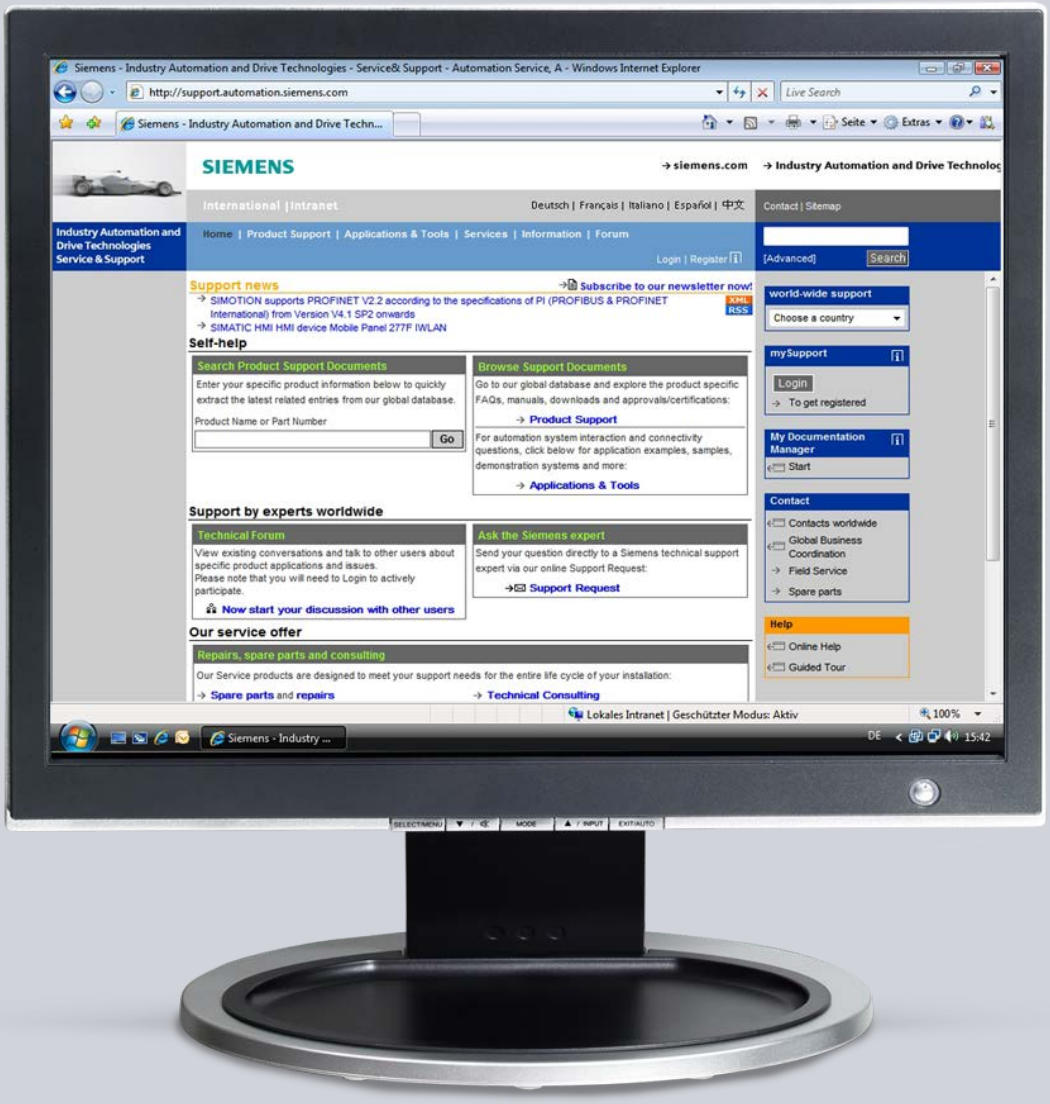
What Information is Available About Licenses for WinCC (TIA Portal)?

WinCC (TIA Portal) & Operator Panels

FAQ • June 2013



Service & Support

Answers for industry.

SIEMENS

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Go to the following link to download this document.

http://support.automation.siemens.com/WW/view/en/74796111

Caution

The functions and solutions described in this article confine themselves predominantly to the realization of the automation task. Furthermore, please take into account that corresponding protective measures have to be taken in the context of Industrial Security when connecting your equipment to other parts of the plant, the enterprise network or the internet. Further information can be found in Entry-ID 50203404.

http://support.automation.siemens.com/WW/view/en/50203404

Question

What information is available about licenses for WinCC (TIA Portal)?

