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System overview

SIMATIC WinCC Professional

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DETAILS

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The SCADA system inside TIA Portal

siemens.com/wincc-professional

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Power consumption

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The SCADA system inside TIA Portal

With SIMATIC WinCC Professional Siemens offers a SCADA system which is perfectly integrated in the TIA Portal and with which you are optimally prepared today for the requirements of the increasing digitalization of production processes.

SIMATIC WinCC Runtime Professional is a PC-based operator control and monitoring system for visualization and operator control of processes, production flows, machines and plants in all sectors – from simple single-user systems to distributed multi-user systems and cross-location solutions with web clients.

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Transparent operation from the TIA Portal – increase your productivity



Consistent data throughout the entire production

Ensure optimum plant transparency – with high-performance and reliable archiving of the production data. Even comprehensively in a central process historian.



Transparent production for optimized processes

Make the right decision – anytime and anywhere.



Increased availability of machines and production plants

Reduce production outages – by combining integrated system diagnostics and efficient process diagnostics.



Energy transparency for energy savings according to ISO 50001

Low-cost and energy-efficient production – of course in accordance with the latest legal stipulations.



Open communication connects the automation and IT world

Easily transfer your production data to higher-level systems – via standard interfaces.



Proven in many industries: Learn how WinCC Professional works – and how easily your processes are visualized and become transparent.

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The added value of SIMATIC SCADA systems





As the key to greater productivity, SIMATIC SCADA systems combine efficient engineering with powerful archiving and maximum data security. They form a solid foundation for efficient operational management and intelligent production analyses.

- > More about efficiency in engineering
- > More about efficiency during runtime

We offer stationary or mobile solutions to meet your growing demands – with guaranteed security. To accomplish this, we draw upon more than 15 years of SCADA expertise in all industries. Whatever your requirements are, no matter how large or small – we have the right answer.

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With mobile PCS7 solutions, you can obtain information anywhere and anytime – even using existing tablet or smartphone hardware. The use of multi-touch gestures paves the way to modern operating concepts.

- > More information
- > More about the SIMATIC SCADA system

Even special requests can be easily implemented thanks to the support of international standards as well as system-specific script and programming interfaces.

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WinCC Specialists are at your service as qualified solution providers worldwide. These certified and centrally audited partners realize your individual SCADA project, also with distributed client-server architectures involving redundancy or with applications involving energy data management systems.

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Versatile and intelligent. Learn more about our SIMATIC SCADA systems.

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Efficient operations management – thanks to integrated transparency

Manufacturing processes are becoming more and more complex against a background of ever increasing quality requirements coupled with fast product changes and frequent modifications. To ensure the highest possible productivity at the same time, it has to be possible to make prompt, target-oriented decisions regarding process optimization at all levels of a company. This requires an integrated flow of information across all operating levels and locations.

SIMATIC WinCC RT Professional provides you with high transparency and the basis for process optimization. The intelligent use of information improves the processes in the company for a fast return on investment. This reduces costs, avoids waste, improves the utilization of production facilities, and ultimately guarantees better efficiency and cost effectiveness for the company.

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Integrated monitoring client



The WinCC/WebUX option allows for flexible operator control and monitoring of plant processes via the Internet or an intranet using mobile devices (tablet PCs or smartphones). All devices with HTML5-capable browser are supported.

One monitor client is available at no additional charge with the installation of the basic system as WinCC/WebUX server.

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Efficient web-based reporting

	SIMATIC Information Server	WINCOSTRATED	07Gemens
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The SIMATIC Information Server offers web-based access to data from production and the SIMATIC Process Historian. It is therefore used at all levels of the automation pyramid.

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High-performance data archiving



Historical process information is saved as WinCC process value archives in the integrated, highperformance SQL database. 500 archive tags are already licensed in the WinCC basic system. This number can be increased at any time through additive powerpacks.

To reduce the amount of data for long-term archiving, the data can be compressed even further. To do so, the maximum value, minimum value or (weighted) mean, the sum or the difference is calculated for adjustable periods of time (e.g. day, month, year) and saved in compression archives. In addition to automatic archiving, it is possible to add values manually to the archive or to modify archive values later with the appropriate authorization. This is required, for example, for laboratory values in some industries. For reasons of traceability, these values are marked as "modified manually" and the process is documented with an operation message.

In addition to local archiving on a WinCC server, central long-term archiving can be implemented with the "SIMATIC Process Historian" option.

