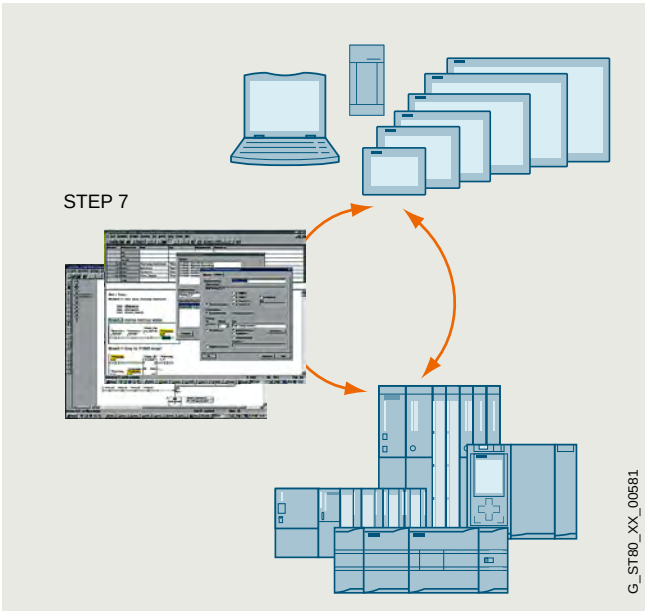
WinCC Specialists

More information is available on the Internet at:
http://www.siemens.com/wincc-specialists

WinCC Premium Add-ons

More information is available on the Internet at:
http://www.siemens.com/wincc-addons

Overview



- Process diagnosis software for quick and precise diagnosis of faults/errors in plants and machines for SIMATIC S7 and SIMATIC HMI
- Standardized diagnostics concept for various SIMATIC components:
  optimum interaction of STEP 7 engineering tools and SIMATIC HMI
- Standardized user interface

Licensing

Runtime software, one license is required for each piece of target hardware.

You can find more information on the Software Update Service, license types, Online Software Delivery and handling your SW licenses with the Automation License Manager at http://www.siemens.com/simatic-licenses

Benefits

- Integral component of Totally Integrated Automation (TIA): increases productivity, minimizes the engineering outlay, reduces the lifecycle costs
- ProAgent:
  - Provides optimum support for plant and machine personnel in respect of troubleshooting and fault rectification
  - Increases plant availability
  - Reduces downtimes
- No further configuration overhead for diagnostics functionality
- Frees up PLC capacity with regard to memory and program execution time
- No special operator know-how is required thanks to clearly comprehensible indication of the cause of error

Application

Increased productivity is being achieved more and more by cutting costs. In this context, the focus is increasingly on maintenance. The emphasis here is on rectifying faults as quickly and efficiently as possible. Ideally, the operating personnel should also perform part of the maintenance tasks. The operating personnel are on-site, they are familiar with the procedures and can intervene quickly. This saves time and reduces costs. It is precisely here that ProAgent can assist operating personnel in identifying faults quickly, in particular in the automotive and machine tool industries.

In the event of a process fault, process fault diagnostics with SIMATIC ProAgent will provide information about the location and cause of that fault and support personnel with troubleshooting.

The ProAgent solution has been optimized specifically for use with SIMATIC S7-300/S7-400 and SIMATIC WinAC. It can be used in combination with the S7-PDIAG, S7-GRAPH and S7-HiGraph[1)] STEP 7 engineering tools. The ProAgent option package features standard displays that are updated with process-specific data during runtime.

[1)] Process diagnostics with S7-HiGraph in combination with TP/OP/MP 270/277, MP 370/377, and C7636 and PC RT systems.

