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# 1 Overview of Options and Licenses

The following tables show which options of which hardware are supported depending on the WinCC (TIA Portal) version used and for which options licenses are required.

#### Legend

Option is not supported
X | O
Option is supported | License not required
X | X
Option is supported | License required
\*)
See footnote

#### 1.1 WinCC V14

Table 1-1

No.	Option	Basic Panel	Comfort Panels	WinCC RT Advanced	WinCC RT Professional
1.	SIMATIC ProDiag		X   X	X   X	X   X
2.	SIMATIC Logon		X   X <sup>1</sup>	X   X <sup>2</sup>	X   X <sup>3</sup>
3.	WinCC Logging	X O	X   O	X   X	XIX
4.	WinCC Recipes	X   O	X   O	X   X	X   X
5.	WinCC Audit		X   X	X   X <sup>4</sup>	
6.	WinCC Sm@rtServer	X   X	X   O	X   X	
7.	WinCC Data Monitor				X   X
8.	WinCC Industrial Data Bridge				XIX
9.	SIMATIC Information Server				ХIХ
10.	SIMATIC Process Historian				ХIХ
11.	WinCC Redundancy				X   X
12.	WinCC Server/ WinCC Client				XIX
13.	WinCC WebNavigator				ХIХ
14.	WinCC WebUX				X   X

Note

The options are described in chapter 7 "SIMATIC WinCC (TIA Portal) Options".

<sup>&</sup>lt;sup>1</sup> A SIMATIC Logon Remote Access license is required in addition

<sup>&</sup>lt;sup>2</sup> A SIMATIC Logon Remote Access license is required in addition

<sup>&</sup>lt;sup>3</sup> License is included in the scope of delivery. A SIMATIC Remote Access license is not required

<sup>&</sup>lt;sup>4</sup> A SIMATIC WinCC Logging license is required in addition

# 1.2 WinCC V14 SP1

Table 1-2

No.	Option	Basic Panel	Comfort Panels	WinCC RT Advanced	WinCC RT Professional
1.	SIMATIC ProDiag		X   X	X   X	X   X
2.	SIMATIC Logon		X   X <sup>5</sup>	X   X <sup>6</sup>	X   X <sup>7</sup>
3.	WinCC Logging	X   O	ΧĮΟ	X   X	X   X
4.	WinCC Recipes	X O	X O	X   X	X   X
5.	WinCC Audit		X   X	X   X 8	
6.	WinCC Sm@rtServer	X   X	ΧĮΟ	ΧΙΟ	
7.	WinCC Data Monitor				X   X
8.	WinCC Industrial Data Bridge				X I X
9.	SIMATIC Information Server				X   X
10.	SIMATIC Process Historian				X   X
11.	WinCC Redundancy				X   X
12.	WinCC Server/ WinCC Client				XIX
13.	WinCC WebNavigator				X   X
14.	WinCC WebUX				X   X

Note

The options are described in chapter 7 "SIMATIC WinCC (TIA Portal) Options".

<sup>&</sup>lt;sup>5</sup> A SIMATIC Logon Remote Access license is required in addition

<sup>&</sup>lt;sup>6</sup> A SIMATIC Logon Remote Access license is required in addition

<sup>&</sup>lt;sup>7</sup> License is included in the scope of delivery. A SIMATIC Remote Access license is not required

<sup>&</sup>lt;sup>8</sup> A SIMATIC WinCC Logging license is required in addition

# 1.3 WinCC V15

Table 1-3

No.	Option	Basic Panel	Comfort Panels	WinCC RT Advanced	WinCC RT Professional
1.	SIMATIC ProDiag		X   X	X   X	X   X
2.	SIMATIC Logon		X   X 9	X   X <sup>10</sup>	X   X <sup>11</sup>
3.	WinCC Logging	X O	X   O	X   X	XIX
4.	WinCC Recipes	X   O	X   O	X   X	X   X
5.	WinCC Audit		X   X	X   X <sup>12</sup>	
6.	WinCC Sm@rtServer	X   X	X   O	ΧΙΟ	
7.	WinCC Data Monitor				X   X
8.	WinCC Industrial Data Bridge	——			XIX
9.	SIMATIC Information Server				ХIХ
10.	SIMATIC Process Historian				ХIХ
11.	WinCC Redundancy				X   X
12.	WinCC Server/ WinCC Client				ХIХ
13.	WinCC WebNavigator				ХIХ
14.	WinCC WebUX				X   X

Note

The options are described in chapter 7 "SIMATIC WinCC (TIA Portal) Options".

