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Image Update / Operating System Update for SIMATIC HMI Operator Panels

WinCC (TIA Portal), WinCC Unified / V17 /
HMI Operator Panel

<https://support.industry.siemens.com/cs/ww/en/view/109746530>

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1 Introduction

1.1 Software Development

In many areas of daily life, there are electrical devices where, over the course of time, the functionality has been improved or extended by software updates.

For this purpose, the manufacturer provides files, some of which have to be downloaded and installed automatically or manually. An example is the operating system of mobile devices or updates of apps.

1.2 SIMATIC HMI Operator Panels

As already explained in the previous section, the Operator Panel software for the SIMATIC HMI Operator Panels also undergoes continuous development. For this purpose, SIEMENS provides image files that have to be transferred to the respective Operator Panel. Please note that the image version installed on the Operator Panel must match the configured engineering software.

When you configure a new Operator Panel, WinCC (TIA Portal) automatically selects the latest device version.

If you want to use a different device version on an Operator Panel than the one set in WinCC (TIA Portal), then transfer the image file to the Operator Panel, e.g., using ProSave. Details are described in the following sections.

1.3 Components Used

This application example consists of the following components:

Table 1-1

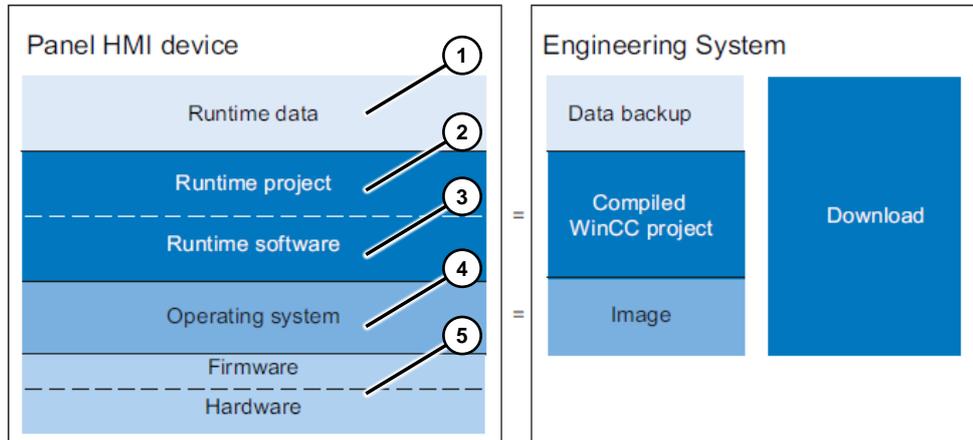
Components	File name	Note
Documentation	109746530_ImageDownload_Hmi_DOC_de.pdf	--

2 Everything on the Topic "Image update"

2.1 What is an Image File?

Structure of the Operator Panel

Figure 2-1



Runtime data (1)

Runtime data is generated while the system is running and stored on the Operator Panel. These include, for example, recipes and User Administration data.

This data is overwritten during loading. If necessary, save this data before loading a Runtime project.

Runtime project (2) and Runtime software (3)

The Runtime project contains the compiled configuration data for an Operator Panel. You load the Runtime project from WinCC (TIA Portal) to the Operator Panel.

Operating system (4)

The operating system of the Operator Panel is called an **image** or **OS (Operating system)**. There are different images for an Operator Panel. All images of an Operator Panel are available in WinCC. Depending on the configuration, you can load the appropriate image together with the Runtime project onto the Operator Panel if required.

Firmware and Hardware (5)

Firmware (System software such as Bootloader) and hardware are fully configured when the Operator Panel is delivered. Furthermore, an operating system without runtime software is already installed on the operator panel

Detailed information can be found in the system manual "SIMATIC STEP 7 Basic/Professional V17 und SIMATIC WinCC V17" [5](#).

2.2 How Do You Use Entry on Image Downloading?

2.2.1 Recommended Variant

If possible, always use the image files listed in the entry under "Section 1". These are sorted by device type as follows:

- 1.1 Image files for WinCC Unified Comfort Panel.
- 1.2 Image files for WinCC Basic, Comfort, and Advanced.