Function

- Context-sensitive diagnostics initiation due to process error message
- Output of operands with symbols and comment
- Switching is possible between LAD, STL and signal list
- Supporting fault rectification with direct process access when using the motion display
- Output of the faulty operands directly in the message including address, symbol and comment[1)]
- Consistency test in RT:
  Inconsistent diagnostics units are marked with icons. This permits quick locating of faults regarding configured data in the commissioning phase.
- Direct, unit-related entry point in the diagnostics display from user displays by using ProAgent functions
- Unit or message-related entry to STEP 7 (LAD/STL/FBD editor, S7-GRAPH, HW CONFIG (upon system error messages)), supported fully automatically [2)]
- Unit or message-related entry to STEP 7, supported fully automatically[3)]
- Graphic display of step sequences

1) In connection with WinCC/ProAgent as of V6.0
2) WinCC/ProAgent as of V5.5 on PC RT
3) Only WinCC/ProAgent as of V5.5

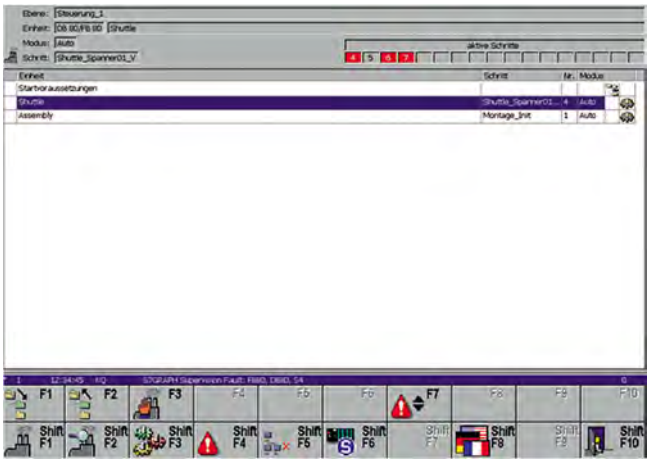
Standardized user interface with standard displays

- Message display
- Unit overview
- Diagnostics detail display
- Motion display
- Sequencer operating display

The displayed screen content is related to the previously selected units or messages. This means that the proper context-sensitive diagnostics screen can be called up based on a message or a selected technological unit.

Message display

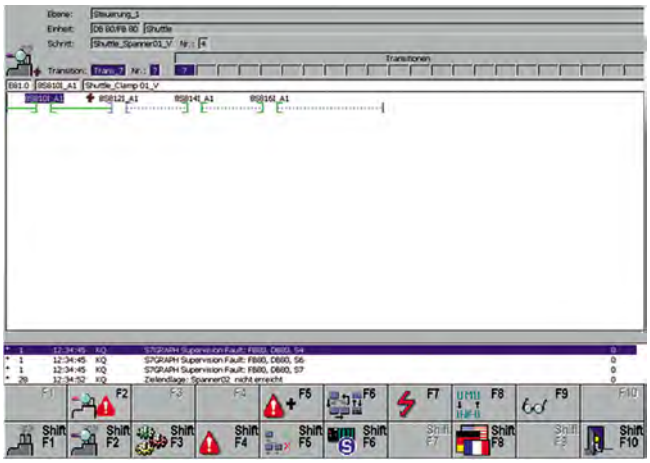
All of the existing process messages are shown in the message display. Context-sensitive branching to other diagnostics displays is also possible with a selected message. The operating personnel can also take the message directly from the erroneous operands and react immediately without having to perform any other operations on the HMI device.
The function is available as of version 6.0 for WinCC/ProAgent.



Unit overview

The unit overview displays all technological units and the respective sub-units (system/machine components) in table form. In this display, the operator is able to recognize, for example, which operating mode or which status the respective unit is in. The operating mode can be changed by the operator if required.

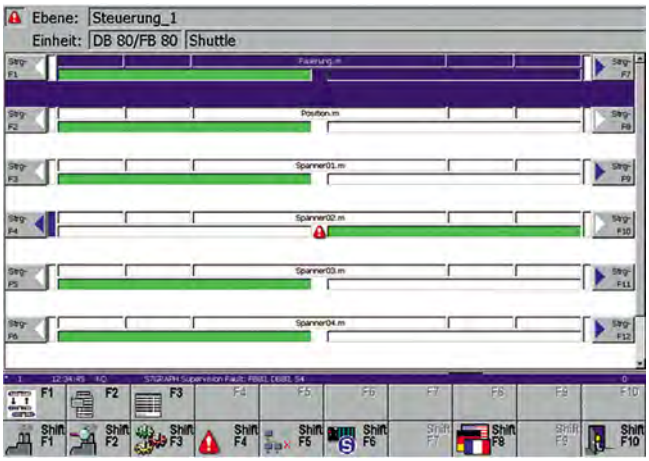
Faulty units are marked with attributes.