Answer

Follow the instructions and notes listed in this document for a detailed answer to the above question.

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1 General Information about Licenses

1.1 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 27005215

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.

1.2 Why Do You Need Licenses?

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
- For using options of WinCC (TIA Portal) Runtime on PC-based operator panels
- For using options on non-PC-based operator panels.

1.3 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.
  This license has a limited duration.
- 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". These licenses have a limited duration 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.

1.4 Online Software Delivery

Online Software Delivery – by download to the automation software.

The link below provides information on the topic of "Downloading automation software and licenses".

http://www.siemens.com/tia-online-software-delivery

2 Options and Services in WinCC (TIA Portal)

Below is a list of options and services available for WinCC (TIA Portal). You need licenses to use these options and services.
This list is divided into the separate WinCC (TIA Portal) products.

WinCC Basic, Comfort and Advanced (Engineering System)

Table 2-1

No.	Option	WinCC Basic	WinCC Comfort	WinCC Advanced
1.	--	--	--	--

WinCC operator panels and WinCC Runtime Advanced

Table 2-2

No.	Option	Operator panel	WinCC Runtime Advanced
1.	WinCC Sm@rtServer	X	X
2.	WinCC Audit	X	X
3.	WinCC Recipes	--	X
4.	WinCC Logging	--	X
5.	SIMATIC Logon	X	X
6.	WinCC Control Development	--	X

WinCC Professional and WinCC Runtime Professional

Table 2-3

No.	Option	WinCC Professional (Engineering System)	WinCC Runtime Professional
1.	WinCC Server / WinCC Client	--	X
2.	WinCC Web Navigator	--	X
3.	WinCC Recipes	--	X
4.	WinCC Logging	--	X
5.	WinCC Data Monitor	--	X
6.	SIMATIC Logon	--	X
7.	WinCC Control Development	--	X

3 License Transfer

3.1 Which Software is Needed?

The **A**utomation **L**icense **M**anager (**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".

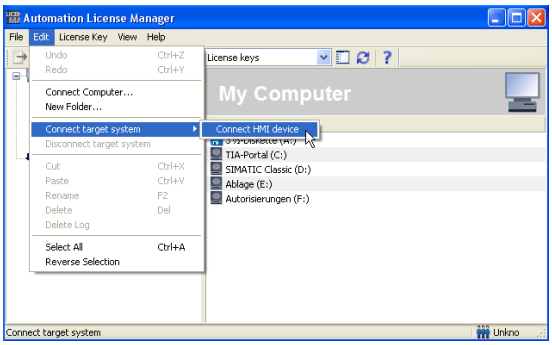
Note Refer to Entry-ID 19109408 for which transfer and connection options are available for the separate operator panels.

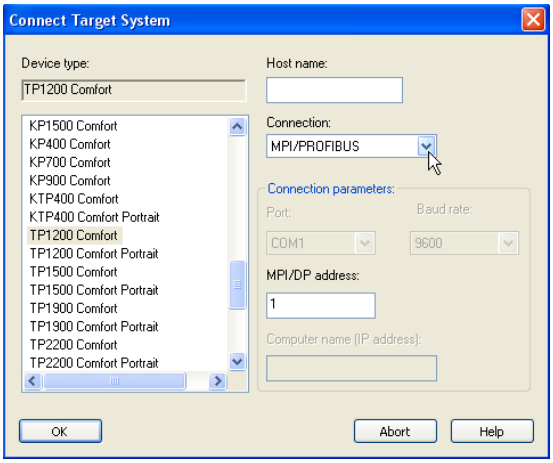
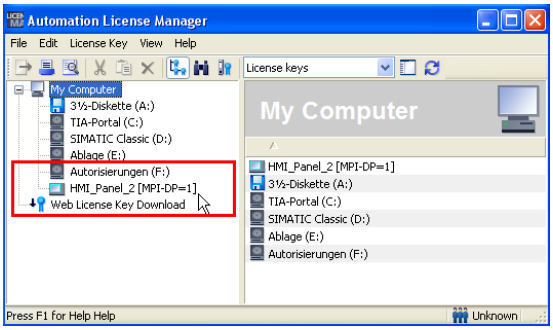
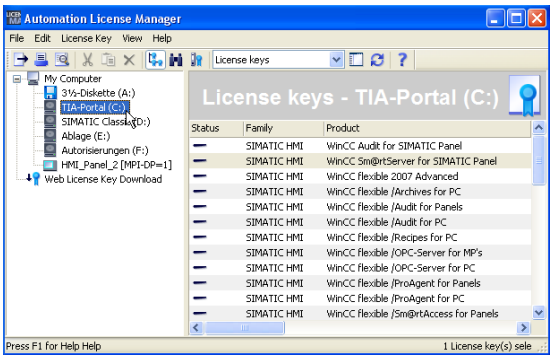
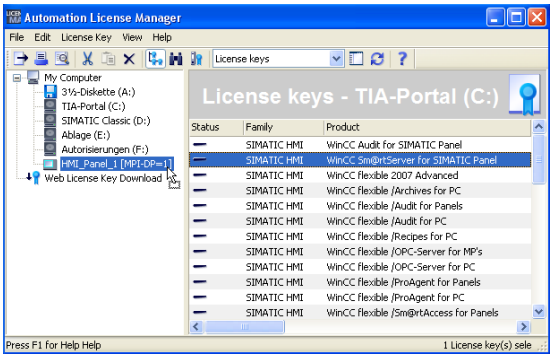
3.3 Transfer License Keys to an Operator Panel

