EB GUIDE Studio

How-to: Using examples in EB GUIDE Studio

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1. Working with the examples in EB GUIDE Studio

In EB GUIDE Studio you can create custom widgets, widget features, EB GUIDE Script functions, and enhanced graphical effects in addition to the basic widgets as for example rectangle. Thus you have more options to design the visual appearance of your EB GUIDE model.

NOTE	**Migration of EB GUIDE projects with custom widgets**
(i)	You cannot migrate an EB GUIDE project with added custom widgets from one EB GUIDE version to another. If your project contains custom widgets, update them with the correct version and then migrate your project. You can only use custom widgets if their version matches the used EB GUIDE version.

NOTE	**Default window layout**
(i)	All instructions and screenshots of this user's guide use the default window layout. If you want to follow the instructions, we recommend to set the EB GUIDE Studio window to default layout by selecting **Layout** > **Reset to default layout**.

1.1. Background information

1.1.1. Example structure

The EB GUIDE examples are divided into three directories:

▶ `concepts`: contain examples for EB GUIDE GTF concepts, for example EB GUIDE GTF plugin

▶ `model_extensions`: contain examples for EB GUIDE model extensions, for example custom widgets

▶ `model_interactions`: contain examples for basic EB GUIDE model interactions, for example how to connect and interact with a HMI model from underlying business logic

Each example consists of the following:

▶ EB GUIDE model in the `model` directory

▶ Example source code in the `src` directory

▶ build files

All models contain prebuilt examples and you can use them without previous compilation.

1.1.2. List of current examples

The following is the list of the current examples:

▶ `ApplicationInteractionExample` shows interaction between HMI and business logic.

▶ `BasicExample` shows basic structure of an EB GUIDE GTF plugin.

▶ `BloomEffect` adds a bright light effect for an image.

▶ `CoreStageExample` shows how to use core stages in EB GUIDE GTF.

▶ `CrepuscularEffect` adds a volumetric light scattering effect for special visual effects of the scene.

▶ `CustomEffect` adds a basic blur effect for special visual effects of the scene.

▶ `DatapoolExample` shows basic concept of datapool communication.

▶ `DependencyResolverExample` shows the dependency resolving example in EB GUIDE GTF.

▶ `EventExample` shows concept of event communication.

▶ `ExtendedContainerWidget` adds a custom container widget with child visibility control.

▶ `ExternalKeyInputExample` shows concept of key-based interaction.

▶ `ExternalTouchInputExample` shows concept of touch-based interaction.

▶ `FocusPolicyWidgetFeature` adds a custom focus policy to a widget.

▶ `FocusedWidgetFeature` adds a custom focus reaction on rectangle widgets.

▶ `ImageDataExample` shows how to load images from an application into the datapool items of a model. The images can be static, like a `.png` or dynamic like a Mandelbrot image.

▶ `ModelStageExample` shows how to use model stages in EB GUIDE GTF.

▶ `RippleEffect` adds a ripple effect for special visual effects of the scene.

▶ `ScriptFunction` adds custom `add` EB GUIDE Script function.

▶ `ScreenshotExample` shows how to capture the scene information of a scene.

▶ `SettingsExample` shows how to deal with EB GUIDE GTF settings.

▶ `TriangleWidget` adds a basic triangle-shaped widget for different design options.

▶ `WindowListExample` shows basic concept with list handling.

1.2. Building the EB GUIDE examples

1.2.1. Building the EB GUIDE examples with Visual Studio

All EB GUIDE examples are provided with Visual Studio 2017 solution and project files. To build any of the provided examples, open the corresponding solution file in Visual Studio 2017 and build it.

NOTE	**Preconfigured Visual Studio solution files**
(i)	All Visual Studio solution files are preconfigured to use required files from the EB GUIDE Studio default installation directory. If you installed EB GUIDE Studio in a custom directory, adapt the values of `Additional include directories` and `Additional library directories` in the Visual Studio project file.

1.2.2. Building the EB GUIDE examples with CMake

You can build all EB GUIDE examples with CMake 3.7.1. For information on how to use CMake, see https://cmake.org/runningcmake.

NOTE	**CMake variable `GTF_TARGET_SDK_ROOT`**
(i)	To build the examples, set the value of the CMake variable `GTF_TARGET_SDK_ROOT` to the directory that contains the EB GUIDE GTF SDK.

1.3. Using examples in your EB GUIDE project

The following instructions show you how to use the examples in your EB GUIDE project.

The downloaded `EB_GUIDE_Examples` file contains the following directories:

► `cmake`

► `doc`: contains this user documentation

► `examples`: contains the respective source code of the EB GUIDE examples

Using an example in your EB GUIDE project

Step 1
To use a concept example, open the unzipped `EB_GUIDE_Examples` directory and navigate to `examples\concepts`.

To use a model extensions example, open the unzipped `EB_GUIDE_Examples` directory and navigate to `examples\model_extensions`.

To use a model interactions example, open the unzipped `EB_GUIDE_Examples` directory and navigate to `examples\model_interactions`.

Step 2
Select an example and navigate to `model`.

Step 3
Double-click the EB GUIDE Studio project file.

EB GUIDE Studio starts with the example. The content area and the **Toolbox** now contain the elements of the example, for example the `TriangleWidget` templates.