Function

Diagnostics detail display

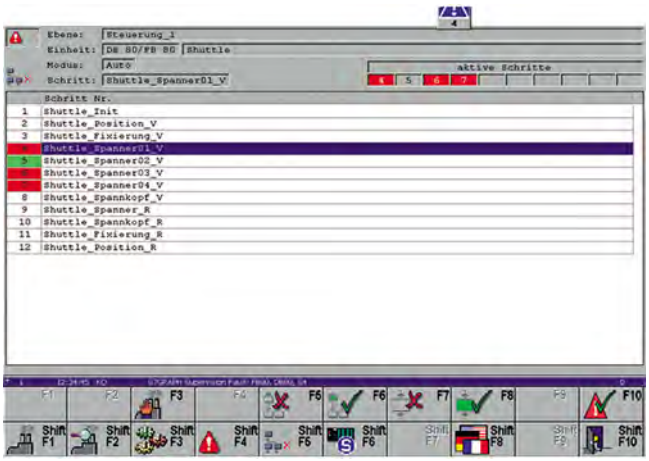
The diagnostics detail display shows the faulty operands at the time of origination of a process error. As an option, current status information can also be displayed. The diagnostics results are either displayed in a ladder diagram (LAD), statement list (STL), or in a clearly arranged signal list overview. The output of the operands depends on the display format with symbols and comments from the S7 symbol table. Only the operands that cause the fault are displayed and marked with a highlighted attribute. Switching to a display that calls up the current status of all operands in the controller is also possible.



Motion display

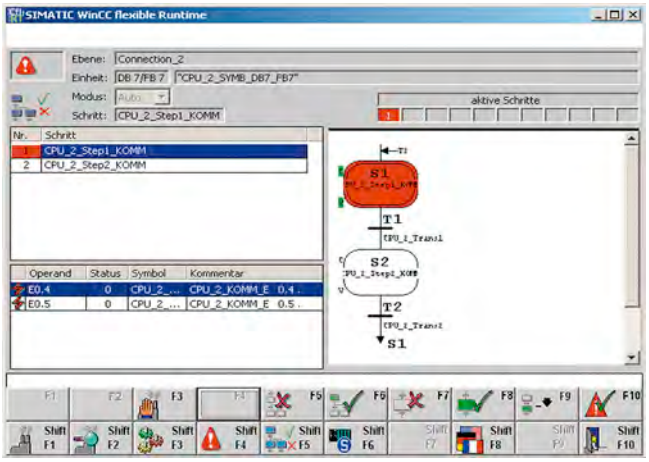
The motion display is used for supported fault rectification. Every motion line contains a comment line that describes the motion (e.g. x-axis), two actions for implementing the motion, response concerning the actuation of a motion and information on the respectively achieved end positions (max. 16).

The motion itself is controlled with softkeys on the side of SIMATIC Panels and Multi Panels. For time-critical motions, the actuation can be done directly through inputs of the controller (depending on the capabilities of the target hardware: 24 V direct keys, DP direct keys via PROFIBUS).



Sequencer operating display

The sequencer operating display supports sequencer control. This makes functions such as initializing and acknowledging sequencers, activating/deactivating individual steps and operating mode settings possible analog to the status/Force in S7-GRAPH. The steps are output to a list with step number/name. Attributes for identifying an active/faulty step give the operating personnel an overview of the current status of the step sequence.



Sequencer diagnostics display

WinCC/ProAgent[1)] also offer capabilities for graphic monitoring and sequencer diagnostics. This gives the user the ability to monitor active/faulty steps as well as the fault cause, e.g. faulty transition conditions, simultaneously on the HMI device.