<sup>&</sup>lt;sup>9</sup> A SIMATIC Logon Remote Access license is required in addition

<sup>&</sup>lt;sup>10</sup> A SIMATIC Logon Remote Access license is required in addition

<sup>&</sup>lt;sup>11</sup> License is included in the scope of delivery. A SIMATIC Remote Access license is not required

<sup>&</sup>lt;sup>12</sup> A SIMATIC WinCC Logging license is required in addition

# 2 General Information about Licenses

### 2.1 License, Certificate of License and License Key

#### Below are explanations of the terms used.

License

A license is granted as the authorization to utilize products. A license consists of the CoL and the license key, which represent the authorization for utilization.

• CoL - Certificate of License:

The CoL is a confirmation in writing (evidence) of the license. It documents the owner of the license in the legal sense and contains the license number for unique identification of the license.

License Key:

The license key is the "technical representation" of the license ("electronic license stamp").

Authorization:

The authorization is the predecessor of the license key. Authorizations are not used any more in WinCC (TIA Portal). This is why the topic of "Authorization" will not be dealt with any further. Information about this is available in Entry ID: <a href="mailto:27005215">27005215</a>.

#### Note

Col ·

You receive the license in paper form. The license authorizes you to install on a computer and use the version of WinCC (TIA Portal) purchased.

License Key:

You receive the license key on a separate, copy-protected USB stick.

# 2.2 What Are Licenses Required For?

You need a license key in the following cases:

- To use the WinCC (TIA Portal) Engineering System.
- To use the options of the WinCC (TIA Portal) Engineering System.
- To use the WinCC (TIA Portal) Runtime.
- To use options of WinCC (TIA Portal) Runtime on PC-based operator panels.
- To use options on non-PC-based operator panels.

# 2.3 Available License Types

The WinCC (TIA Portal) Engineering System uses the following license types.

- Demo License
- Floating License
- Trial License
- Single License
- Upgrade License
- Power Pack
- Unlock Copy License (UCL)

#### Descriptions of the license types

Demo License

Utilization of the software with this license is limited to

- The number of operating hours specified in the contract.
- The number of days from first use specified in the contract.
- Up to the expiry date specified in the contract.
- Floating License
  - Standard license for WinCC (TIA Portal) Engineering System.
  - The license has no time limit.
  - You can use this license locally or through the network on any computer.
  - Can be upgraded.
- Trial License
  - One-off, limited duration standard license.
  - You can install and use this license locally on any computer.
- Single License
  - All licenses for WinCC (TIA Portal) Runtime and Runtime options are "Single Licenses". The license has no time limit and can only be installed and used locally.
  - Can be upgraded.
- Upgrade License

With the Upgrade License you can do the following, for example:

- Switch from an old version to a new version (the requirement here is that the new version is already installed).
- Extend the quantity framework.

Power Pack

Power Pack permits you to make the following upgrades:

- From a smaller to a greater edition of WinCC Engineering System.
- To a Runtime system with a larger quantity framework.

For this a Power Pack includes a special license for switching to utilization of a higher level of WinCC.

- Unlock Copy License (UCL)
  - The UCL is an add-on based on standard products (with authorization) which replaces the authorization query of copy-protected programs with a customer-specific entry; the UCL therefore overrides the copy protection.
  - The customer-specific entry is displayed in a splash screen each time the software is started and can also be read out from "Help/Info".
  - The UCL is a customer-specific production.

# 2.4 Online Software Delivery

Online Software Delivery – by download to the automation software.

