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Getting Started•02/2017

Quick Start for Configuring an HMI Faceplate

SIMATIC Comfort Panels, Runtime Advanced and WinCC (TIA Portal)

<https://support.industry.siemens.com/cs/ww/en/68014632>

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1 Creating a Faceplate

1.1 Introduction

Faceplates can be used for creating and changing elements centrally. Easy connection of process values is also possible.

Using a simple example, the configuration of a faceplate in connection with a PLC data type is explained.

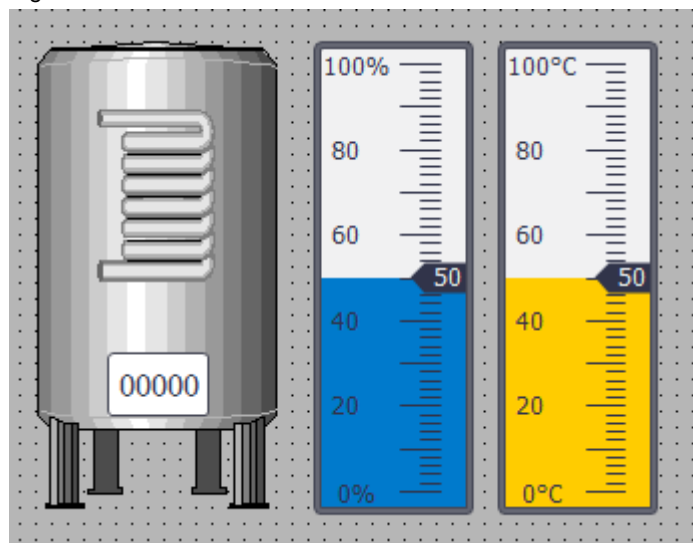
1.2 Task Description

For several identical tank containers, the following process values shall be output in a standardized picture.

- Current filling level
- Percentage of filling level
- Temperature of the liquid

Displayed picture in which the process values are output.

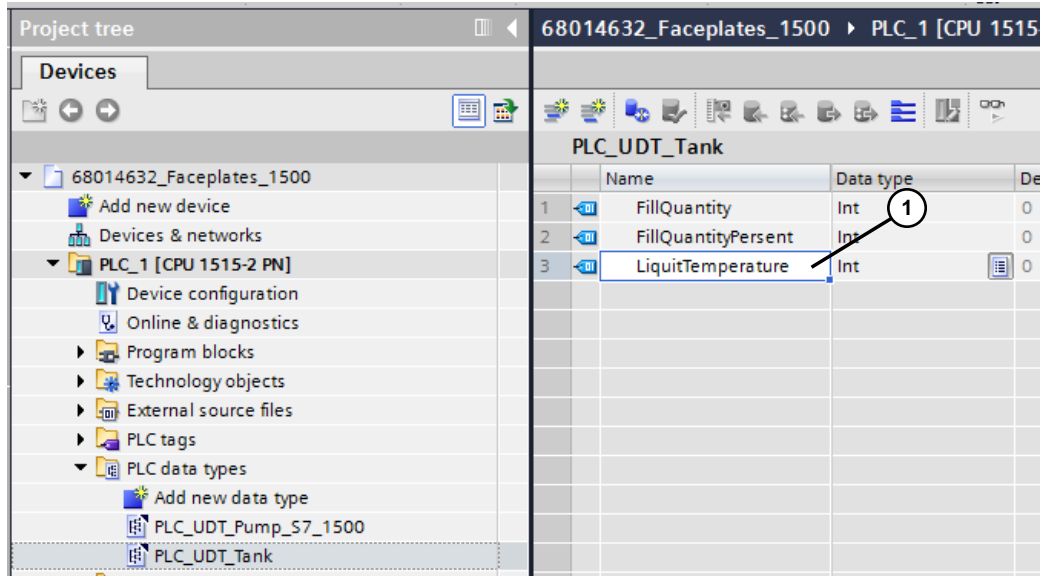
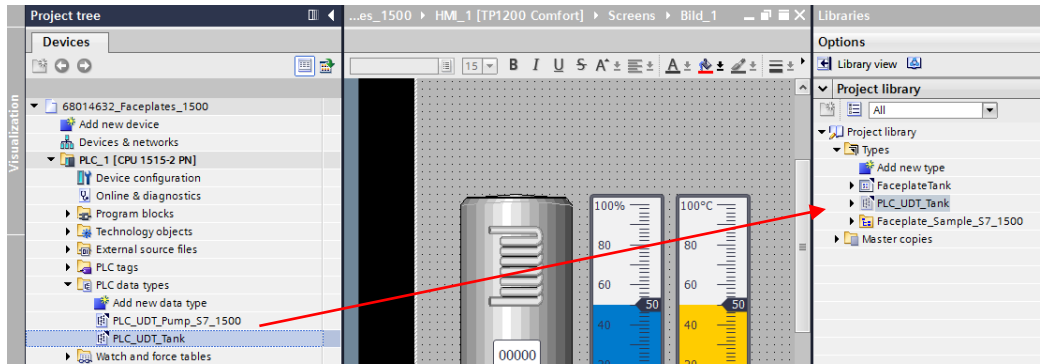
Figure 1-1



