

HMI Widget Library SVG/SVGHMI

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Description

The widget library for WinCC Unified stands apart from the standard Siemens set and complements it favourably. Motors, vessels, sensors, pumps and much more are included. The library comes in 4 file formats and a composed Dynamic SVG Library for TIA Portal WinCC Unified. These formats are JPG, PNG, SVG, SVGHMI. Thus these pictures can be used in not only in WinCC Unified. But also other SKADA and HMI applications.

Limitations

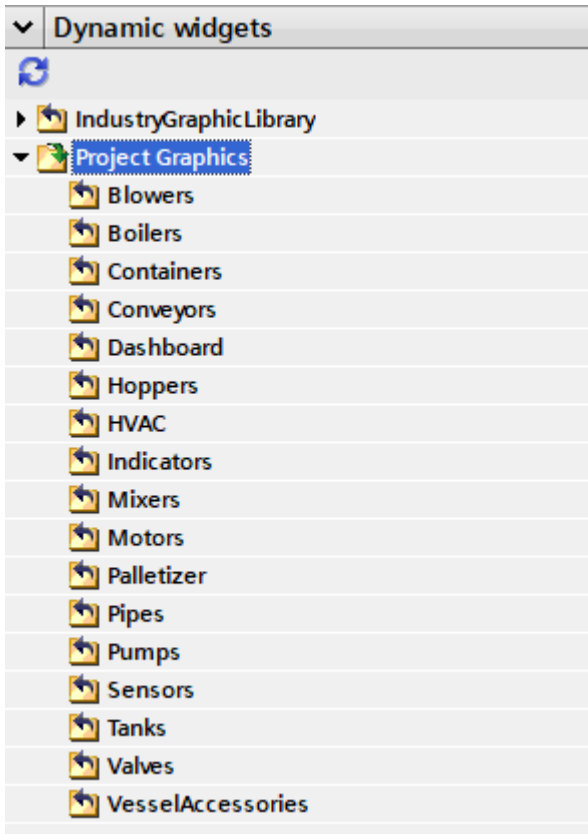
Full functionality is supported in WinCC Unified PC RT (V18, V19 tested). Since animation and hover effect are not officially supported by Siemens. These options work only in WinCC Unified PC RT. On panels Basic and Comfort does not work. Accordingly, widgets that use animation such as 'Blowers' or Hover Effect such as 'HoverZone'. Also blurring with svg element is not rendered on panels.

Usage

There are two ways to get widgets in your project:

SVGHMI files itself

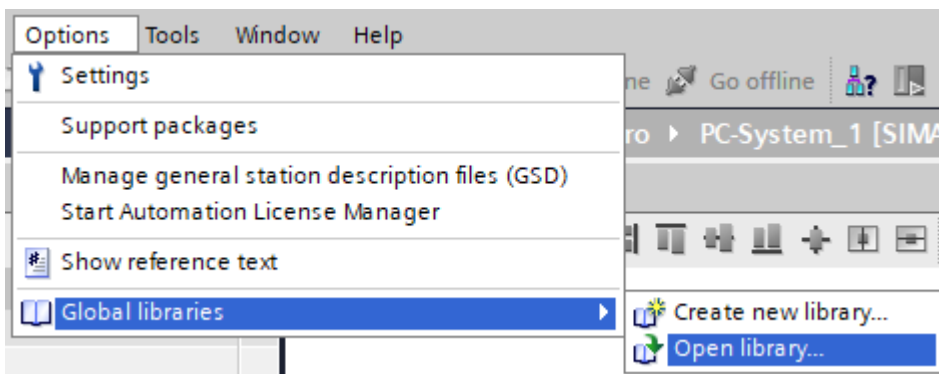
1. Copy the contents of the SVGHMI folder into your project folder along the following path:
`YOUR_PROJECT_FOLDER\UserFiles\SvgControls` if folder `SvgControls` does not exist, then create it
2. Open your TIA Portal project
3. Open any "Screen"
4. Push the button `Refreshes the outdated dynamic graphics` in Dynamic widgets section
5. You will see the new widgets



