



Visualisation; Diagnostics

Easy to Configure

Programming IEC 61131-3

Rapid Installation

PASvisu V1.2.0

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SD means Secure Digital

General

This document contains important information, which must be noted. This document also contains details of the changes made in the software tool from one version to the next.

System requirements



INFORMATION

Please note:

To install the PASvisu Builder, PASvisu Server and PASvisu Viewer you need administrator rights on the target device.

PASvisu Builder

| | |
|-----------------------------|--|
| Operating system: | 32 or 64 Bit version of Windows 7 and Windows 8 |
| Processor: | Dual Core (2.4 GHz) or desktop equivalent |
| RAM: | Min. 2 GB |
| Available hard drive space: | Approx. 4 GB |
| Screen resolution: | Min. 1024 x 768 pixels |
| Colour quality: | 32 Bit |
| Text size: | Smaller – 100% (default) |
| Required software tools: | "CodeMeter" software from WIBU SYSTEMS (is installed automatically with PASvisu Builder) |

PASvisu Server for PC

| | |
|-----------------------------|---|
| Operating system: | 32 or 64 Bit version of Windows 7 and Windows 8 |
| Processor: | Dual Core (2.4 GHz) or desktop equivalent |
| RAM: | Min. 2 GB |
| Available hard drive space: | Approx. 4 GB |
| Required software tools: | <ul style="list-style-type: none"> ▶ "CodeMeter" software from WIBU SYSTEMS (is installed automatically with PASvisu Server) ▶ Microsoft .NET Framework Version 4.5.2 |

PASvisu Server for PMI

The following PMIs support the PASvisu Server:

- ▶ PMI v507
- ▶ PMI v512

Important information

Display of visualisation

Pilz supports the display of the PASvisu project on PCs, the PMI v507 and PMI v512. Other end devices are possible, but have not been tested.

PMI: The PASvisu Viewer for PMI can be used as the Visu Client.

PC: The PASvisu Viewer for PC or Google Chrome can be used as the Visu Client. Other HTML 5-compatible web browsers are possible, but have not been tested.

Operation of the PASvisu Server

Pilz supports the operation of the PASvisu Server on PCs, the PMI v507 and PMI v512. The possible system layouts are described in the online help for the PASvisu Builder.

PMI: If the PASvisu Server is on a PMI, then the PSS 4000 OPC Server classic must always be on this PMI. There may be a local Visu Client on this PMI. Remote Visu Clients are not supported.

PC: Simultaneous display of the PASvisu project on 5 Visu Clients is supported. Up to 8 Visu Clients are possible, but simultaneous operation of 8 Visu Clients has not been tested.

Compatibility with PAS4000

Pilz offers a solution for visualisation of PSS 4000 projects. PSS 4000 projects must be built using PAS4000 from Version 1.12.2.

If the PASvisu Server is to be operated on a PMI, then the PSS 4000 project must be built using PAS4000 from Version 1.14.0. That's because the PMI v507 and PMI v512 are only supported in PAS4000 from this version.

If the PSS 4000 project is built using PAS4000 from Version 1.14.0, an OPC Server must be configured in the project so that the namespace element file used by the PASvisu Builder is created during the build process.

Compatibility between PASvisu Builder and PASvisu Server

PASvisu projects can only be run on PASvisu Servers if the version of the PASvisu Server is compatible with the version of the PASvisu Builder.

| | | Version of PASvisu Server | | |
|----------------------------|-------|---------------------------|-------|-------|
| | | 1.0.x | 1.1.x | 1.2.x |
| Version of PASvisu Builder | 1.0.x | ◆ | --- | --- |
| | 1.1.x | --- | ◆ | --- |
| | 1.2.x | --- | --- | ◆ |

Versions marked with a diamond symbol (◆) are compatible.

Migration of PASvisu projects

A project that was created using an older PASvisu Builder version will automatically be migrated when opened using a newer PASvisu Builder version.

Once a project has been opened with a newer PASvisu Builder version it may no longer be opened using older PASvisu Builder versions.