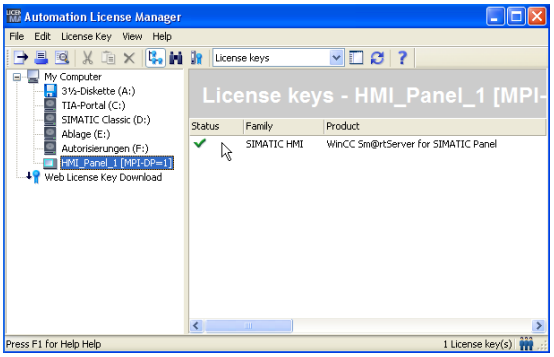
You can find out below how to transfer a license key from a PC to a TP1200 Comfort Panel, by way of example.

Note The operator panel used determines which connection types are supported.

Table 3-1

No.	Action	Screen
1.	**Connect operator panel with the configuration computer** Use a cable corresponding to the selected transfer to connect the operator panel to the configuration computer. In this example it is a PROFIBUS cable.	
2.	**Settings on the Operator Panel** Set the relevant transfer type on the operator panel. This must match the settings in the ALM described below (Link). Then set the operator panel to Transfer Mode.	
3.	**Open the Automation License Manager (Windows XP Professional)** Open the Automation License Manager by means of "Start > Programs > Siemens Automation > Automation License Manager".	
4.	**Connect the operator panel with the Automation License Manager** • Select the menu command "View > Administration". • Go to "Edit > Connect Target System > Connect Panel" to get to the "**Connect Target System**" menu.	

No.	Action	Screen
	"Connect Target System" menu screen • **Device type:** Here you select the relevant operator panel. In this case the "TP1200 Comfort". • **Connection:** In the drop-down list box you select the connection type. In this example "MPI/PROFIBUS". Make sure that the transfer setting matches the target device. • **MPI/DP address:** Here you specify the MPI/DP address of the operator panel. • Confirm the inputs with the "**OK**" button. This establishes a connection between the ALM and the operator panel. **Note** When the connection to the operator panel has been established, the operator panel is displayed in the navigation area. If this is not the case, then please refer to the information at this Link.	 
5.	**Display available licenses** • Mark the drive where the license is located. In this example drive "**C:**". • In the Object area on the right you have a display of all the available licenses on drive "C:\".	
6.	**Transfer licenses** • In the Object area you mark one or all the licenses that you wish to transfer to the operator panel. • Drag-and-drop the marked license to the operator panel displayed in the navigation area. The license is transferred to the operator panel.	

No.	Action	Screen
7.	**Overview of licenses available on the operator panel** To check, you mark the operator panel in the navigation area. In the Object area on the right you get a display of the license just copied. This concludes the license transfer. You can close the ALM again.	