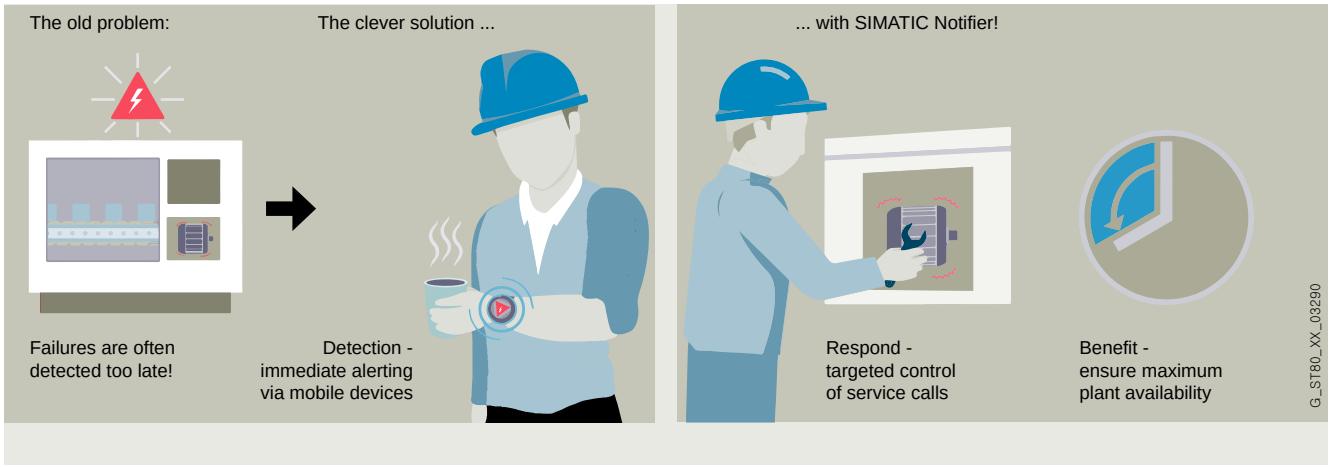
[1)] WinCC/ProAgent as of V5.6 in combination with S7-GRAPH as of V5.1 (OCX is delivered as of S7-GRAPH 5.1)

SIMATIC WinCC/ProAgent

Ordering data	Article No.
SIMATIC WinCC/ProAgent	
Software option package for process diagnosis based on S7 GRAPH V5 and higher and S7 PDIAG V5 and higher; functional enhancement for SIMATIC WinCC; electronic documentation in English, French and German; functions and standard screens for use on a PC (resolution 1024 x 768 pixels) and Panel PC 577/677/877 15" (resolution 1024 x 768 pixels) in English, French and German, runtime license (single license)	
WinCC version:	
• V7.5[1]	**6AV6371-1DG07-5AX0**
• V7.4[1]	**6AV6371-1DG07-4AX0**
As download	
• V7.5[1]	**6AV6371-1HG07-5AX0**
• V7.4[1]	**6AV6371-1HG07-4AX0**
Upgrade	
• V7.4 to V7.5[1]	**6AV6371-1DG07-5AX4**
• V7.2/3 to V7.5[1]	**6AV6371-1DG07-5AX3**
• V7.x to V7.4[1]	**6AV6371-1DG07-4AX3**
As download	
• V7.4 to V7.5[1]	**6AV6371-1KG07-5AX4**
• V7.2/3 to V7.5[1]	**6AV6371-1KG07-5AX3**
• V7.x to V7.4[1]	**6AV6371-1KG07-4AX3**

[1] Not multi-station-capable

Overview



SIMATIC Notifier

SIMATIC Notifier: Detect. React. Benefit.

SIMATIC Notifier is used to provide targeted notifications to employees on their smart devices. The web-based configuration is performed on the Notifier Server in advance for each individual device.

The SIMATIC Notifier Client app receives the notifications. S7, S7 Classic or OPC UA communication is required for integration into a system/machine.