Renaming the controller project after download

Once the PASvisu project has been downloaded to the PASvisu Server it is no longer possible to change the name of the controller project, so that the PASvisu Server can access the data on the OPC Server. If the name of the controller project is changed, the PASvisu project must be synchronised with the controller project and the download must be performed again.

Licensing

Licences are managed in licence containers. They are managed using "CodeMeter" software from WIBU SYSTEMS. This software has been installed together with the PASvisu Builder/PASvisu Server.

PC: If the "CodeMeter" software is installed on a PC, the  icon will be found in the Windows status bar.

Note: When starting the PASvisu Server, if you receive a message that WIBUCM32.dll is missing, then the "CodeMeter" software has been uninstalled and the PASvisu Server can no longer be started. In this case, re-install the PASvisu Server. (2823)

Licence Information

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Known problems

PASvisu Builder

- ▶ PASvisu Builder does not start
If the message "Terminating the PASvisu Builder because an internal error occurred (error code: 10)." is displayed when the PASvisu Builder is started, the WebSocket port 40857 may be occupied. If the message is displayed with error code 11, the HTTP port 40856 may be occupied.
Remedy: Make sure that no other service is occupying the ports or change the ports used by the PASvisu Builder. To do this, open the file "PASvisuBuilder.ini" in the directory "C:\ProgramData\Pilz\PASvisu Builder" and change the values for "websocket_port" and/or "http_port".
(2838)
- ▶ "Slider" tile
The labelling of the start and end value is not displayed correctly if the following formula does not produce an integer:
$$(\text{"End value"} - \text{"Start value"}) / (\text{"Steps per division"} \times \text{"Step size"})$$

Remedy: Change the tile's configuration.
(1879)
- ▶ Importing graphics
When the **Import from library** button is operated, sometimes the last directory to be used is opened rather than the directory containing the graphics library.
Remedy: In Windows 7, for example, the graphics library can be found in the directory "c:\Programs (x86)\Pilz\PASvisu x.x.x\library"
(2750)
- ▶ Multiple selection of variables in the Variable Editor
If the Shift key is used in the Variable Editor to select multiple variables, the required variables are not always selected.
Remedy: Press the Ctrl key and then click on the required variables one by one.
(2501)
- ▶ Display format
In the Page Editor, the display format of the time and date plus the decimal values (decimal point or comma) depends on the tool language, although it should depend on the selected project language.
Note: In the PASvisu Viewer, the display format depends on the selected project language.
(2994)

PASvisu Server

- ▶ Websocket port
If the websocket port that is configured for the PASvisu Server is already in use by another service, the PASvisu Server does not work, but no error message is issued.
(683)

Visu Clients

▶ General

- Displaying process data
If the controller project is changed, the Visu Client must be restarted to enable all process data to be displayed correctly on the tiles.
(2639)
 - PAS4000 Version 1.12.2
At runtime, it is not possible to access variables from a Multi program in the PAS-visu project if some blocks in the Multi program are assigned to an FS resource and some blocks are assigned to an ST resource. The same applies to variables from component blocks.
This is an error in PAS4000, which means that the OPC Server fails to provide the data correctly.
Remedy: Use PAS4000 Version \geq 1.13.0.
(2502)
 - "Slide control" and "Linear/radial gauge" tiles
If the tile is configured so that the scale is calculated automatically, then the division displayed in the PASvisu Viewer for PC will be different to that displayed in the PASvisu Viewer for PMI.
(2989)
 - "Slide control" tile
Operation of the slide control in the PASvisu Viewer for PC is different to that of the PASvisu Viewer for PMI. On a PMI, the slide control must always be dragged in order to adjust it. It is not possible to adjust it simply by clicking on the scale.
(2996)
 - Entering values
If a Visu variable is configured for a tile's data item and this Visu variable is not assigned a namespace element, then no values can be entered in the tile.
Example: A decimal value tile is configured for data entry and uses a Visu variable without an assigned namespace element as the data item. Another decimal value tile is configured for the data output and uses the same Visu variable. If a value is now entered in the first tile in the Visu Client, it will not be displayed on the second tile.
(571)
- ### ▶ PASvisu Viewer for PMI
- No alphanumeric keyboard
The PASvisu Viewer for PMI provides a keyboard for entering numbers, but no alphanumeric keyboard.
(2998)
 - "PSS 4000 device status" and "PSS 4000 device project" tiles
If the tiles in the PASvisu Builder are scaled so that they are very small, it is possible that they will not be displayed correctly in the PASvisu Viewer for PMI.
(2999)

