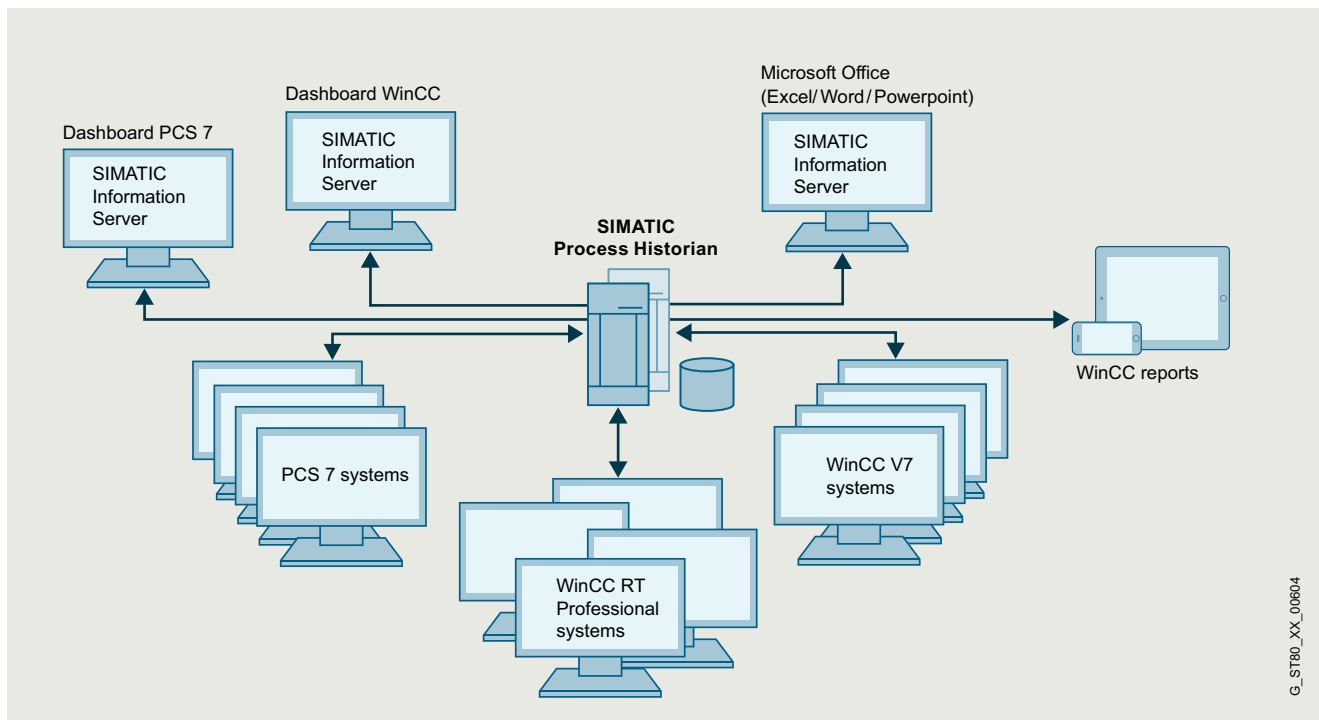


HMI software

SCADA software

SCADA options > SIMATIC Process Historian

Overview



G_STF80_XX_00604

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

HMI software

SCADA software

SCADA options > SIMATIC Process Historian

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

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>

HMI software

SCADA software

SCADA options > WinCC IndustrialDataBridge

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

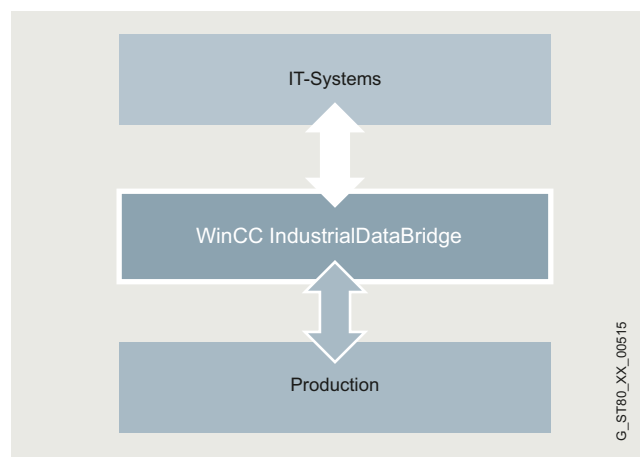
- No programming knowledge required
- Efficient due to transmission of individual data or block transfer (">", "<", "inside where...")
- Unicode support
- Support of Asian languages (Simplified Chinese, Japanese)
- Web Navigator; support of the WinCC IndustrialDataBridge controls in WinCC images
- WinCC 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.

