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Externally Editing WinCC (TIA Portal) Graphics

WinCC (TIA Portal) V17 or higher / Export Graphics Tool / SIMATIC Openness

https://support.industry.siemens.com/cs/ww/en/view/109562021

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1 Purpose

Microsoft's Windows operating system provides "MS Paint" for the processing of graphics.
This software is sufficient for minor changes to graphics.
In order to use external graphics editing programs with a greater range of functions, the existing graphics must be exported and saved to a separate directory. In addition, it is necessary to keep the properties and the file type (e.g., "png, jpg").
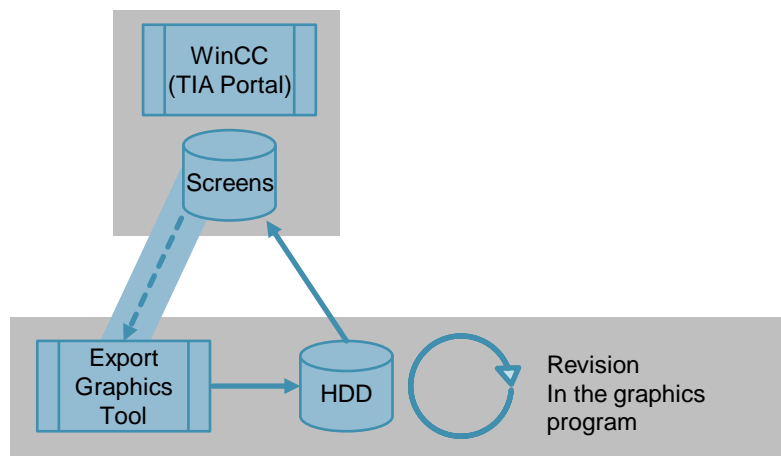
2 Solution

2.1 Overview

The "Export Graphics Tool" allows you to export graphics from a WinCC (TIA Portal) configuration to a local directory. The graphics are saved with their original file type and the associated properties (e.g., transparency).

Opening graphics with a defined graphics program makes editing graphics more efficient.

After editing the graphics, they are reinserted into TIA Portal's Project Graphics using drag & drop.

Figure 2-1

Note	The "Export Graphics Tool" option is version-dependent and **must** match the WinCC (TIA Portal) version used.
	If, for example, you are using WinCC (TIA Portal) V17, you must use "Export Graphics Tool" version V17.

2.2 Hardware and Software Components

2.2.1 Validity

The application example is valid for WinCC (TIA Portal) V17 or higher.

2.2.2 Components Used

The application example was created with the following components:

Software components

Table 2-1

Component	Qty.	Article number	Note
SIMATIC WinCC Comfort/Advanced V17	1	6AV2102-0AA07-0AA5	Alternatively, WinCC Professional V17
SIMATIC TIA Openness V17	1	--	Included in the WinCC (TIA Portal) V17 installation.

Example files and projects

The following list contains all files and projects used in this example.

Table 2-2

Component	Note
109562021_TIA_Export_Graphics_Tool_DOC_v50_en.pdf	This document.
109562021_TIA_Export_Graphics_Tool_V17.zip - TIA Portal Export Graphics.exe	Export Tool

3 TIA Export Graphics Tool

3.1 Requirements

- WinCC (TIA Portal) V17 is installed on the PC.
- SIEMENS TIA Openness V17 is installed on the PC.
  (For details see Chapter 3.2)
- On the configuration PC, the logged-in "user" is assigned to the "SIEMENS TIA Openness" group
- The "TIA Export Graphics Tool" V17 is available on the configuration PC.
- The WinCC (TIA Portal) configuration from which the files are exported from must be closed during the process.

3.2 SIEMENS TIA Openness

3.2.1 Installing WinCC (TIA Portal) V17 via the Installation DVD

Note	The "SIEMENS TIA Openness" software can be found on the 2nd installation DVD of WinCC Comfort/Advanced

- Install the "SIEMENS TIA Openness" software on the configuration PC.
- To start the setup, double-click the file name "SIEMENS_TIA_Openness_V17.exe". Then follow the installation instructions.