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	Number	Date	Time	Event	English	Spanish	German
2	102056	12/05/15	13:28:13.095	Line2	High temperature at filling system (21).	Temperatura elevada en el sistema de llenado	Hohe Temperatur im Füllsystem
3	102057	12/05/15	13:31:53.104	Line2	Low temperature at filling system (20).	Temperatura baja en el sistema de llenado	Geringe Temperatur im Füllsystem
4	102058	12/05/15	13:31:58.020	Line2	Other errors: reason unknown	otros errores: razón desconocida	Unbekannter Fehler
5	101059	12/05/15	13:32:53.111	Line1	Material inside bin 1 is missing	El material del contenedor 1 no disponible	Material in Behälter 1 fehlt.
6	101060	12/05/15	13:32:58.058	Line1	Material inside bin 4 is missing	El material del contenedor 4 no disponible	Material in Behälter 4 fehlt.
7	102051	12/05/15	13:35:38.023	Line2	Material inside bin 1 is missing	El material del contenedor 1 no disponible	Material in Behälter 1 fehlt.
8	102052	12/05/15	13:35:43.113	Line2	Material inside bin 4 is missing	El material del contenedor 4 no disponible	Material in Behälter 4 fehlt
9	101061	12/05/15	13:35:43.130	Line1	Outlet X4 is jammed	Salida X4 esta atascada	Ventil X4 ist blockiert
10	101062	12/05/15	13:35:48.033	Line1	Outlet X3 is jammed	Salida X3 esta atascada	Ventil X3 ist blockiert
11	101067	12/05/15	13:38:33.121	Line1	Material jam at conveyor band	atasco de material en la cinta transportadora	Materialstau bei Förderband
12	101063	12/05/15	13:38:38.036	Line1	High temperature at filling system (23)	Temperatura elevada en el sistema de llenado	Hohe Temperatur im Füllsystem
13	501012	12/05/15	13:39:09.439	Prod5	Jam in pipeline 7		Materialstau in Röhre 7
14	102053	12/05/15	13:39:23.119	Line2	Outlet X4 is jammed	Salida X4 esta atascada	Ventil X4 ist blockiert.
15	102054	12/05/15	13:39:28.052	Line2	Outlet X3 is jammed	Salida X3 esta atascada	Ventil X3 ist blockiert.
16	501011	12/05/15	13:40:01.437	Prod5	High temperature station 5		Zu hohe Temperatur in Station 5
17	101082	12/05/15	13:40:48.041	Line1	Switch to Maintenance mode	mantenimiento	Wartung
18	501013	12/05/15	13:40:53.444	Prod5	Broken pump in plant 14 (Druck: 9)		Kaputte Pumpe in Werk 14 (Druck: 9)
19	101064	12/05/15	13:41:23.129	Line1	Low temperature at filling system (23).	Temperatura baja en el sistema de llenado	Genringe Temperatur im Füllsystem
20	101083	12/05/15	13:41:23.134	Line1	Switch to stop mode	parada	stop
21	101065	12/05/15	13:41:28.045	Line1	Other errors: reason unknown	otros errores: razón desconocida	Unbekannter Fehler
22							
Read	У					Pending: 21 To acknowledge: 21 Hidden 0	List: 21 📑 1:41:38 PM

WinCC allows you to implement display languages in a simple and cost-effective manner. Thanks to UNICODE support, the display language can be changed at any time during operation. This is independent of the language set in the operating system. This means that it is possible to display multiple languages parallel to each other, such as message texts in European and Asian languages.

This make commissioning considerably easier in international teams.

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	animym	Maximum	Average	Standard deviation	Weighted average value	Number of values	Duration
1968.7 6	.0	128.0	64.6	38.8	64.5	217	1:48.000
904.3 2	4.0	110.0	63.8	26.1	63.9	217	1:48.000
247.8 1	8.0	130.0	67.2	31.9	67.1	217	1:48.000
10448.3 1	7.0	166.0	96.8	44.8	96.7	217	1:48.000
	904.3 2 247.8 1 0448.3 1	504.3 24.0 247.8 18.0 0448.3 17.0	964.3 24.0 110.0 954.3 24.0 110.0 247.6 18.0 130.0 0448.3 17.0 166.0	366 7 5 0 128 0 64 6 247 8 18 0 130 0 67 2 0448 3 17 0 166 0 96 8	966 / 5.0 128 0 146 0 26 5 8 25 1 247 8 18 0 130 0 47 2 31 9 0443 3 17 0 166 0 95 8 44 8 =	965 240 1100 618 251 619 2478 180 1300 672 319 671 0448 370 1660 958 448 967 	No.1 Li No.0 Hi Sol Hi Hi Sol S

Efficient controls are integrated into WinCC process pictures for the display of current or historical data. Process values can be displayed as a table or analyzed using a trend display.