These files contain version-related image files for all configurable HMI Operator Panels. Furthermore, the files contain an installation setup menu.

2.2.2 Selecting the Device Type-Dependent Image Files

1. Find the article number of the Operator Panel.

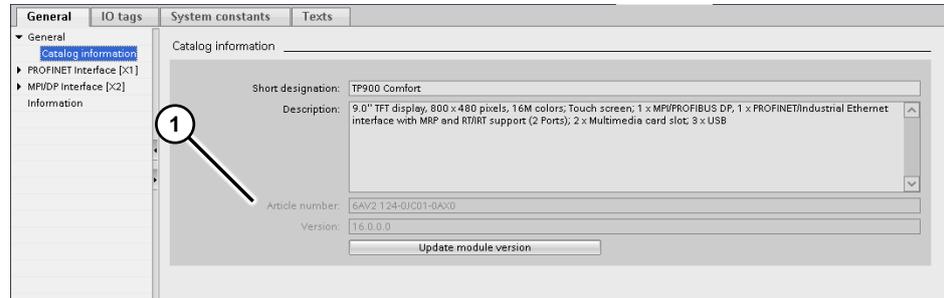
First, determine which Operator Panel you are using. Please refer to the back of the Operator Panel. You will find a sticker on which, among other things, the panel type (1) and the article number (2) are stored.

Figure 2-2



Alternatively, open the HMI project configuration.
Under "Properties > General > General > Catalog information", the article number and the version are displayed (1).

Figure 2-3



2. On the entry page, left-click in an empty space.
3. Open the search function of the internet browser you are using.
To do this, press the key combination "ctrl + F", for example.
4. A search window will open on the entry page. Enter the article number in the search window and press the Enter key.
Ensure that the article number you enter does not contain any spaces.
5. On the entry page, the Operator Panel you are looking for is displayed in color in one of the following sections.
If you do not receive a search result, please check the article number again or refer to Section 3.4. It may be an older HMI Operator Panel, using the article numbers listed there.
6. Select the section in which the article number is displayed.
7. Select your WinCC TIA Portal version in the table below.
8. The required image file can be found in the right half of the table.

Note

If the table with the image files does not list the WinCC TIA Portal version you are using, please use the previous WinCC TIA Portal version.

Example: You are using WinCC V15.1 Upd. 5 and would like to configure the 2nd generation Mobile Panel. If you look in the table, there is no special image file for version V15.1 Upd 5.
In this case, use the image file with version V15.1 Upd. 4.

2.3 How Do I Install an Image File?

2.3.1 Update via DVD

As of TIA Portal V15, not all Operator Panel images of the previous versions are included in the standard WinCC (TIA Portal) installation.

The Operator Panel images that are no longer included in the WinCC (TIA Portal) installation are supplied on two additional DVDs; DVD 1 or DVD 3, and can be installed at any time.

Use the appropriate setup menu for the installation.