You can find detailed information about the software under the Entry ID: 108716692 "TIA Portal Openness: Introduction and Demo Application". This additional information is **not** required to implement the application example.
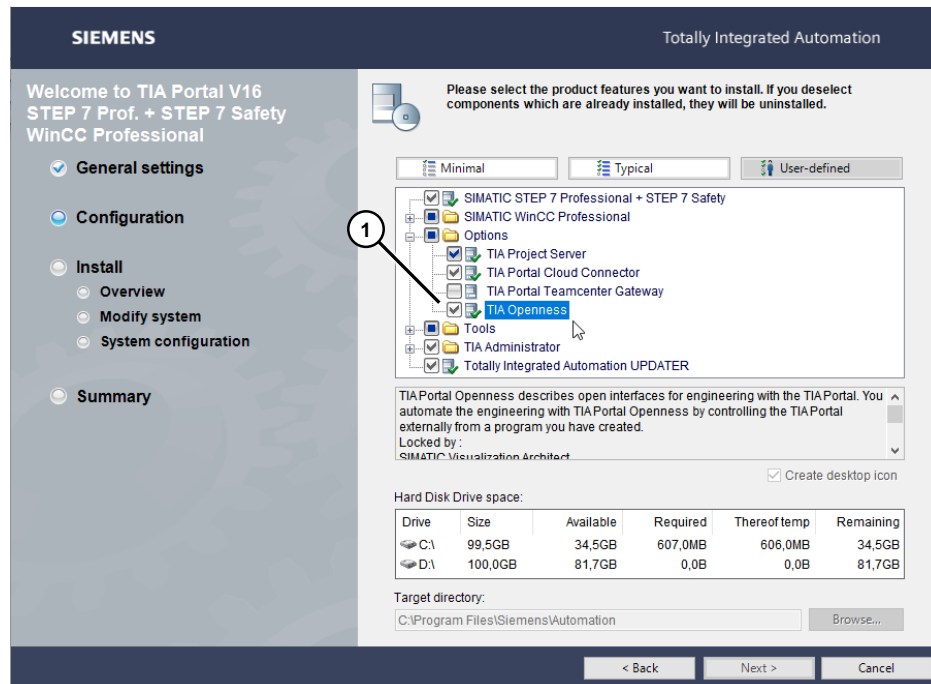
3.2.2 Installation WinCC (TIA Portal) V17 via the Installation Program

For WinCC (TIA Portal) V15 or higher, the "TIA Openness" software is part of the installation program.

In the STEP 7/WinCC installation program, go to the "Options" folder and check the "TIA Openness" check box (1).
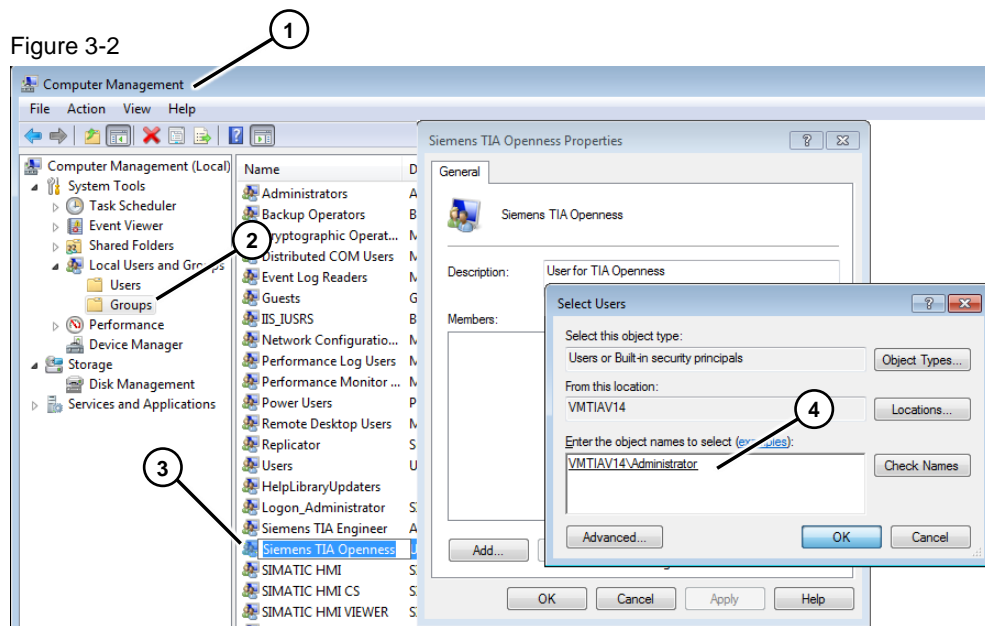If necessary, open the installation program again.

Figure 3-1

3.2.3 Assigning the Current User to the "Openness" Group

- On the configuration PC, open "Computer Management" (1).
  "Windows Start menu > Control Panel > Administrative Tools > Computer Management".
- Select the "System Tools" task card and navigate to the "Groups" folder ("Local Users and Groups > Groups") (2).
- Assign the logged-in user to the "Siemens TIA Openness" group.
  - Open the group properties for "Siemens TIA Openness" (3).
  - In the open window, add the currently logged-in user/all persons who have a "user account" on this PC and will potentially use the tool (4).
  - Click the "OK" button to confirm your entries.

