

Visualization with the software „VisuStage“

Conversion of third-party visualisations / Extract from manual 01/2021

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.

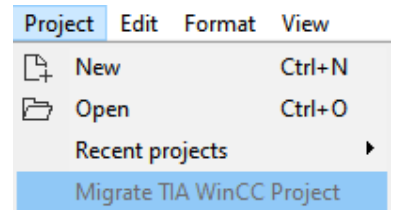
Requirements

This function is integrated from VisuStage version 2.1.0.36.

However, on the same computer as the VisuStage, the Siemens software tools

- TIA Portal 14-16.1 and from VisuStage version 2.1.0.37: TIA V17
- TIA Openness *

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



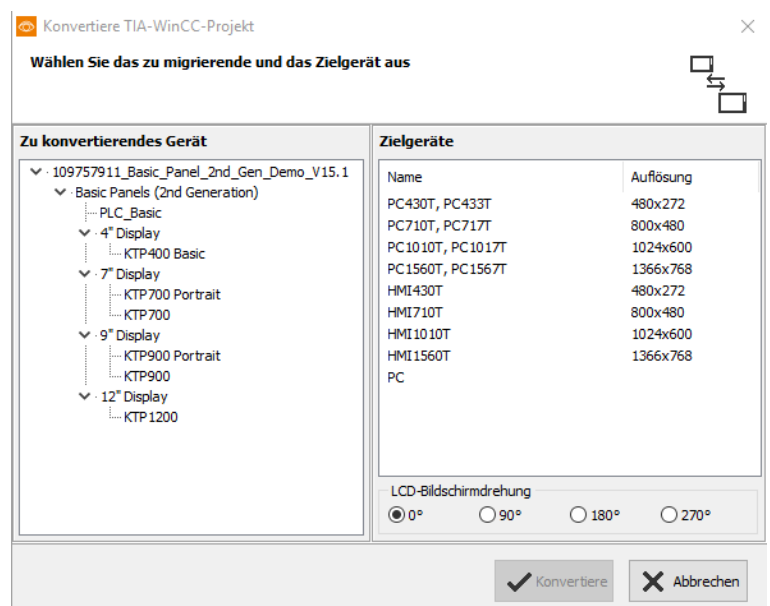
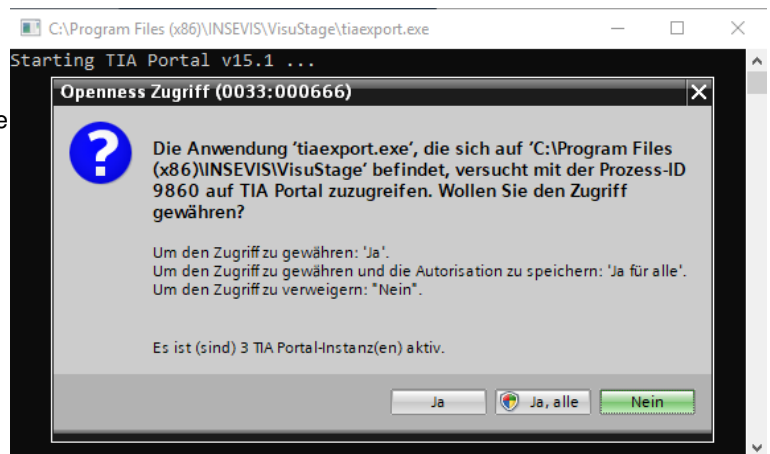
Hint for the correct settings when using the Openness software:

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).



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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

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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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