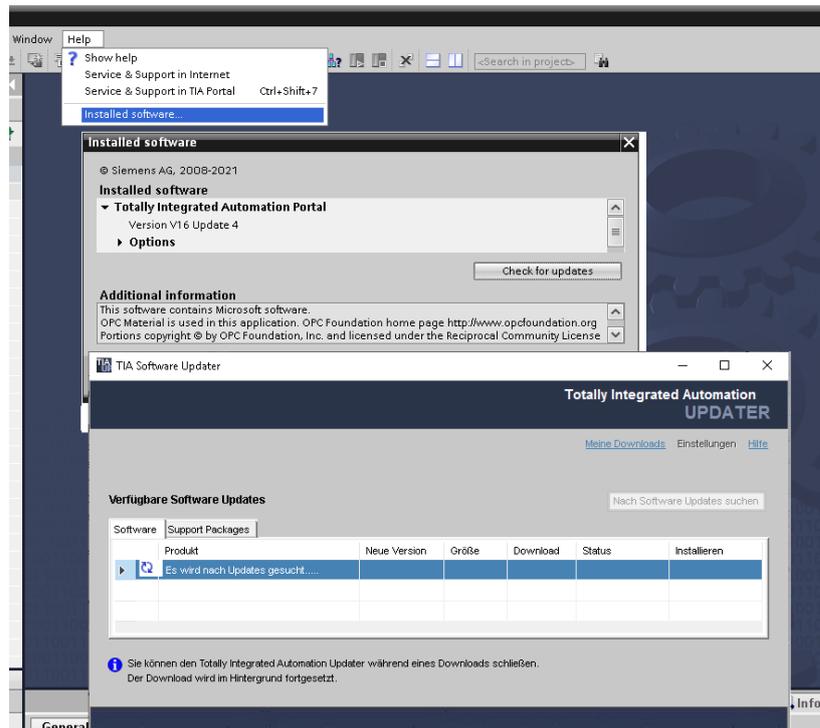
2.3.2 TIA Software Updater

To update the WinCC Image Setup files, you can use the "TIA Software Updater".

The "TIA Software Updater" provides the same files as the WinCC Image Setup files listed on the entry page under Section 1.

1. Open the WinCC (TIA Portal).
2. Open the tool under "Help > Installed software > Check for updates". The tool starts searching for possible updates. This search process may take a few minutes.

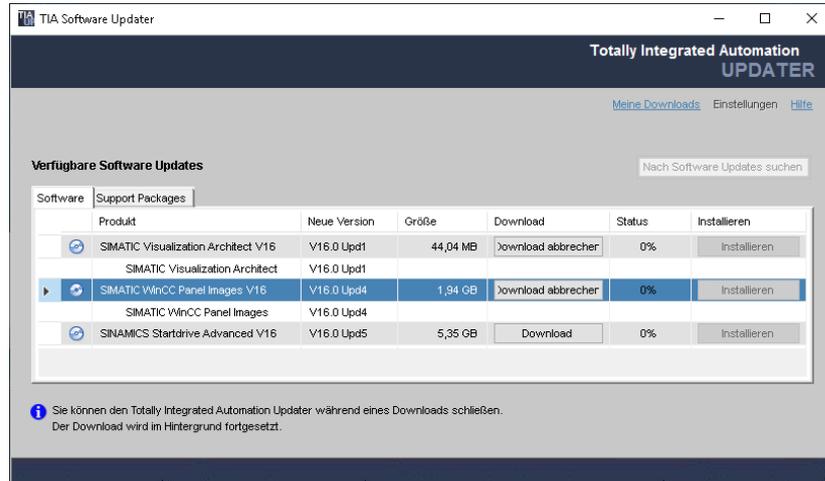
Figure 2-4



2 Everything on the Topic "Image update"

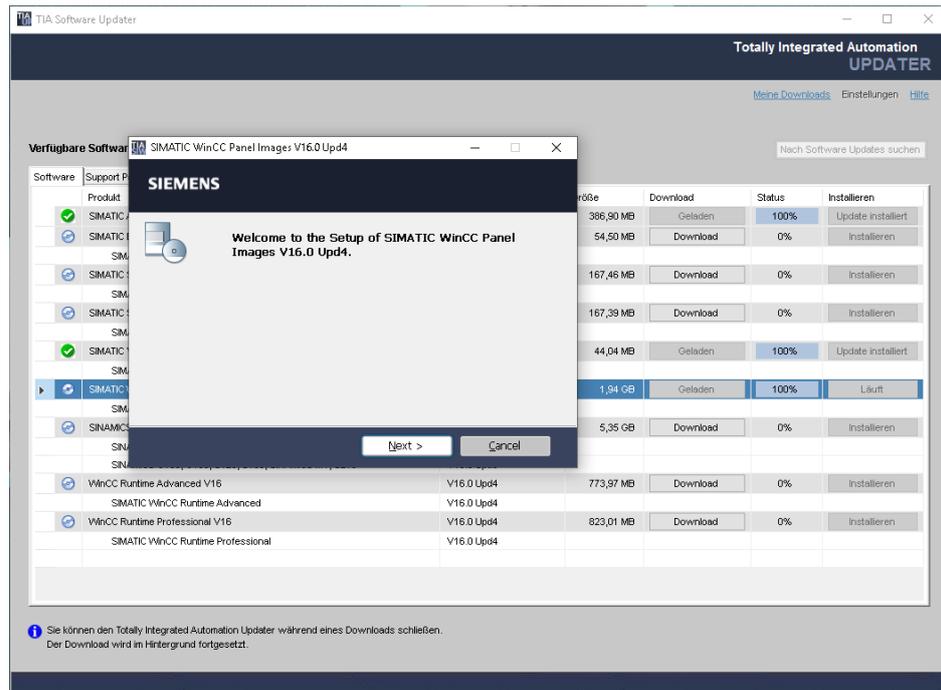
3. After the system has found the image file, select the file, start the download, and then the subsequent installation.

