

# Visualization with the software „VisuStage“

## Conversion of third-party visualisations / Extract from manual 01/2024

TIA WinCC visualisations can to a large extent be automatically converted into VisuStage format. This saves the manual import of variables, the creation and linking of pages (menus) and the creation and linking of static and dynamic objects.

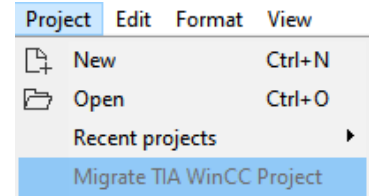
Only list objects such as recipe and trend management and the fault message system must then be added manually, as these cannot be converted.

### Requirements

- 1) This function is integrated from VisuStage version 2.1.0.36.
- 2) However, on the same computer as the VisuStage, the Siemens software tools
  - TIA Portal 14-19.1 (from VisuStage version 2.2.3.0)
  - TIA Openness \*

must be installed on the same computer as VisuStage in order for the conversion function to be activated (not greyed out).

- 3) VisuStage and Openness (TIA-Portal) must be executed from the same user with the same rights.



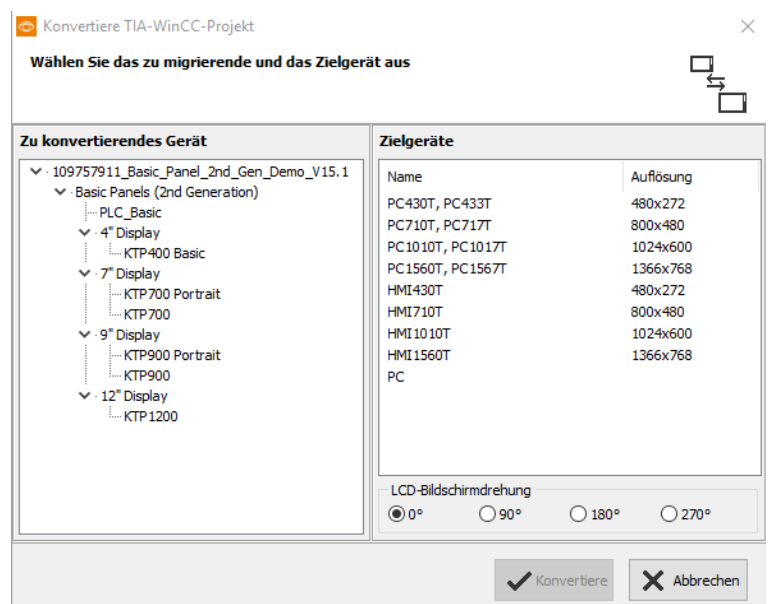
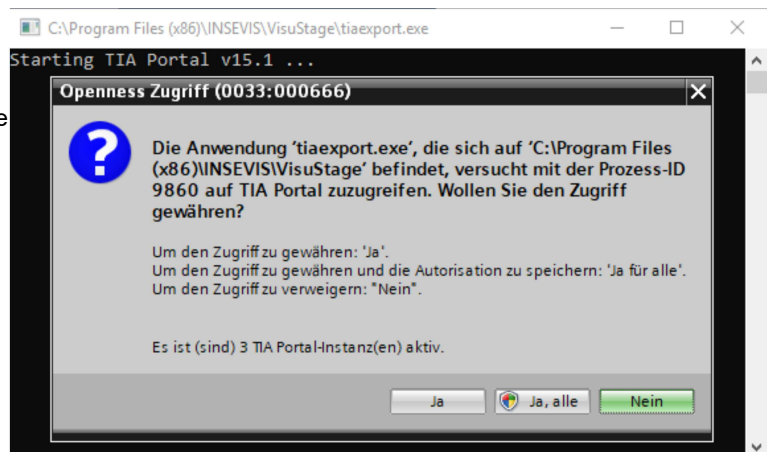
#### Hint for the correct settings when using the Openness software:

The Windows user must be a member of the "Siemens TIA Openness" group.  
Depending on the Windows operating system, please set this assignment as administrator!