Figure 3-2

3.3 Downloading the TIA Export Graphics Tool

Download the "TIA Export Graphics Tool" from Online Support. You can find the tool under the Entry ID: 109562021 "Export Graphics Tool".
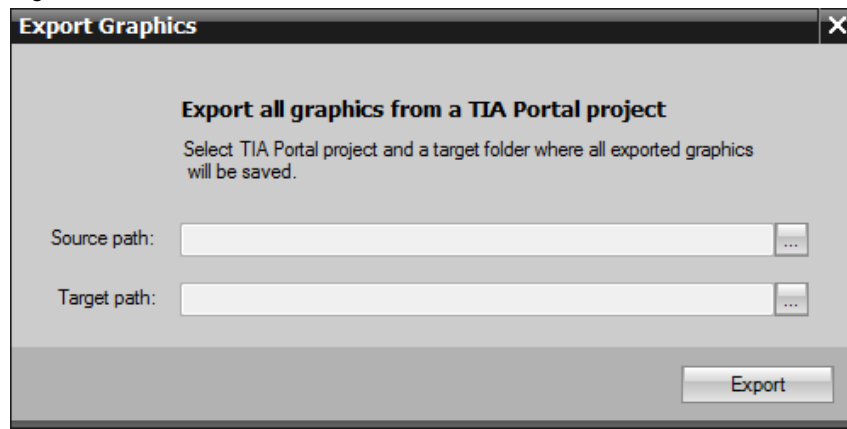
3.4 Exporting Graphics

Note   It is assumed that the settings described in Chapter 3.1 "Requirements" have been applied.

Starting the tool

1. Close WinCC (TIA Portal).
2. Unpack the zipped file "109562021_TIA_Export_Graphics_Tool_V17" into a local directory.
3. Double-click the file name "TIA Portal Export Graphics.exe" to start the tool.
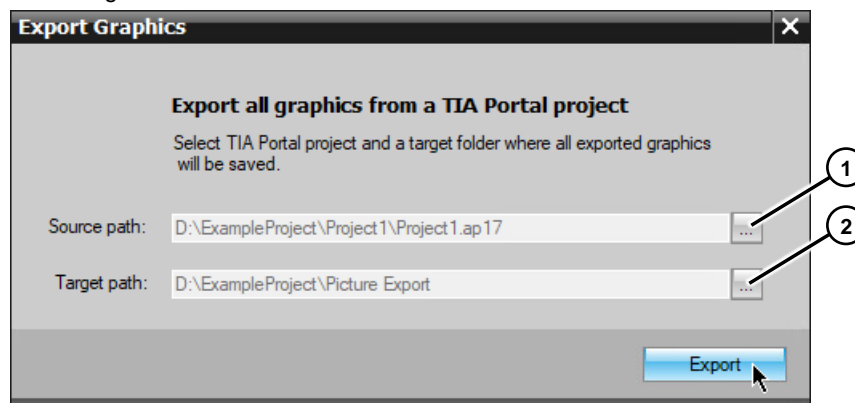   The tool's user interface appears.

Figure 3-3

Selecting the project and target folder

1. Select the file path of the WinCC (TIA Portal) project from which the graphics will be exported (1).
2. Specify the file path where the exported graphics will be saved (2).
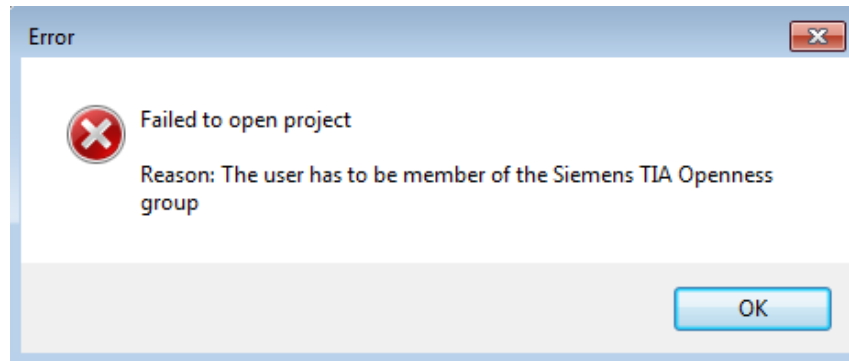3. Select the "Export" button.