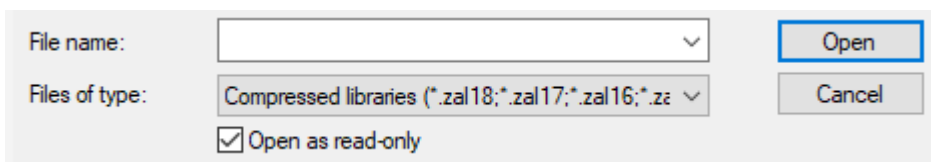
Global Library

1. Unpack Library file "SVGHMI.pro_WidgetLibrary.zalxx" into your workspace folder.

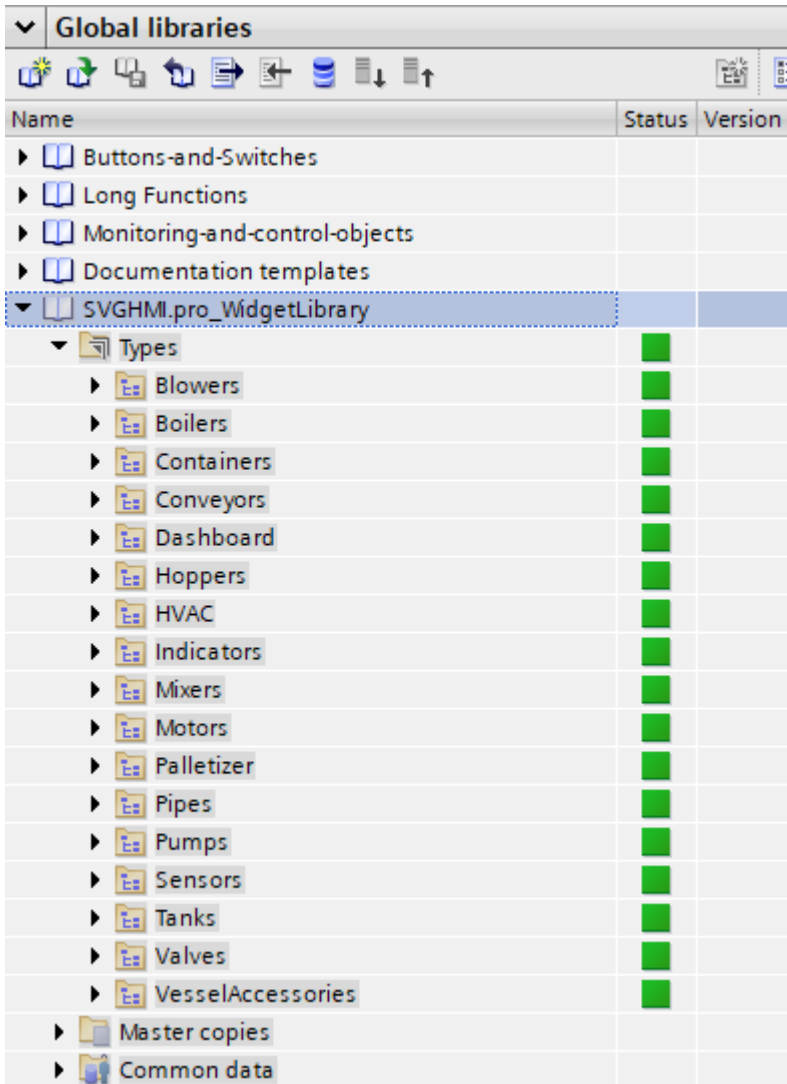
Go to "Options->Global libraries->Open library"



2. Select "Compressed libraries"



4. Unpack library in your workspace folder
5. Now you can see the SVGHMI.pro library in TIA Portal Global Library tab



Animation/Hover effect

To see the animation and hover effect in action, you need to enable the desired Property (Run usually for animation) and load your project into Runtime. Only in Runtime will the animation and hover effect work

Usage in Faceplates

Starting with TIA Portal version V18 it is now possible to use SVGHMI Dynamic Widgets in Faceplates, but the 'Dynamic SVG' library element must be created beforehand to do so. Due to the fact that the package contains a "Global Library" in which all widgets are organised, you can use them in your Faceplates without any problems.