See here for more: <https://support.industry.siemens.com/cs/mdm/109773802?c=101778035467&lc=en-DE>

### Procedure

- A project browser opens under Project → Convert TIA-WinCC Project.
- Open the TIA project with the visualisation to be converted.
- The file "tiaexport.exe" integrated in the VisuStage is opened and automatically started in a DOS window.  
(The DOS window may be hidden, but can be seen in the task bar).
- This program starts the TIA Portal.
- The Openness Firewall recognises the access, which must be granted with "Yes, all"
- A new screen opens for selecting the source and target devices.
- (Make sure that the resolutions of both devices are identical so that the entire visualisation is visible).
- Start the conversion by pressing "Convert".
- The progress of the conversion is displayed in the DOS window.
- (Depending on the size of the visualisation, the conversion may take some time).



# Visualization with the software „VisuStage“

Cross reference list: The following TIA WinCC objects are converted into VisuStage screen objects

TIA WinCC „Basic objects“	VisuStage „Static objects“
Line	Line
Rectangle	Rectangle
Ellipse	Ellipse
Circle	Ellipse
Text field	Text
Graphic view	Image

TIA WinCC „Elements“	VisuStage „Dynamic objects“ / „Viewers“
I/O field	I/O field
Button (Mode=“Text“ and Label=“Text“)	Button
Button (Mode=“Text“ and Label=“Text list“)	Text button
Button (Mode=“Graphic“ and Graphic=“Graphic“)	Button
Button (Mode=“Graphic“ and Graphic=“Graphic list“)	Dynamic button
Button (Mode=“Graphics and text“)	Button
Button (Mode=“Invisible“)	Touch area
Symbolic I/O field	Text list
Graphic I/O field (Mode=“Two states“)	State area
Graphic I/O field (except „Two states“ Mode)	Image list
Date/time field	Time/Date field
Bar	Progress bar
Switch (Mode=“Switch“)	Text list
Switch (Mode=“Switch with text“)	Text list
Switch (Mode=“Switch with graphic“)	State area
Slider	Slider
Gauge	Gauge

The following TIA WinCC objects are not supported during conversion.

Either they must be created manually in the VisuStage project or they are not available due to the system.

- „Polyline“ ..... replace by multiple „Linies“
- „Polygon“ ..... replace by „Images“
- „Symbol library“ ..... replace by „Image list“ with single state images
- „Clock“ ..... replace by a digital display at „Date/Time field“
- „Alarm view“ ..... replace by „Message viewer“
- „Trend view“ ..... replace by „Trend viewer“
- „User view“ ..... replace by „Text list viewer“ with the user names
- „Watch table“ ..... this function is currently not available
- „SmartClient view“ ..... this function is currently not available
- „Recipe view“ ..... replace by „Recipe viewer“
- „f(x) trend view“ ..... replace by „Function graph“
- „System diagnostics view“ ..... this function is currently not available
- „Media player“ ..... this function is currently not available
- „GRAPH overview“ ..... this function is currently not available
- „ProDiag overview“ ..... this function is currently not available
- „Criteria analysis view“ ..... this function is currently not available
- „Camera view“ ..... this function is currently not available
- „PDF view“ ..... this function is currently not available

# Visualization with the software „VisuStage“

Following „Event-Press“ and „Event-Release“ functions are converted into VisuStage button functions:

TIA WinCC functions	VisuStage functions
ActivateScreen	Change screen
ActivatePreviousScreen	Change screen
SetLanguage	Select language
SetTag	Assign value to variable
IncreaseTag	Increment variable value
DecreaseTag	Decrement variable value
SetBrightness	Increment brightness
SetBit	Set a bit
SetBitInTag	Set a bit
SetBitWhileKeyPressed	Set a bit
ResetBit	Reset a bit
ResetBitInTag	Reset a bit
InvertBit	Invert a bit
InvertBitInTag	Invert a bit
ClearAlarmBuffer	Clear the alarm buffer
ClearAlarmBufferProTool (class number = 0)	Clear the alarm buffer
ClearAlarmBufferProTool (class number = 1)	Clear the event buffer
Logoff	Log-Out the user
ActivateCleanScreen	Activate Clean screen
ClearLog	Delete the alarm archive

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