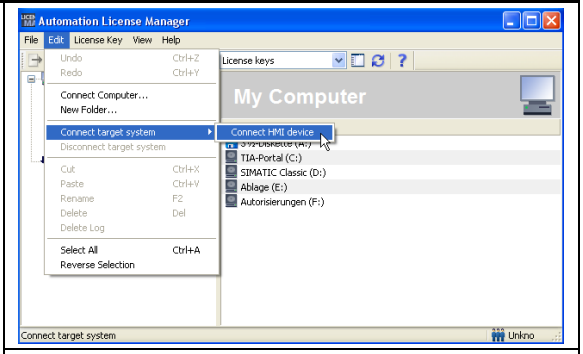
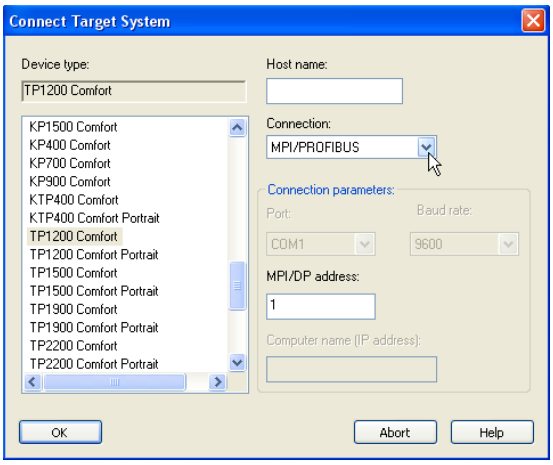
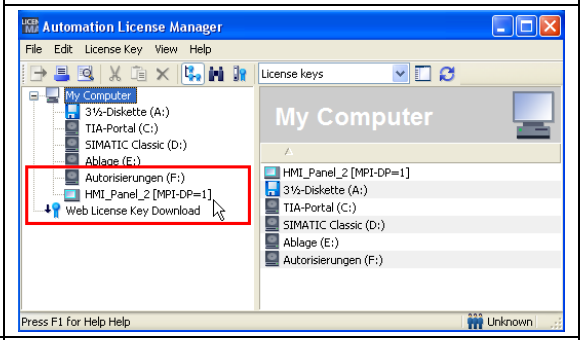
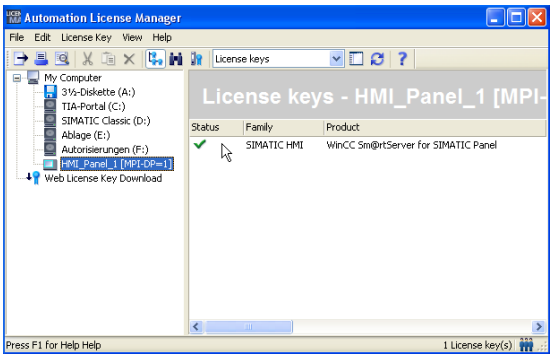
3.4 Transfer License Keys back from an Operator Panel

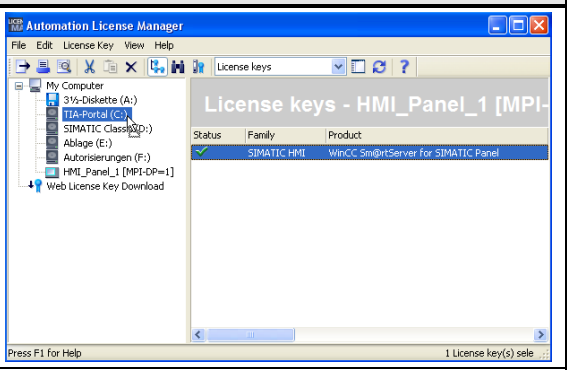
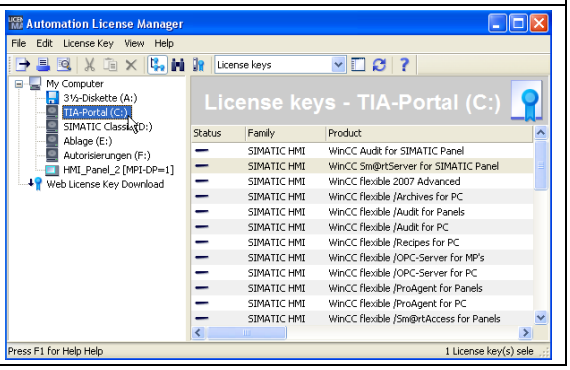
You can find out below how to transfer a license key from a TP1200 Comfort Panel, by way of example, back to a PC.

Note The operator panel used determines which connection types are supported.