Licenses:

- SIMATIC Notifier Server
- SIMATIC Notifier Client License (unlimited extension options, depending on the number of linked smart devices)

SIMATIC Notifier

Benefits

- Detection and localization of plant or machine faults
- Direct notification on smartwatches, smartphones and tablets
- Increased productivity by avoiding downtimes
- Increased freedom of movement and ability to reach employees via wireless LAN communication

Application

- Plants and machines with operator intervention
- Long production lines, individual machines or total systems
- Simple retrofit/integration
- Fast and user-friendly configuration
- Licensing based on number of connected smart devices (smartwatch, smartphone or tablet)

Function

- Notifications on smart devices
- User and role management
- Different notification categories: Alert, warning and information
- Customizable notification texts and triggering conditions
- "Take over" feature for team applications

Ordering data

	Article No.
SIMATIC Notifier Server 1.0 for Win7 or Win10 (64-bit) SIMATIC Notifier Server license key, download + SIMATIC Notifier Server software, download. Including a SIMATIC Notifier Client license. Email address required for delivery.	**6AV2170-0AA10-0AA0**
SIMATIC Notifier Client license Freely expandable Client license, download. Email address required for delivery.	**6AV2170-0AA20-0AA0**

Technical specifications

	SIMATIC Notifier
Machine integration	S7 Classic, S7+, OPC UA
Max. number of controllers/machines	30x S7 or 30x OPC UA or 30x mixed configurations [1]
Max. number of variables per second per machine	50 [1]
Max. number of variables per second per Notifier Server	1500 [1]
Max. number of connected smart devices per Notifier Server	50 [1]
Minimum requirements for smartwatch OS	Android Wear 2
Minimum requirements for a Windows PC	Windows 7 or 10 (64-bit), 4 GB RAM; Internet Explorer or Google Chrome
Availability	In countries as per OSD country list (Online Software Delivery)

[1] Depending on the performance of the Windows PC used

More information

More information is available at

http://www.siemens.com/simatic-notifier

Overview

SIMATIC Unified Air: Offline authentication with mobile devices

With SIMATIC Unified Air, it is possible to log in to SIMATIC HMI Unified Comfort Panels through biometric authentication.
To do this, the "SIMATIC Unified Air" app is installed on a mobile device. This must be connected to the Unified Comfort Panel via Bluetooth. Authentication is carried out using the biometric sensors built into the mobile device.
The mobile devices used must be registered in advance for use.

Prerequisites for authentication use:

- SIMATIC HMI Unified Comfort Panels from Version 19, Update 1
- SIMATIC RF1000 readers as Bluetooth dongles (requires additional software)
- Mobile end device (iOS or Android)

Licensing

- One SIMATIC Unified Air license per Unified Comfort Panel.

Benefits

- Simplify user authentication through easy access to Unified Comfort Panels using mobile devices
- No need for special passwords
- Works completely offline, no internet connection required
- Increased productivity through shorter response times
- Optimize workflows for more efficient plant operations
- Offline-ready to increase flexibility (without LAN/WLAN infrastructure)
- Visualization of available nearby Unified Comfort Panels
- Easy recognition of current logins on a Comfort Panel
- Fast and user-friendly configuration
- Increased freedom of movement and accessibility for operators through communication via Bluetooth Low Energy

Application

- Can be used for plants and machines with operator intervention in extensive production lines, individual machines or complete systems
- Integrated into Unified Comfort Panels from version 19 Update 1

Function

- Authentication via biometric sensors for increased security and operational integrity
- Full encryption of communication via Bluetooth Low Energy
- Ensuring a connection to nearby devices

Ordering data

	Article No.
SIMATIC Unified Air starter kit Consisting of SIMATIC Unified Air license (6AV2151-0BR01-0LB8); download SIMATIC RF1070R (6GT2831-6BA60) Email address required for delivery	**6AV2151-1BR01-0AB8**
SIMATIC Unified Air Download license; Email address required for delivery	**6AV2151-0BR01-0LB8**

Technical specifications

	SIMATIC Unified Air
Machine integration	SIMATIC HMI Unified Comfort Panel
Max. number of registered mobile devices per Unified Comfort Panel	Depending on the local user management specification
Minimum requirements Unified Comfort Panels	V19 Update 1 or higher
Minimum requirement iOS devices	iOS 12 or higher
Minimum requirement Android devices	Android 13 or higher
Availability	In countries as per OSD country list (Online Software Delivery)