Abbildung 3-4

Possible error messages

If the below error message appears, the "user" currently logged in to the configuration PC is not assigned to the "Siemens TIA Openness" group.
Check the settings you have made in "Computer administration" (see chapter 3.2.3 "Assigning the Current User to the "Openness" Group").
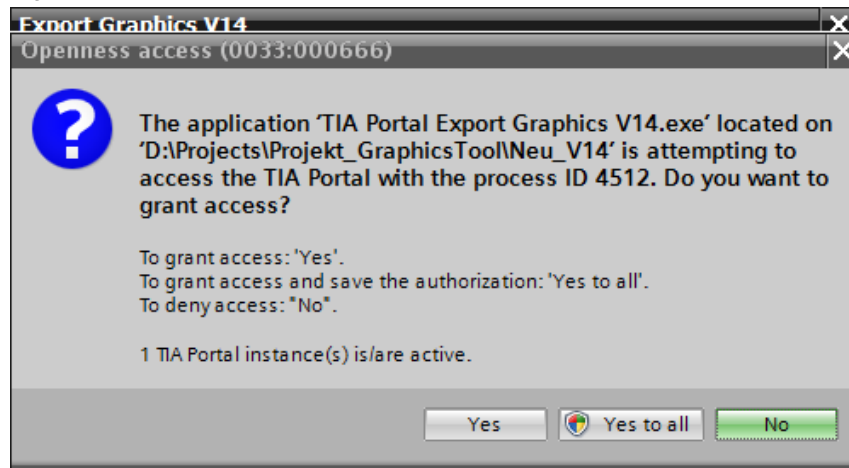
Figure 3-5

Security warning (using the example of WinCC V14)

The following security query appears while running the tool. The message is used to prevent unauthorized access to the project data.

Confirm this message accordingly.

Figure 3-6

Once all images have been downloaded from the configuration, the start screen with the user interface appears again.
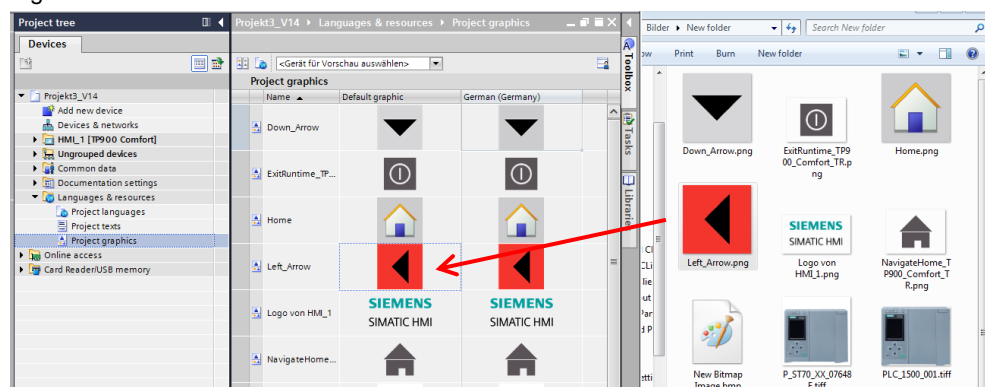
When editing the graphics, make sure to retain the file name and the file type so that the existing graphics in WinCC (TIA Portal) can be replaced with the edited graphics.

3.5 Adding Edited Graphics to the Project

Importing single graphics into WinCC (TIA Portal)

1. Open the WinCC (TIA Portal) configuration.

2. In the project navigation, open "Project Graphics" ("Language & resources > Project graphics").

3. Open the Windows Explorer folder that contains the exported and edited graphics.

4. Using drag & drop, drag the graphic to be replaced onto the "old/existing" graphic in the Project Graphics.

Figure 3-7

Importing all graphics into WinCC (TIA Portal)

To update all graphics at once, proceed as follows:

1. Save your project.

2. Open the WinCC project and navigate in the project directory to the Project Graphics ("Language & resources > Project graphics").

3. In the "Project Graphics" folder, select all of the graphics and delete them.

4. Open the Windows Explorer folder that contains the exported and edited graphics.

5. Select all of the graphics and use drag & drop to move them to the "empty" Project Graphics folder.

4 Appendix

4.1 Service and support

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support.industry.siemens.com/cs/ww/en/sc/2067

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4.3 Links and literature

Table 4-1

	Subject
\1\	Siemens Industry Online Support https://support.industry.siemens.com
\2\	TIA Export Graphics Tool https://support.industry.siemens.com/cs/ww/en/view/109562021
\3\	SIMATIC WinCC V17 (SIMATIC TIA Openness V17) delivery release https://support.industry.siemens.com/cs/ww/en/view/109795525

4.4 Change documentation

Table 4-2

Version	Date	Change
V1.0	02/2015	First edition
V2.0	03/2017	Updated to WinCC V14
V2.0	05/2017	Updated to WinCC V14 SP1
V3.0	03/2019	Updated to WinCC V15/V15.1
V4.0	03/2020	Updated to WinCC V16
V5.0	07/2022	Updated to WinCC V17