- ▶ PASvisu Viewer for PC
 - "Button" tile, "pushbutton" type
The pushbutton does not work on all touchscreens.
Remedy: Make sure that the current driver for the touchscreen is installed.
If this does not help, you can use a set button and reset button instead of the pushbutton.
(1563)
 - "Trend line graph" tile
If the connection between the Visu Client and PASvisu Server is interrupted, the tile is marked with a red border. This border is not removed when the connection is available.
Remedy: Switch to another page and then back again.
(2560)
 - "Decimal value" tile
If the tile is used for data entry and decimal figures are configured, although the data item is of INTEGER data type, then the value displayed may differ from the actual value in the control system.
Example: "4.5" is entered and displayed on the tile, although the value on the control system is "4".
(2995)
- ▶ HTML 5-compatible web browser
 - Google Chrome: Behaviour of touchscreens
The behaviour of the PASvisu project on touchscreens is improved if the following setting is made in Google Chrome:
Enter "Chrome://flags" in the field for the URL address and deactivate the property "Disable touch adjustment".
(2614)

Changes in Version 1.2.0

This version is available in the following languages:

- ▶ German
- ▶ English

New features

- ▶ Visualisation on PMIs
PASvisu projects can now be displayed on the following PMIs, plus it is possible to install the PASvisu Server:
 - PMI v507
 - PMI v512The possible system layouts are described in the online help for the PASvisu Builder.
- ▶ Licensing of the runtime environment
If the PC on which the PASvisu Builder is installed has an Internet connection and the PC is also connected to the device on which the PASvisu Server is installed, then the runtime environment can now be licensed using the PASvisu Builder.

Optimisations

- ▶ "Increment/decrement" tile
If the endless loop option is selected, then incrementing will continue with the start value once the end value is reached.
Example: 0 -> 5 -> 10 -> 15 -> **20 -> 0** -> 5 -> 10...

Changes in Version 1.1.0

This version is available in the following languages:

- ▶ German
- ▶ English

New features

- ▶ Project languages
Project languages can be used to create a project in several languages.
- ▶ New tiles
 - Administration
The administration tile can be used in the online project to open a dialogue box, in which the users' passwords can be changed. The system time of the Visu Host device can also be changed.
 - NUMBER button
Tile for entering a value of the NUMBER data type
 - Switch language
Tile for switching between project languages
- ▶ System variables
System variables provide system information and/or enable intervention into the system behaviour. The following system variables have been introduced:
 - ActivePage
The system variable contains the page identifier of the last page requested by the PASvisu Server.
 - SetPage
When a page identifier is written in the system variable, the corresponding page is opened on all Visu Clients.
- ▶ User may change his own password online
Depending on the configuration, the user is permitted to change his own password in the online project. This happens on the login/logout tile.
- ▶ Pop-up windows in the PASvisu Viewer
Pop-up windows containing messages can now be moved.
- ▶ Tile: Decimal value
A variable can also now be used at runtime to determine whether the tile is to be used only to output values or also to enter values.

Optimisations

- ▶ Default ports on the PASvisu Server
The default HTTP port on the PASvisu Server has been changed from "8081" to "40856".
The default WebSocket port on the PASvisu Server has been changed from "45454" to "40857".

- ▶ "Date and time" tile
The warning "The "Data item" tile property must be configured" was issued even if the time of the Visu Client was to be displayed on the tile. This fault has now been rectified.
(2392)
- ▶ Grey window
With certain actions (e.g. when saving the project under a different name, when opening a project or when creating a new project), a grey window could be displayed. This fault has now been rectified.
(2285)
- ▶ "PSS 4000 device project" tile
The check sum "FS project" is now also displayed on the tile. This is the check sum "FS project" for the online project.
(2913)

► Support

Technical support is available from Pilz round the clock.

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