Figure 2-5



4. The "Installation Setup Wizard" is started. The "Wizard" will automatically install the image files into the correct directory.

Figure 2-6



This completes the update of the image files.

2.3.3 Manual Installation

The following describes how to install the image files listed on the entry page to your PC.

WinCC Image Setup

Requirements:

A corresponding WinCC (TIA Portal) version, i.e., V16, is installed.

1. Download the corresponding WinCC Image Setup from the entry page.
2. Open the file by double-clicking the *.exe file.
3. The "Installation Setup Wizard" is started.
 - Follow the instructions.
The "Wizard" will automatically install the image files into the correct directory.
4. This completes the installation of the image files.

Installing individual, device-specific image files

You have the option to download and install individual device-specific image files.

In this case, you must manually add the image file to the designated file folder.

Requirements:

A corresponding WinCC (TIA Portal) version, i.e., V16, is installed.

Installation path of the image file:

"C:\Program Files\Siemens\Automation\Portal V16\Data\Hmi\Transfer\
16.0\Images\CP_7_9"
(V16 = your used WinCC (TIA Portal) version).

Note

The installation path specified here may differ slightly depending on the installation environment. To verify the installation path, see the example below.

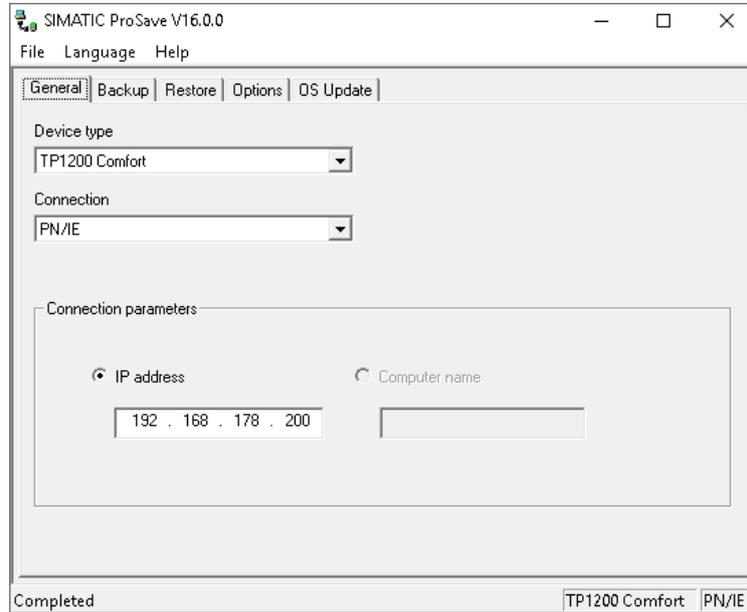
Example

1. First select the image file required for your Operator Panel. A description of this can be found in Section [2.2.2](#).
2. Download the image file from the entry page and extract the zipped file to a separate folder.
3. There are several folders in the unzipped zip file. Open the folder named "Images". There are other folders in this folder. These contain the image files (*.fwf) that must be copied into the image installation directory on your PC.