The display is either predefined or can be adjusted individually by the operator, if authorized. Numerous means of representation guarantee the best possible overview.

The freely configurable toolbar functions also provide the option of integrating project-specific functions.

f(x) trends, e.g. pressure *l* temperature, can also be displayed in addition to the time- and value-based representation.

In combination with the Ruler Controls, there is also the option of performing statistical calculations online without the need for programming. The relevant statistics – maximum and minimum value, average value, (weighted) mean, integral and total – are displayed without delay for a time range selected in the Trend Control.

Efficient monitoring with SIMATIC WinCC



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Efficient analysis of messages

	Date	Time	Number	Status	Type	English
1	19/05/15	09:17.58.061	101082	513	Alarm High	Switch to Maintenance mode
2	19/05/15	09:18:32.802	102053	62	Warning Low	Outlet X4 is jammed
3	19/05/15	09:18:32.803	102053		Warning Low	Outlet X4 is jammed
4	19/05/15	09:18:32.813	101054	62	Warning High	Low temperature at filling system (24).
5	19/05/15	09:18:32.814	101054		Warning High	Low temperature at filling system (24).
6	19/05/15	09.18 32.819	101083	22	Alarm High	Switch to stop mode
7	19/05/15	09.18 32.820		111	Alarm High	Switch to stop mode
8	19/05/15	09.18.37.882	102054	62	Warning Low	Outlet X3 is jammed
9	19/05/15	09.18.37.883	102053	6	Warning Low	Outlet X4 is jammed
10	19/05/15	09:18:37.883	102054	101	Warning Low	Outlet X3 is jammed
11	19/05/15	09:18:37.895	101065	123	Reason	Other errors: reason unknown
12	19/05/15	09:18:37.896	101054	6	Warning High	Low temperature at filling system (24).
13	19/05/15	09 18 37 896	101055	(II)	Reason	Other errors, reason unknown
14	19/05/15	09 18 37 903			Alarm High	Switch to Maintenance mode
15	19/05/15	09 18 37 903			Alarm High	Switch to stop mode

	Number	Frequency	Average +/-	Average +/*1	Average +/*2
1	501011	523	51.629	0.000	1.43.618
2	101080	324	0.000	0.000	0.000
3	101082	321	39 969	0.000	2:49.554
4	101081	321	0.000	0.000	0.000
5	101083	319	4,116	0.000	2:49:251
6	501012	264	22 29 088	24:22.618	24:22.618
7	501013	132	3:27.806	0.000	6:54.648
8	101060	81	4.877	11:18:078	11:18.078
9	101059	81	4.123	11.19.870	11:19.870
10	101062	80	4.888	11:15.829	11:15.829
11	101061	80	4.113	11:15.882	11:15.882
12	101063	79	4.873	11:13.547	11:13.547
13	101064	79	4.114	11:11.320	11:11.320
14	101065	79	4.886	11-11.307	11:11:307
15	101067	79	4.114	11:13.560	11:13.560
16	102053	61	4.115	14:57.404	14:57.404
17	102052	61	4.115	14:45.439	14:45.439
18	102051	61	4.885	14:59.982	14 59 982
19	102054	61	4.885	14:57.333	14:57.333
20	102056	60	4.117	14:53.268	14:53.268
21	102055	60	4 883	14 53 357	14 53 357

The messages are displayed on the screen via the freely configurable WinCC Alarm Control. Here, the display of the message information can be adapted precisely to the requirements of the operator. The settings made can be saved in user-specific or global templates.

WinCC Alarm Control for the display of current *I* historical messages based on the contents of the individual message blocks can be filtered, selected and sorted, for example chronologically, by priority or by fault location, in the display. The contents can then be exported directly as CSV file or printed out as report. A freely definable toolbar function also offers a maximum degree of flexibility. For examples, project-specific functions can be integrated. To maintain an overview when there is a large numbers of incoming messages, unimportant operating messages can be suppressed from the screen display via an "alarm hiding" function. The hidden messages continue to be archived in the background.