Table 3-2

No.	Action	Screens
1.	**Connect operator panel with the configuration computer** Use a cable corresponding to the selected transfer to connect the operator panel to the configuration computer. In this example it is a PROFIBUS cable. **Note** The operator panel used determines which connection types are supported.	
2.	**Settings on the Operator Panel** Set the relevant transfer type on the operator panel. This must match the settings in the ALM described below (Link). Then set the operator panel to Transfer Mode.	
3.	**Open the Automation License Manager (Windows XP Professional)** Open the Automation License Manager by means of "Start > Programs > Siemens Automation > Automation License Manager".	

No.	Action	Screens
4.	**Connect the operator panel with the Automation License Manager** • Select the menu command "View > Administration". • Go to "Edit > Connect Target System > Connect Panel" to get to the "**Connect Target System**" menu. **"Connect Target System" menu screen** • **Device type:** Here you select the relevant operator panel. In this case the "TP1200 Comfort". • **Connection:** In the drop-down list box you select the connection type. In this example "MPI/PROFIBUS". Make sure that the transfer setting matches the target device. • **MPI/DP address:** Here you specify the MPI/DP address of the operator panel. • Confirm the inputs with the "**OK**" button. This establishes a connection between the ALM and the operator panel. **Note** When the connection to the operator panel has been established, the operator panel is displayed in the navigation area. If this is not the case, then please refer to the information at this Link.	  
5.	**Display available licenses** • In the navigation area you mark the operator panel where the license is located. • In the Object area on the right you have a display of all the available licenses on the operator panel.	

No.	Action	Screens
6.	**Transfer licenses** • 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 license to the drive in the navigation area where the license is to be stored. The license is transferred from the operator panel.	
7.	**Overview of licenses available on the drive** To check, in the navigation area you mark the drive where the license is located. In this example drive "**C:**". In the Object area on the right you get a display of all the available licenses. This concludes the license transfer. You can close the ALM again.	

4 License Key (License) Backup

4.1 Which Software is Needed?

License Keys for software and operator panels can be backed up using the **A**utomation **L**icense **M**anager (ALM).
Follow the instructions in section 3.4 to backup the license keys of an operator panel.

4.2 When Do You Have to Back Up 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 28928853.

5 License Upgrades

If you need to upgrade a license key to use a new software version, then you must also use the
Automation **L**icense **M**anager (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 as well as the upgrade itself must be stored on the hard disk of the computer on which the upgrade is to be made.

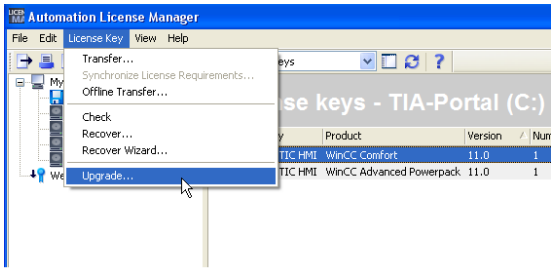
5.2 Upgrading using the ALM

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.	Action	Screens
1.	**Open the Automation License Manager (Windows XP Professional)** Open the Automation License Manager by means of "Start > Programs > Siemens Automation > Automation License Manager".	

No.	Action	Screens
2.	**Storage location of the license** Select the menu command "View > Administration". Select the storage location in the navigation area where the license key to be upgraded is located. In this case "**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** The "WinCC Advanced Power Pack" upgrade was transferred previously from the USB stick to the hard disk.	
3.	**Execute an upgrade** • In the Object area you select the license key that is to be upgraded. In this example the "**WinCC Comfort**" license. • Execute the menu command "License Key > Upgrade". The upgrade is now made.	
4.	The old License Key has now been replaced. Now only the new license key is visible. In this example: "WinCC Advanced Combo". This completes the upgrade.	

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

6.1 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 topic 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.

6.2 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.

6.3 Why are 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".

6.4 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.

6.5 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 topic is available in Entry-ID 772175.

6.6 Can the WinCC (TIA Portal) Edition be Changed through Replacement of Licenses

WinCC (TIA Portal) Editions

- Basic
- Comfort
- Advanced
- Professional

Yes, this is possible. The WinCC (TIA Portal) software is always the same. When you start the software, the license is queried and the software functions are changed to match the scope of the license. The software does not have to be reinstalled.

6.7 Can You Copy Licenses for Backup?

A License Key cannot be copied. The copy-protection procedure used prevents the copying of License Keys.