2 Everything on the Topic "Image update"

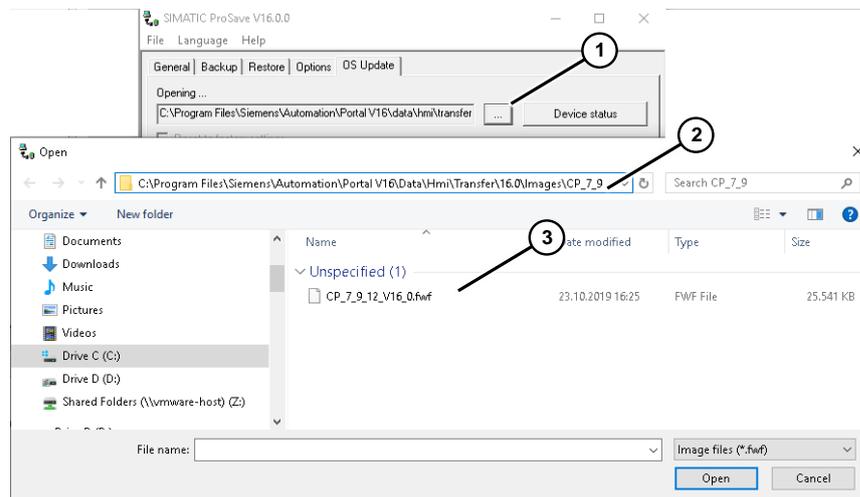
4. Check the directory where the image files are stored on your PC.
 - a. Open the ProSave software.
 - b. Select your Operator Panel under "General > Device type" (in this example TP1200 Comfort).

Figure 2-7



- c. Then use the "OS Update" button to change the window.
- d. Click the button with the three dots (1).
Windows Explorer opens with the path (2) and the existing image file (3).

Figure 2-8

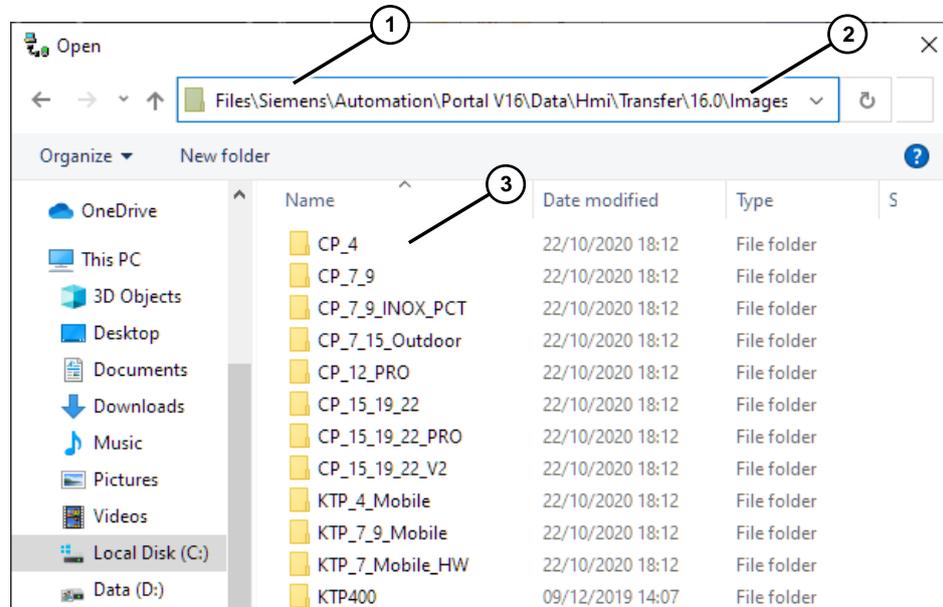


- e. Select the complete path and then copy the path specification, e.g. with the key combination "ctrl + C".
You can now close/exit the "ProSave" application.

2 Everything on the Topic "Image update"

- f. Open the "Windows Explorer" and paste the previously copied "path specification" into the address bar (1).
- g. Left-click in the directory name "...\\Images\\..." (2).
The "System" changes to the directory with the individual image folders (3).