Numerous integrated statistics functions allow a comprehensive analysis of process states. The message hit list shows how long certain messages were pending on average and in total (message duration) and similarly the average and the total acknowledgment time. Of course, the messages can be filtered here by relevant events, message locations and time intervals. This indicates quickly where critical points and bottlenecks in the production are located. To sort the messages in the message display for an evaluation, you can simply select the column heading and the required sorting criterion (for example, "Frequency, descending").

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Ready-to-use diagnostics



The timely recognition of faulty or incorrect modules and devices is essential for avoiding long downtimes. Therefore, constant monitoring of the plant is of the utmost importance. The TIA Portal provides support with its ready-to-use diagnostics mechanisms. No additional comprehensive configurations of the diagnostics are necessary. Activating the devices for the system diagnostics generates alarms derived from the configured plant layout in the "Devices and Networks" editor. These can be displayed in the HMI. SIMATIC ProDiag is the fully-integrated TIA solution for machine and plant diagnostics. It saves the need for programming diagnostics in the CPU during the engineering phase and provides support for troubleshooting on the HMI. ProDiag makes it possible to monitor a machine or plant and to intervene in the event of a fault.

The monitoring messages which can be generated for the various faults provide specific information on the monitoring mode, location and cause of the fault. Information on troubleshooting can be provided in addition. Plant operators can then not only recognize faults, they can also identify any potential danger in advance and take appropriate countermeasures.

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Efficient energy data management



Ensure the competitiveness of your company with an energy management solution that is already integrated in the automation.

The SIMATIC Energy Suite is available as an integrated option for the TIA Portal. It efficiently combines energy management with automation and thus brings energy transparency into your production. The significantly simplified configuration of energy-measuring components and the automatic generation of the energy management program considerably reduces the configuration effort.

Thanks to the integrated connection to SIMATIC Energy Manager PRO or Service Energy Analytics, the recorded energy data can be seamlessly extended to a multi-site and ISO 50001 certified energy management system.

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Scalable from the single-user system to a web-based solution – for all industries and technologies

To be able to meet growing requirements, the visualization must be expandable at any time without causing technology incompatibilities or requiring completely new configurations. Scalability with investment protection is the top priority.

SIMATIC WinCC is scalable in terms of quantity structure and functionality. From single-user systems through distributed multi-user systems all the way to web-based solutions. Redundant solutions that achieve maximum availability and security are also possible.

In addition to the scalable plant configuration, WinCC options and add-ons also offer customized extensions for industry-specific and technological solutions.

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Client-Server solutions



Depending on requirements, a WinCC single-user system can be expanded into a high-performance client/server system.

In this way, several coordinated operator control and monitoring stations can be operated together with networked automation systems.

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Redundant server solutions



The WinCC/Redundancy option gives the user the opportunity to increase the system availability by means of redundant WinCC stations or servers that monitor each other and, therefore, ensure the operability of the plant and allow seamless data acquisition.

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Web solutions



WinCC/WebUX offers flexible operator control and monitoring of plant processes via the Internet or an intranet, especially using mobile devices (tablet PCs or smartphones). All devices with HTML5-capable browser are supported.

> More information



WinCC/WebNavigator allows integrated operator control and monitoring of plants via the Internet or intranet without having to make changes to the WinCC project. Thin client solutions support the use of PCs and even rugged on-site devices and mobile PDAs.

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Web-based reporting



SIMATIC Information Server supports the creation of target group-oriented reports and analyses of historical WinCC and Process Historian data on the basis of Microsoft Reporting Services.

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Process Historian



The SIMATIC Process Historian archives any amount of data from different data sources of automation and the MES world and is the central long-term archive for production data.

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The SIMATIC Information Server offers web-based access to data from production and the SIMATIC Process Historian. It is therefore used at all levels of the automation pyramid.

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Software for energy management

The following related products for energy management are also WinCC-compatible:



SIMATIC Energy Suite

Intelligent energy management generated automatically. SIMATIC Energy Suite in the TIA Portal efficiently links energy management to automation and thus brings energy transparency to production.

> More informations

SIMATIC Energy Manager Basic and PRO

Manage consumption in accordance with ISO 50001, across sites and economically: SIMATIC Energy Manager Basic and PRO support you in the efficiency analysis of your machines and plants and in company-wide energy efficiency controlling, cost center accounting, and the optimization of energy procurement.

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Using standards for easy integration

SIMATIC WinCC has always stood for the highest level of openness and integration capability because it is consistently based on standard technologies and standard software tools.