Folder structure

Here's a folder structure for a widget library folder:

```

svghmi-widget-library/
|- JPG/                # Images with white backgrounds
  |- 64px/            # Width 64 pixels
    |- Blowers/       # Blower images (grey, green, red, yellow)
    |- Boilers/       # Boiler images (grey, green, red, yellow)
    |- Containers/    # Container images (grey, green, red, yellow)

```

```

|- Conveyors/      # Conveyor images (grey, green, red, yellow)
|- Hoppers/       # Hopper images (grey, green, red, yellow)
|- HVAC/         # HVAC images (grey, green, red, yellow)
|- Indicators/   # Indicator images (grey, green, red, yellow)
|- Mixers/       # Mixer images (grey, green, red, yellow)
|- Motors/      # Motor images (grey, green, red, yellow)
|- Palletizer/   # Palletizer images (grey, green, red, yellow)
|- Pipes/       # Pipe images (grey, green, red, yellow)
|- Pumps/       # Pump images (grey, green, red, yellow)
|- Sensors/     # Sensor images (grey, green, red, yellow)
|- Tanks/      # Tank images (grey, green, red, yellow)
|- Valves/     # Valve images (grey, green, red, yellow)
|- VesselAccessories/ # Vessel accessories images (grey, green, red, yellow)
|- 128px/      # Width 128 pixels
|- Blowers/    # Blower images (grey, green, red, yellow)
|- Boilers/    # Boiler images (grey, green, red, yellow)
|- Containers/ # Container images (grey, green, red, yellow)
|- Conveyors/  # Conveyor images (grey, green, red, yellow)
|- Hoppers/    # Hopper images (grey, green, red, yellow)
|- HVAC/      # HVAC images (grey, green, red, yellow)
|- Indicators/ # Indicator images (grey, green, red, yellow)
|- Mixers/    # Mixer images (grey, green, red, yellow)
|- Motors/    # Motor images (grey, green, red, yellow)
|- Palletizer/ # Palletizer images (grey, green, red, yellow)
|- Pipes/    # Pipe images (grey, green, red, yellow)
|- Pumps/    # Pump images (grey, green, red, yellow)
|- Sensors/  # Sensor images (grey, green, red, yellow)
|- Tanks/    # Tank images (grey, green, red, yellow)
|- Valves/   # Valve images (grey, green, red, yellow)
|- VesselAccessories/ # Vessel accessories images (grey, green, red, yellow)
|- 256px/    # Width 256 pixels
|- Blowers/  # Blower images (grey, green, red, yellow)
|- Boilers/  # Boiler images (grey, green, red, yellow)
|- Containers/ # Container images (grey, green, red, yellow)
|- Conveyors/ # Conveyor images (grey, green, red, yellow)
|- Hoppers/  # Hopper images (grey, green, red, yellow)
|- HVAC/    # HVAC images (grey, green, red, yellow)
|- Indicators/ # Indicator images (grey, green, red, yellow)
|- Mixers/  # Mixer images (grey, green, red, yellow)
|- Motors/  # Motor images (grey, green, red, yellow)
|- Palletizer/ # Palletizer images (grey, green, red, yellow)
|- Pipes/   # Pipe images (grey, green, red, yellow)
|- Pumps/   # Pump images (grey, green, red, yellow)
|- Sensors/ # Sensor images (grey, green, red, yellow)
|- Tanks/   # Tank images (grey, green, red, yellow)
|- Valves/  # Valve images (grey, green, red, yellow)
|- VesselAccessories/ # Vessel accessories images (grey, green, red, yellow)
|- PNG/     # Images with transparent backgrounds
|- 64px/    # Width 64 pixels
|- Blowers/ # Blower images (grey, green, red, yellow)
|- Boilers/ # Boiler images (grey, green, red, yellow)
|- Containers/ # Container images (grey, green, red, yellow)
|- Conveyors/ # Conveyor images (grey, green, red, yellow)
|- Hoppers/  # Hopper images (grey, green, red, yellow)