1.3 PLC configuration

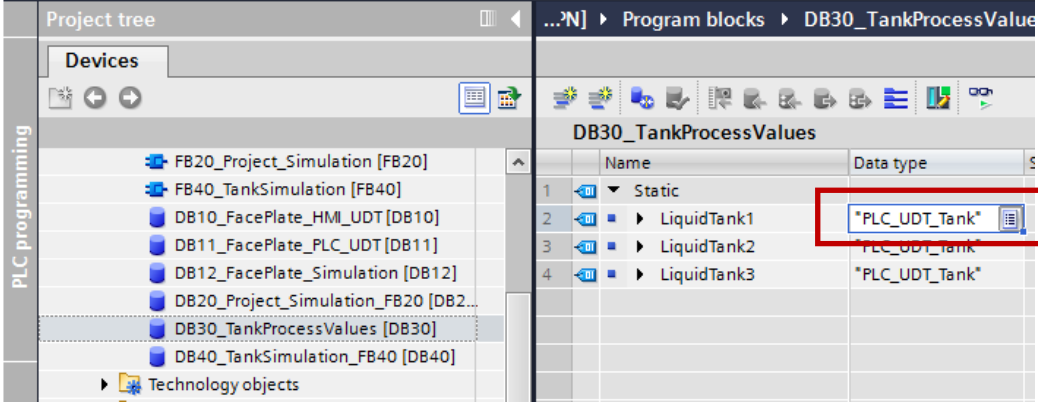
PLC program part

Table 1-1

No.	Action
1.	<p>Creating PLC data types</p> <p>Create a PLC data type and add all process-relevant tags there (1). Later, the PLC data type supplies the faceplate with process values from the controller.</p> 
2.	<p>Add PLC data type into the library</p> <p>To be able to use the PLC data type in the faceplate, drag the created PLC data type into the project library using drag&drop.</p> 

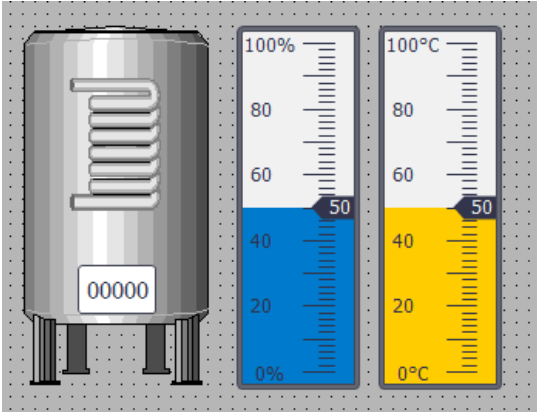
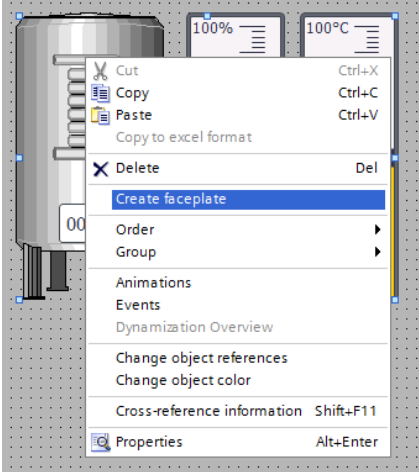
1 Creating a Faceplate

1.3 PLC configuration

No.	Action
3.	<p>Assigning PLC data types to a data block tag</p> <ul style="list-style-type: none">• Open the data block used for transferring the process values to the operator panel.• Create a tag and select the created “PLC data type” as the data type.  <p>Further settings regarding the “faceplate” are not required in the PLC program.</p>

1.4 HMI configuration

Table 1-2

No.	Action
1.	<p>Creating faceplates</p> <ul style="list-style-type: none"> Open a picture in which you compile all objects to be contained in the faceplate (I/O fields, symbols etc.).  <ul style="list-style-type: none"> Mark all objects. Right-click on the marked objects. Select "Create faceplate type" from the context menu:  <p>The faceplate editor opens. The further configuration of the faceplate is performed in the editor.</p>