Entry ID: <u>109479521</u> provides information on the topic of "Downloading automation software and licenses".

# 3 Transferring Licenses

### 3.1 Which Software is Required?

The Automation License Manager (ALM) software is required for handling the license keys.

The Automation License Manager is installed automatically by default with the software. Alternatively you can download the software in Entry ID: 114358.

### 3.2 How Do You Transfer License Keys?

The Automation License Manager provides the following options for transferring license keys:

- 1. Drag and drop.
- 2. Cut and paste.
- 3. Menu command "License Keys > Transfer"

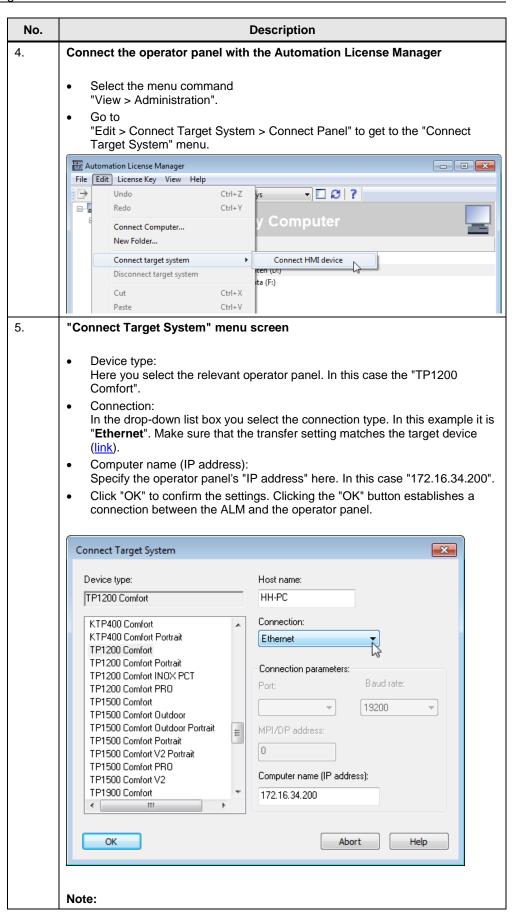
A description of which transfer and connection options are available for the operator panels is given in Entry ID: <u>19109408</u>.

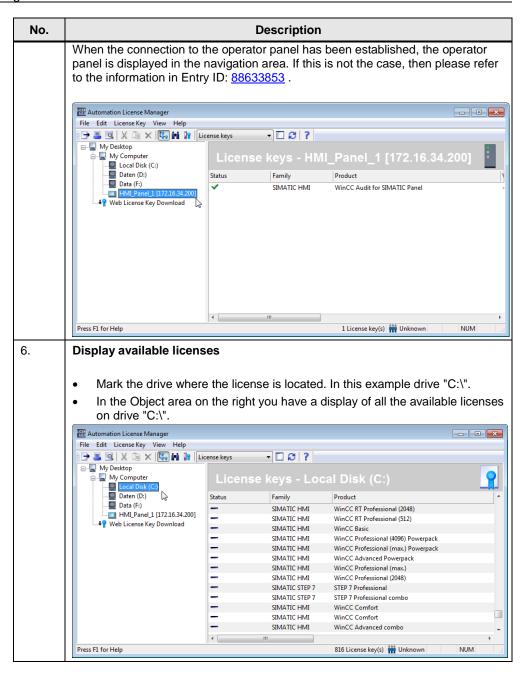
# 3.3 Transfer License Keys to an Operator Panel