SIMATIC WinCC has been relying on the market leader in operating systems since the first version. This means for you: additional investment security.

By using WinCC Runtime Professional, you automatically benefit from the powerful SQL Server – an integral part of the WinCC basic system. Furthermore, open interfaces allow you to automate engineering and to connect the automation and the IT world, even during option.

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With WinCC it is possible to implement connections and dynamic sequences without programming via simple standard dialogs. More complex functions can be implemented as scripts in VBScript or ANSI-C whenever required – for example in order to convert values, automatically initiate a report, or for individual messages.

debugging support is available.

When using scripts, you have full access to the properties of all WinCC graphical objects, the controls, and to the object model of WinCC and the applications of other manufacturers.

> More information

For VBScript, a separate, user-friendly editor with

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WinCC/IndustrialDataBridge is the flexible information hub between automation and the IT world. It reduces the complexity of interfaces and data formats.

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Cross-vendor communication with OPC (OLE for Process Control)

OPC is a communication standard for the secure and reliable data exchange between applications in the industrial automation environment. It describes a series of specifications which are used independent of the manufacturer for the interface between clients and servers or between servers. These include, for example, direct access to real-time data, the monitoring of messages and events, as well as access to historical data. Originally, the OPC standard was only available for Windows operating systems. It was developed from OLE (Object Linking and Embedding) for Process Control. The new OPC UA specification, which was introduced in 2009, is a real universal connection and is based on a secure, simple and technology-independent platform, which is future-oriented, scalable and expandable for all challenges of the different company levels.

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• OPC UA (DE, HA) Server 1.02

Transfer of process values, archive data and messages of WinCC according to the OPC UA specification 1.02. In addition to that, a separately licensed OPC UA Server for the connection to the SIMATIC Process Historian is available.

OPC DA Server

OPC XML DA 1.0 Server

Data exchange across platforms via the web between WinCC and Office applications, ERP/PPS systems (e.g. SAP/R3), or business-to-business portals.

• OPC UA DA Client 1.02

Access to process data according to the OPC Unified Architecture specification

• OPC DA Client

OPC XML DA1.01 Client Web-based and platform-independent access to process data, e.g. to integrate third-party controllers or systems.

• OPC HAD 1.20 Server (Historical Data Access)

Access to historical data of WinCC, e.g. for data access using proprietary reporting tools.

• OPC A&E 1.10 Server

Forwarding of WinCC process alarms and events.

• WinCC OLE DB Provider

Direct access to the process value and message archives: You can write your own applications to access the databases with WinCC OLE DB. For communication with the WinCC OLE DB Provider, ADO DB/ADO.NET is used in applications created with, for example, Visual Basic, VBScript, VB.NET.

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Automatic creation of visualizations

SIMATIC Visualization Architect allows the automatic generation of variables, pictures, screen objects and text lists of a visualization solution, based on the program code of the controller and corresponding rules for creating the visualization objects.

SiVArc is ideal for system integrators and machine builders who want to easily, quickly and flexibly create a standardized operator control and monitoring solution in the TIA Portal.

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Supported operating systems and system requirements

The system requirements vary depending on the type of the selected WinCC installation and the operating system used.

WinCC Runtime Professional (TIA Portal) V16

Operating systems

- Windows 10 64bit Pro Version 1809 (OS Build 17763) Version 1903 (OS Build 18362)
- Windows 10 64bit Enterprise Version 1809 (OS Build 17763) Version 1903
- Windows 10 64bit IoT Enterprise LTSB 2015 LTSP (OS Build 10240) (Test for IPC) 2016 LTSP (OS Build 14393) (Test for IPC) 2019 LTSP (OS Build 17763) (Test for IPC)
- Windows Server 2012 R2 64bit StdE
- Windows Server 2016 64Bit Standard
- Windows Server 2019 64Bit Standard

Office

- Excel 2016
- Build 16.0.6769 (32 or 64 Bit)
- Access to Online Office 365

Recommended hardware for single-user systems/clients

- Processor Intel[®] Core[™] i3 3.5 GHz*
- RAM 8 GB

Recommended hardware for multi-user systems server/web server **

- Processor Intel[®] Core[™] i5 2.4 GHz*
- RAM 8 GB

Recommended hardware for web clients

- Processor Intel[®] DualCore[™]
- RAM 4 GB
- * If additional options are used, higher hardware requirements may apply.
- ** When using a Workstation operating system, a maximum of 3 clients can be connected to a WinCC server.