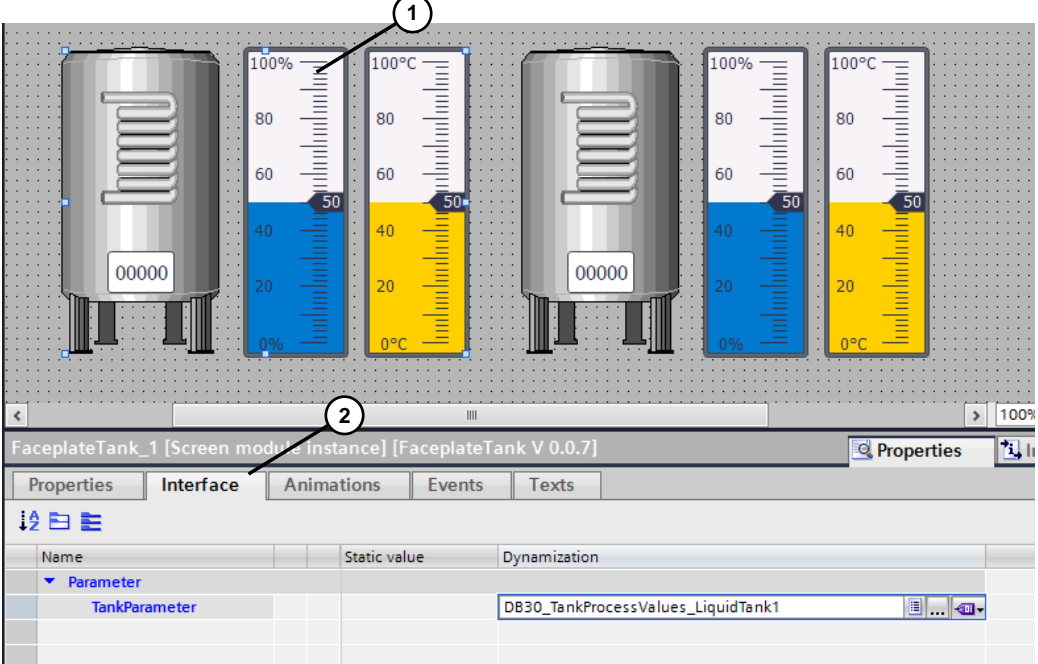
1 Creating a Faceplate

1.4 HMI configuration

No.	Action
2.	<p>Configuring the faceplate</p> <p>Add another property to the selected category (1). The name can be selected by the user (2). In parameter "Type" you select the stored "PLC data type" (3).</p> <p>Selecting the PLC data type automatically displays the three stored tags. These tags are now assigned to the individual objects.</p>
3.	<p>Assigning properties to the faceplate</p> <ul style="list-style-type: none"> Link the properties of the individual objects to the parameters of the "PLC data type" using "drag&drop". Then close the faceplate and release it.

1 Creating a Faceplate

1.4 HMI configuration

No.	Action
4.	<p data-bbox="336 309 799 338">Assigning tags to the faceplate interface</p> <p data-bbox="336 376 1342 427">The data exchange between the controller and the objects stored in the faceplate is performed via the interface.</p> <ul data-bbox="336 465 1358 613" style="list-style-type: none"><li data-bbox="336 465 1358 524">• Drag the completed faceplate from the library into the plant picture and open the properties of the faceplate (1).<li data-bbox="336 533 1358 613">• A parameter is now displayed in the “Interfaces” tab (2). As the tag for this parameter you select the data block address intended for data exchange between controller and operator panel (see Link). <p data-bbox="336 651 1031 680">This completes the generation and configuration of the faceplate.</p> <p data-bbox="336 719 1350 770">In this example, the faceplate was entered a second time into the plant picture of the faceplate. The only necessary modification was a new tag that had to be assigned to the interface.</p>  <p>The screenshot shows two identical faceplate instances on a grey dotted background. Each instance consists of a cylindrical tank with a heating coil and a label '00000'. To the right of each tank are two vertical gauges: a blue one on the left and a yellow one on the right. Both gauges have a scale from 0 to 100 and a needle pointing to 50. A circled '1' points to the top-right gauge of the first instance. Below the faceplates is a software interface window titled 'FaceplateTank_1 [Screen module instance] [FaceplateTank V 0.0.7]'. The 'Interface' tab is selected, showing a table with columns 'Name', 'Static value', and 'Dynamization'. A parameter named 'TankParameter' is listed, with its 'Dynamization' field set to 'DB30_TankProcessValues_LiquidTank1'. A circled '2' points to the 'Interface' tab.</p>

2 Further documents on this application example

Basics - Documentation and application example

Continuing information is available on the entry page of this application example entry-ID: [68014632](#). \2\

In detail:

- A detailed description of the parameters and functions of a faceplate. Document "68014632_Faceplates_Basics.pdf".
- Further configuration examples. Document "68014632_Faceplates_EngineeringExamples.pdf".

3 Links & Literature

Table 3-1

	Topic	Title
\1\	Siemens Industry Online Support	https://support.industry.siemens.com
\2\	Download page of the entry	https://support.industry.siemens.com/cs/ww/en/68014632
\3\	FAQ	What are the functional differences between the different SIMATIC panels? https://support.industry.siemens.com/cs/ww/en/view/40227286
\4\	FAQ	How can you create faceplates in WinCC (TIA Portal) with user authorizations? https://support.industry.siemens.com/cs/ww/en/view/57434982
\5\	Application	Application: Sample blocks for STEP 7 and WinCC flexible https://support.industry.siemens.com/cs/ww/en/view/36435784
\6\	Application	Faceplates for the Visualization of Sentron PAC Power Meters. https://support.industry.siemens.com/cs/ww/en/view/67318600

4 History

Table 4-1

Version	Date	Modifications
V2.0	06/2015	First publication