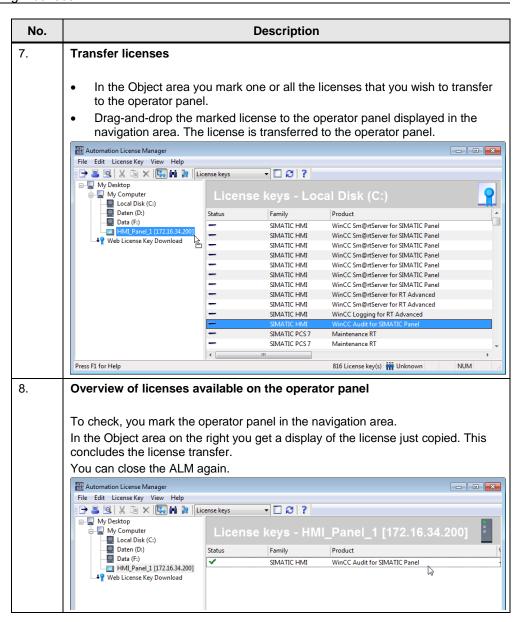
You can find out below how to transfer a license key from a PC to a TP1200 Comfort Panel, by way of example. The connection type depends on the operator panel you are using.

Table 3-1

No.	Description		
1.	Connect operator panel with the configuration computer		
	Use a cable corresponding to the selected transfer type to connect the operator panel to the configuration computer.  In this example it is an Ethernet cable.		
2.	Settings on the operator panel		
	<ul> <li>Set the relevant transfer type on the operator panel. This must match the settings in the ALM described below. Here you must pay attention above all to the settings on the Comfort Panel, for example. Transfer type "PN/IE" → "Ethernet" selected? (link).</li> <li>Then set the operator panel to Transfer Mode.</li> </ul>		
3.	Open the Automation License Manager (Windows 7 Professional)		
	Open the Automation License Manager via "Start > Programs > Siemens Automation > Automation License Manager".		







# 3.4 Transferring License Keys Back from an Operator Panel

The procedure is identical to that described previously in section <u>3.2</u> "<u>How Do You</u> Transfer License Keys?".

The difference is in table section no. "7".

- In the Object area you mark one or all the licenses that you wish to remove from the operator panel.
- Drag-and-drop the marked licenses to the drive in the navigation area where the licenses are to be stored. The licenses are transferred from the operator panel to the drive.

# 4 License Key (License) Backup

### 4.1 Which Software is Required?

You can use the Automation License Manager (ALM) to backup license keys for software and operator panels. Follow the instructions in section 3.4 "Transferring License Keys Back from an Operator Panel" to backup the license keys of an operator panel.

### 4.2 When Do You Have to Backup License Keys?

You must save the license keys under the following circumstances:

- When you install a new operating system on a PC.
- Before you format the hard disk on a PC.
- Before you compress the hard disk on a PC.
- Before you restore the hard disk on a PC.
- When you start an optimization program that moves fixed blocks on a PC.
- Before you run a backup / restore procedure on an operator panel.
- Before you do a "Reset to factory settings" on an operator panel.

# 4.3 Backup and Restore on an Operator Panel

You do a backup or restore on an operator panel

- With ProSave
- · Directly on the operator panel

With a backup you can do a complete save including licenses and use "Restore" to transfer them back again to the operator panel.

How to do a backup and restore is described in Entry ID:  $\underline{28928853}$  and in Entry ID:  $\underline{58876345}$  (Comfort Panel).

# 5 Upgrading Licenses

If you need to upgrade a license key to use a new software version, then you must also use the Automation License Manager (ALM).

Note

You cannot install upgrade license keys during Setup.

### 5.1 Requirements for an Upgrade

For upgrading a license key you need

- Of the software version to be upgraded:
- The CoL (Certificate of License) and the license key.
- Of the target version (operator panel):
- The CoL and the upgrade license key

Note

Please note that both the "old" license key and the upgrade itself must be stored on the hard disk of the computer on which the upgrade is to be made.