```

```

|- HVAC/ # HVAC images (grey, green, red, yellow)
|- Indicators/ # Indicator images (grey, green, red, yellow)
|- Mixers/ # Mixer images (grey, green, red, yellow)
|- Motors/ # Motor images (grey, green, red, yellow)
|- Palletizer/ # Palletizer images (grey, green, red, yellow)
|- Pipes/ # Pipe images (grey, green, red, yellow)
|- Pumps/ # Pump images (grey, green, red, yellow)
|- Sensors/ # Sensor images (grey, green, red, yellow)
|- Tanks/ # Tank images (grey, green, red, yellow)
|- Valves/ # Valve images (grey, green, red, yellow)
|- VesselAccessories/ # Vessel accessories images (grey, green, red, yellow)
|- 128px/ # Width 128 pixels
|- Blowers/ # Blower images (grey, green, red, yellow)
|- Boilers/ # Boiler images (grey, green, red, yellow)
|- Containers/ # Container images (grey, green, red, yellow)
|- Conveyors/ # Conveyor images (grey, green, red, yellow)
|- Hoppers/ # Hopper images (grey, green, red, yellow)
|- HVAC/ # HVAC images (grey, green, red, yellow)
|- Indicators/ # Indicator images (grey, green, red, yellow)
|- Mixers/ # Mixer images (grey, green, red, yellow)
|- Motors/ # Motor images (grey, green, red, yellow)
|- Palletizer/ # Palletizer images (grey, green, red, yellow)
|- Pipes/ # Pipe images (grey, green, red, yellow)
|- Pumps/ # Pump images (grey, green, red, yellow)
|- Sensors/ # Sensor images (grey, green, red, yellow)
|- Tanks/ # Tank images (grey, green, red, yellow)
|- Valves/ # Valve images (grey, green, red, yellow)
|- VesselAccessories/ # Vessel accessories images (grey, green, red, yellow)
|- 256px/ # Width 256 pixels
|- Blowers/ # Blower images (grey, green, red, yellow)
|- Boilers/ # Boiler images (grey, green, red, yellow)
|- Containers/ # Container images (grey, green, red, yellow)
|- Conveyors/ # Conveyor images (grey, green, red, yellow)
|- Hoppers/ # Hopper images (grey, green, red, yellow)
|- HVAC/ # HVAC images (grey, green, red, yellow)
|- Indicators/ # Indicator images (grey, green, red, yellow)
|- Mixers/ # Mixer images (grey, green, red, yellow)
|- Motors/ # Motor images (grey, green, red, yellow)
|- Palletizer/ # Palletizer images (grey, green, red, yellow)
|- Pipes/ # Pipe images (grey, green, red, yellow)
|- Pumps/ # Pump images (grey, green, red, yellow)
|- Sensors/ # Sensor images (grey, green, red, yellow)
|- Tanks/ # Tank images (grey, green, red, yellow)
|- Valves/ # Valve images (grey, green, red, yellow)
|- VesselAccessories/ # Vessel accessories images (grey, green, red, yellow)
|- SVG/ # Vector image type
|- Blowers/ # Blower images
|- Boilers/ # Boiler images
|- Containers/ # Container images
|- Conveyors/ # Conveyor images
|- Dashboard/ # Dashboard images
|- Hoppers/ # Hopper images
|- HVAC/ # HVAC images
|- Indicators/ # Indicator images

```

```
| - Mixers/           # Mixer images
| - Motors/          # Motor images
| - Palletizer/      # Palletizer images
| - Pipes/           # Pipe images
| - Pumps/           # Pump images
| - Sensors/         # Sensor images
| - Tanks/           # Tank images
| - Valves/          # Valve images
| - VesselAccessories/ # Vessel accessories images
|- SVGHMI/           # WinCC dynamic widget type
| - Blowers/         # Blower widgets
| - Boilers/         # Boiler widgets
| - Containers/      # Container widgets
| - Conveyors/       # Conveyor widgets
| - Dashboard/       # Dashboard widgets
| - Hoppers/         # Hopper widgets
| - HVAC/            # HVAC widgets
| - Indicators/      # Indicator widgets
| - Mixers/          # Mixer widgets
| - Motors/          # Motor widgets
| - Palletizer/      # Palletizer widgets
| - Pipes/           # Pipe widgets
| - Pumps/           # Pump widgets
| - Sensors/         # Sensor widgets
| - Tanks/           # Tank widgets
| - Valves/          # Valve widgets
| - VesselAccessories/ # Vessel accessories widgets
```

Troubleshooting

- If you have made manually changes to a widget, in order to see the effect you need to close all screens in TIA Portal refresh widgets and then open them. Also for these changes to be applied in Runtime (Browser) it is necessary to do `'Compile->Rebuild All'`. This way when loading delta changes the widget will not be updated.
- The file name of the widget must be unique and must match any other file in your SvgControl folder, both the one in the project folder and the one in the TIA Portal folder. Also in the widget itself at the beginning of the file in the `<hmi:self />` element there are two attributes `'displayName'` and `'name'` they should also be unique. `'name'` should start with `'extended.'` prefix.

Changelog

Version 0.9 (Beta) [12 Nov 2024]

- Added motors pack
- Fix shaft property in some widgets
- Changed default colors

Version 1.0 (Release) [20 Nov 2024]

- Added indicators widgets

- Fix gradient of "[SimpleTrend-01.svg](#)"
- Fix bugs with default values

References

- [SVGHMI.pro](#)
- [Component page](#)
- [Changelog](#)