Figure 2-9



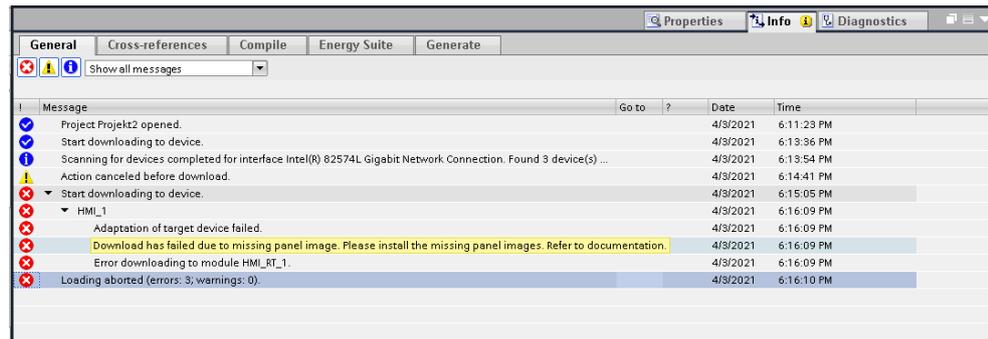
5. Copy the image files from the unzipped "Zip file" into the file folder described under "4."; overwrite the files if necessary.
(C:\Program Files\Siemens\Automation\Portal V16\Data\Hmi\Transfer\16.0\Images).
6. This completes the installation of the image file(s).

2.4 Message Concerning Missing Image File

You have installed a new WinCC (TIA Portal) version or performed an update for an existing version and you receive a message during the project download that the image file for the HMI Operator Panel is not available.

Possible cause: Check that you have also installed the new image files after installing the new WinCC (TIA Portal) software version. These are no longer automatically installed during the standard installation. Please refer to the following Section [2.5](#).

Figure 2-10



2.5 Where Can I Find the Image Files?

As of TIA Portal V15, **not** all Operator Panel images of the previous versions are included in the standard WinCC (TIA Portal) installation.

This reduces the size of the TIA Portal installation package and subsequent updates compared to previous versions.

The Operator Panel images that are no longer included in the WinCC (TIA Portal) installation are supplied on two additional DVDs; DVD 1 or DVD 3, and can be installed at any time.

In addition, you have the possibility to download the respective Operator Panel image for installation from SIOS under the following entry ID [109746530](#).

2.6 When Do I Need an Image File?

Whenever the WinCC (TIA Portal) version you used to configure the HMI Operator Panel does not match the image version installed on the HMI Operator Panel, you must adjust the image file on the HMI Operator Panel.

2.7 Difference Between an Operating System Update / OS-Update

Regardless of whether they are talking about "operating system update", "reset to factory settings", or "OS update". In all cases, **an** image file is transferred to an HMI Operator Panel.

2.8 Working with Different Versions

Can several people work on one project with different WinCC (TIA Portal) versions?

In principle, this is possible. When merging the projects, all project data must then be upgraded to the highest shared WinCC (TIA Portal) version. From that point, subsequent editing with an older version is no longer possible.

We recommend that all persons involved in the project use the same Use WinCC (TIA Portal) version.

2.9 Selecting the Device Version

When you configure a new Operator Panel, WinCC (TIA Portal) automatically selects the latest device version.

If you want to use a different device version on an Operator Panel than the one set in WinCC (TIA Portal), transfer the image to the Operator Panel.

WinCC (TIA Portal) provides the required images for the supported Operator Panels.

Information about the device versions used in WinCC (TIA Portal) can be found in the FAQ under the entry ID [21742389](#).

CAUTION

Changing the device version deletes all data on the Operator Panel.

If you change the device version, data on the target system is deleted. Therefore, first save the existing Runtime data before changing the device version. Please also see Section [2.1](#).

3 Appendix

3.1 Service and support

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3.3 Links and literature

Table 3-1

No.	Subject
\1\	Siemens Industry Online Support https://support.industry.siemens.com
\2\	Link to the entry page of the application example https://support.industry.siemens.com/cs/ww/en/view/109746530
\3\	SIMATIC ProSave service tool https://support.industry.siemens.com/cs/ww/en/view/10347815
\4\	Operating system update https://support.industry.siemens.com/cs/ww/en/view/19701610
\5\	SIMATIC STEP 7 Basic/Professional V17 and SIMATIC WinCC V17 https://support.industry.siemens.com/cs/ww/en/view/109798671

3.4 Change documentation

Table 3-2

Version	Date	Change
V1.0	04/2021	First version
V2.0	03/2022	Update V17, adapt Structure of the Operator Panel