# 5.2 Upgrading Using the ALM

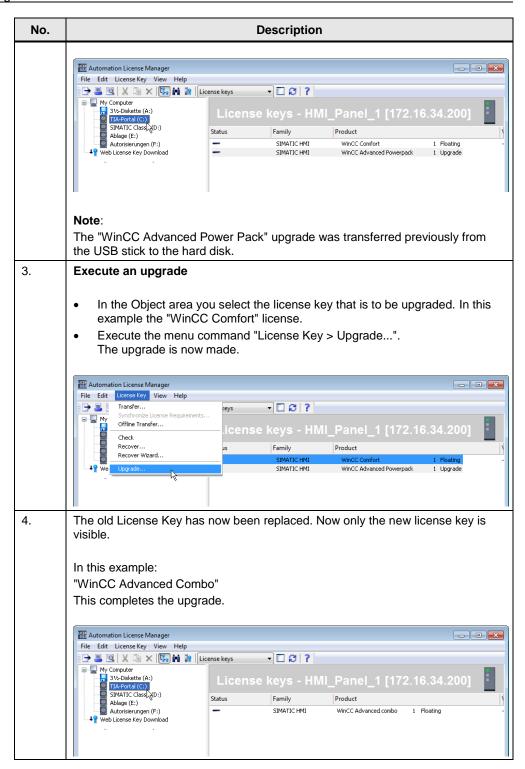
The procedure is described taking the example of an upgrade from WinCC V11 Comfort to WinCC V11 Advanced.

Note

When you upgrade the license to a new version, the "old" license is **overwritten**.

Table 5-1

No.	Description
1.	Open the Automation License Manager (Windows XP Professional)
	Open the Automation License Manager via
	"Start > Programs > Siemens Automation > Automation License Manager".
2.	Storage location of the license
	Select the option
	"View > Administration".
	View > Administration .
	Select the storage location in the navigation area where the license key to be upgraded is located.
	In this case drive "C:\".
	In the Object area on the right you get a display of the available licenses.
	In this example:
	WinCC Comfort
	WinCC Advanced Power Pack



#### Note

If there is only one option for upgrading, then the upgrade is made without any other displays or prompts.

If other upgrade options are found, the "License Key Upgrade" dialog opens.

Select the upgrade to be made and click on the "Upgrade" button.

# 6 Tips and Tricks

#### How do you repair a defective license?

A license is deemed to be defective in the following cases:

- If the license key can no longer be accessed in the storage location.
- If the license key disappears when being transferred to the target drive.

You can use the Automation License Manager to repair a defective license key. For this, use the "Restore" function or the "Restore Wizard" of the Automation License Manager.

You must get in touch with Customer Support if you want to restore a license. More information on this is available in Entry ID: 772175.

#### **Note**

The Runtime software runs perfectly even if the license is missing or defective. The system displays a message at short intervals informing you of the unlicensed mode.

#### Why is a license invalid after changing time zones?

The installed license no longer functions if you switch from a time referred to a full hour to a time not referred to a full hour.

Example: You switch the time zone from GMT +3:00 hours to GMT +3:30 hours.

Remedy:

Uninstall the license key with a time zone setting that was set before you installed the license key and reinstall the license key with the new time zone setting.

#### Why are my license keys not recognized?

In this case, the reason might be an upgrade license. You might have installed the license key, but have not yet made an upgrade. Help on this topic is available under "Upgrading Licenses".

#### Where is the "old" license key located after an upgrade?

If you want to upgrade an existing system, you can purchase an upgrade. When you make an upgrade, the existing license keys are replaced by the new license keys of the upgrade.

#### How do you retrieve a lost license key?

You must make sure that you have the CoL in order to receive a new License Key. This is evidence that you are the owner of the license in the legal sense.

You must get in touch with Customer Support if you want to restore a license. More information on this is available in Entry ID: 772175.

#### Can you copy licenses for backup?

A license key cannot be copied. The copy-protection procedure used prevents the copying of license keys.

# 7 SIMATIC WinCC (TIA Portal) Options

# SIMATIC Panels, SIMATIC WinCC RT Advanced, SIMATIC WinCC RT Professional SIMATIC ProDiag

- Fully integrated TIA solution for machine and plant diagnostics.
- This saves having to program diagnostics in the CPU during the Engineering phase and supports troubleshooting with relevant diagnostics overviews and PLC code directly on the HMI without Engineering System.