HMI software

SCADA software

SCADA options > WinCC IndustrialDataBridge

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)
<ul style="list-style-type: none"> • Microsoft Access 2016, 2019, 2021 • Microsoft SQL Server 2016, 2019, 2022 • MySQL 5.7, 8.0 • Oracle 19c, 21c • OPC Access 3.0 	<ul style="list-style-type: none"> • Microsoft Access 2016, 2019, 2021 • Microsoft SQL Server 2016, 2019, 2022 • MySQL 5.7, 8.0 • Oracle 19c, 21c • MS Excel 2003, 2007, 2010, 2013, 2016
<ul style="list-style-type: none"> • OPC XML 1.01 • Send/Receive • WinCC OLE DB 7.5, 8.0, 8.1 • WinCC User Archives 7.5, 8.0, 8.1 • WinCC RT Professional V16, V17, V18, V19, V20 (via OLE DB provider) 	<ul style="list-style-type: none"> • OPC Data Access 3.0 • OPC XML 1.01 • IDB OPC Server • Send/Receive • WinCC User Archives 7.5, 8.0, 8.1 • Configurable file editor for TXT / HTML / XML
<ul style="list-style-type: none"> • OPC UA DA (1.0.4) client 	<ul style="list-style-type: none"> • CSV, TXT file • OPC UA DA (1.0.4) server (incl. status messages) • OPC UA DA (1.0.4) client

Ordering data

Article No.

SIMATIC WinCC IndustrialDataBridge 8.1 for WinCC

For data exchange with databases and OPC servers;
language versions: English, German, Simplified Chinese, Japanese

- Basic package
- With 300 tags (countable)
- With 1 000 tags (countable)
- With 3 000 tags (countable)

6AV6362-4AA08-1AA0
6AV6362-4AD00-0BB0
6AV6362-4AF00-0BB0
6AV6362-4AH00-0BB0

As download

- Basic package
- With 300 tags (countable)
- With 1 000 tags (countable)
- With 3 000 tags (countable)

6AV6362-4AA08-1AH0
6AV6362-4AD00-0AH0
6AV6362-4AF00-0AH0
6AV6362-4AH00-0AH0

SIMATIC WinCC IndustrialDataBridge 7.5 for WinCC

For data exchange with databases and OPC servers;
language versions: English, German, Simplified Chinese, Japanese

- Basic package
- With 300 tags (countable)
- With 1 000 tags (countable)
- With 3 000 tags (countable)

6AV6362-4AA07-5AA0
6AV6362-4AD00-0BB0
6AV6362-4AF00-0BB0
6AV6362-4AH00-0BB0

As download

- Basic package
- With 300 tags (countable)
- With 1 000 tags (countable)
- With 3 000 tags (countable)

6AV6362-4AA07-5AH0
6AV6362-4AD00-0AH0
6AV6362-4AF00-0AH0
6AV6362-4AH00-0AH0

SIMATIC WinCC IndustrialDataBridge upgrade

- From V7.4/V7.5 to V8.1
- From V8.0 to V8.1

6AV6362-4AA08-1AE0
6AV6362-4AA08-1AE1

As download

- From V7.4/V7.5 to V8.1
- From V8.0 to V8.1

6AV6362-4AA08-1AK0
6AV6362-4AA08-1AK1

More information

More information on the WinCC V8 basic functions is available under

<https://www.siemens.com/global/en/products/automation/industry-software/automation-software/scada/simatic-wincc-v8/basic-functionalities.html>

More information on the WinCC V8 advanced functions is available under

<https://www.siemens.com/global/en/products/automation/industry-software/automation-software/scada/simatic-wincc-v8/advanced-features.html>

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