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The Compatibility Tool is a function provided by Industry Online Support with which you can select compatible software products or check the compatibility of existing configurations.

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Industry Online Support

Central Archive Server based on the SIMATIC Process Historian



The Central Archive Server based on the SIMATIC Process Historian runs in the following operating systems:

- Windows Server 2012 R2 (64bit)
- Windows Server 2016 (64bit)

The recommended hardware configuration depends on the quantity you want to archive using the SIMATIC Process Historian. For details, please refer to the system manual for the administration of the SIMATIC Process Historian.

> To the system manual

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The following virtualization systems have been tested:

- VMware vSphere Hypervisor (ESXi) 6.5
- Microsoft HyperV Server 2016

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Scalability for any quantity structure

SIMATIC WinCC Runtime Professional is available as a basic software package with a maximum of PowerTags. PowerTags are data points that are connected to controllers or other data sources via a WinCC Runtime Professional channel.

Up to 32 messages can be obtained from one data point. Moreover, internal tags without coupling are available for additional system performance.

Powerpacks to increase the number of tags are available to provide scalability of the basic package.

The table below shows the available licenses of the basic packages.

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SIMATIC WinCC RT Professional V16

Basic Package (software as download)

Basic	Package	(software	on	DVD)
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128 Power Tags	6AV2105-0BA06-0AH0	128 Power Tags	6AV2105-0BA06-0AA0
512 Power Tags	6AV2105-0DA06-0AH0	512 Power Tags	6AV2105-0DA06-0AA0
2.048 Power Tags	6AV2105-0FA06-0AH0	2.048 Power Tags	6AV2105-0FA06-0AA0
4.096 Power Tags	6AV2105-0HA06-0AH0	4.096 Power Tags	6AV2105-0HA06-0AA0
8.192 Power Tags	6AV2105-0KA06-0AH0	8.192 Power Tags	6AV2105-0MA06-0AA0
65.536 Power Tags	6AV2105-0MA06-0AH0	65.536 Power Tags	6AV2105-0MA06-0AA0
102.400 Power Tags	6AV2105-0PA06-0AH0	102.400 Power Tags	6AV2105-0PA06-0AA0
153.600 Power Tags	6AV2105-0RA06-0AH0	153.600 Power Tags	6AV2105-0RA06-0AA0
262.144 Power Tags	6AV2105-0TA06-0AH0	262.144 Power Tags	6AV2105-0TA06-0AA0
WinCC Client for RT Professional V16	6AV2107-0DB06-0AH0	WinCC Client for RT Professional V16	6AV2107-0DB06-0AA0

Each basic package contains 500 archive tags, regardless of the number of PowerTags (see below) and a WebUX Monitor Client.

For more information and order data on upgrades, powerpacks, and available versions, visit the Industry Mall. A filter mechanism facilitates your selection.

> To the Industry Mall

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A WinCC Runtime Professional Basic Package contains 500 archive tags. Additional archive licenses can be purchased for larger configuration limits.

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Web Monitoring and Operate licenses

One WebUX Monitoring Client is part of the WinCC RT Professional basic package. Further Monitoring Clients sand Operate licenses can be obtained separately.

> More information

Licenses for a multi-user configuration

The system software with the required number of PowerTags and additionally a "WinCC Server for Runtime Professional" license must be installed on the server. Each client needs a "WinCC Client for Runtime Professional" license.

> More information

Updates

Learn about topics such as Software Update Service, types of license, online software delivery, and managing your software licenses using the Automation License Manager.

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The system solution for efficient production

The system solution for efficient production



SIMATIC WinCC RT Professional and SIMATIC Industrial PCs form a high-performance and flexible platform for the acquisition, evaluation and visualization of data. Thus you rely on coordinated development and integrated end-to-end functionality of hardware and software, which pays off over the entire life cycle.

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The system solution for efficient production

Find out more:

siemens.com/wincc-professional

SIMATIC WinCC Professional – the SCADA system inside TIA Portal:

- Efficiency in engineering
- Scalable to cover increasing demands
- Innovative through mobile SCADA
- Open for simple integration



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Subject to changes and errors. The information given in this document only contains general descriptions and/or performance features which may not always specifically reflect those described, or which may undergo modification in the course of further development of the products. The requested performance features are binding only when they are expressly agreed upon in the concluded contract.

More information: siemens.com/wincc-professional