#### **SIMATIC Logon**

- Creates a user administration on a central computer to which one/multiple WinCC stations can be connected via Ethernet network.
- SIMATIC Logon checks whether a user ID has been created and whether the required authorizations are present each time a user logs on/off.
- SIMATIC Logon supports the user together with the Audit option in meeting requirements in compliance with FDA 21 CFR Part 11 and EU178.

# SIMATIC WinCC Runtime Advanced and SIMATIC WinCC Runtime Professional SIMATIC WinCC Logging

- Archiving of messages and process values.
- Online evaluation on process value archives and message archives.
- Evaluation of process value and message archives via MS standard tools like Excel, for example.

#### **SIMATIC WinCC Recipes**

- Creation and administration of data records for machine or production data.
- Data record display and input via a configurable screen object distributed in the project via process screens.
- Transfer of the data records to and from the controller.
- Import/export of the data records for further processing with other tools like MS Excel, for example.

### SIMATIC Panels and SIMATIC WinCC Runtime Advanced

#### **SIMATIC WinCC Audit**

- Recording of operator actions in an Audit Trail.
- Electronic signature for important production-relevant user actions.
- Audit supports the user in meeting special quality requirements like production plants requiring validation in compliance with 21 CFR Part 11 (Food and Drug Administration rule).
- With regard to traceability in compliance with EU 175/2002 (EU directive).

#### SIMATIC WinCC Sm@rtServer

- Flexible solution for location-independent access to HMI systems.
- Teleservicing of machines and plants via the internet/intranet.
- Reduction of machine and plant downtimes through direct remote access.
- Flexible solution for location-independent access to machines and plants.

#### **SIMATIC WinCC Runtime Professional**

#### **SIMATIC WinCC Data Monitor**

- Display and evaluation of current process statuses and historical data on Office PCs with standard tools.
- Information can be gathered separately online during Runtime via the internet/intranet.

# WinCC Industrial Data Bridge for WinCC Runtime Professional (V13 SP1 and higher)

With SIMATIC WinCC Industrial Data Bridge you can establish communication links between different data sources and data targets through simple configuration/parameterization. WinCC Industrial Data Bridge can be both integrated in WinCC and used independently (not in conjunction with WinCC) as a standalone application.

#### **SIMATIC Information Server 2014 SP3**

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

For more information about SIMATIC Information Server and the article numbers see SCADA System SIMATIC WinCC.

#### **SIMATIC Process Historian 2014**

SIMATIC Process Historian 2014 is a powerful long-term archive server solution that stores WinCC process values and messages in a central database. The system is freely scalable with regard to performance and quantity framework: It captures and stores data from one or multiple WinCC, WinCC/RT Professional and PCS 7 projects. There is no limit to the number of single stations, servers or redundant server pairs that can be connected. SIMATIC Process Historian is designed for plant-wide usage and is located below the corporate management level (ERP, MES).

For more information about SIMATIC Process Historian and the article numbers see SCADA System SIMATIC WinCC.

#### **SIMATIC WinCC Redundancy**

For the configuration of a powerful, fail-safe client/server system. One WinCC/Redundancy package is required for each redundant server pair.

#### SIMATIC WinCC Server and SIMATIC WinCC Client

Enables the configuration of a powerful client/server system.

- Multiple coordinated operator stations can be operated in a common network with networked automation systems.
- Client/server solution: One server supplies up to 32 connected clients with process and archive data, messages, screens and logs.

#### SIMATIC WinCC WebNavigator

- Operation and monitoring of plants via the internet or the company-internal intranet or LAN.
- Web Client enables operation and monitoring of a running WinCC Runtime Professional project via an internet browser with ActiveX support.

#### **SIMATIC WinCC WebUX**

- Mobile operation and monitoring with commercially available mobile devices via the internet or the company-internal intranet or LAN.
- Platform and browser can be used independently on HTML5-capable and SVG-capable data terminal equipment without installation on the client.

An overview of the options is available at the following link.

 $\underline{\text{https://mall.industry.siemens.com/mall/en/WW/Catalog/Products/10092241?tree=C}} \\ \underline{\text{atalogTree}}$