

# SceneComposer

## V3.2.0

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# Candera Related Features

## Canvas

In order to introduce 2D content in 3D, a new concept will be introduced: Canvas. New scene nodes are available in order to achieve this: Canvas (under the "Nodes 3D" section of the Toolbox), CanvasGroup and CanvasSprite (under the "Canvas Nodes" section of the Toolbox). Canvas acts as a surface. CanvasGroup nodes and CanvasSprite nodes can be inserted into it.

CanvasSprite is a node that represents a solid object, offering the possibility to render a texture, a flat colored rectangle or other visual effects, depending on its appearance configuration.

Canvas, CanvasGroup and CanvasSprite behave like normal nodes when it comes to transformations and selection. Bounding box will be rendered for each of them. They can be translated, rotated, scaled.

For each Canvas object, a new editing camera is added in the scene camera list and becomes available in "Canvas" category. This camera can be selected and exhibits a special behavior: is automatically oriented towards the canvas, regardless of canvas transformations, so that the Canvas and its children will always appear like they would be viewed from a "Front" camera. A Canvas camera provides an orthographic projection (Mantis 6101).

### See also:

- [Canvas](#) in SceneComposer User Manual

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## Texture Lookup from Flash

It is now possible to choose where a Bitmap is read from, either Video Memory (Video RAM) or Client Memory (System RAM). This property, named "Memory Pool" is visible in the property grid for every Bitmap (Mantis 6212).

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## ETC2 and EAC Support

If an image with an unsupported format is to be written in the asset on the Amber platform an error will be shown saying the format is not supported (Mantis 6211).

The following formats will generate this error:

- EacCompressedUnsignedRPixelFormat
- EacCompressedSignedRPixelFormat
- EacCompressedUnsignedRGPixelFormat
- EacCompressedSignedRGPixelFormat
- SrgbUnsignedBytePixelFormat
- SrgbaUnsignedBytePixelFormat
- Etc2CompressedSrgbPixelFormat
- Etc2Alpha1CompressedRgbaPixelFormat
- Etc2Alpha1CompressedSrgbaPixelFormat

**See also:**

- [Color Depth Configuration](#) and
  - [Bitmap Converter](#) in SceneComposer User Manual
  - [Bitmap Profile](#) in SceneComposer User Manual
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# SceneComposer Usability Improvements

## Integrate Appearance Templates

A set of appearance templates was introduced in the default solutions for OpenGL 2.0 and OpenGL 3.0 platforms. Those templates will be available only in the newly created solutions.

Migration: in order to make the templates available in solutions converted to 3.2.0, one can import them via "Import from solution" option. The appearance templates solutions can be found in SceneComposer\Data\AppearanceTemplates.zip.

The file must be first unzipped in a preferred location in order to reveal the two folders which contain the solutions for OpenGL 2.0 and OpenGL 3.0 (Mantis 6421).

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## Executable Generation

A new feature is available in the toolbar as a plug-in which will provide the option to generate the asset files and run a script with certain commands defined by the user.

The user is able to define as many configurations as necessary, each configuration containing a set of default parameters, a set of custom parameters and a script to be run after a successful asset generation. Long lines can be broken by using the caret (^). The script is not mandatory and it can contain references to the default and custom parameters defined by the user. The set of custom parameters are specific for each solution and are saved in

USER\_DIR\ AppData\Roaming\SceneComposer\Solutions.

(Mantis 6232).

### See also:

- [How to Import Resources](#) in SceneComposer User Manual
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## Control Handles for cubic Bezier

A new editing mode will be available in the Curve Editor: "Pair editing". This mode will apply only in case of Bezier interpolation. It will be available through a toggle button "Enable control points pair

editing". The button will be available when at least one animated property within the selected ones has Bezier interpolation (Mantis 6268).

**See also:**

- [Bezier Animations in Curve Editor](#) in SceneComposer User Manual
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## Scripting

Scripts can now be added to a solution. SceneComposer offers a script editor, similar to shader editor. Scripts, written in the LUA programming language, can be "validated" by pressing F8 or by selecting Validate Script from the Script menu (Mantis 6042).

**See also:**

- [Scripting](#) in SceneComposer User Manual
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## Automatic Imports

The user can configure monitored folders for automatic imports - both images and fbx files (Mantis 6302).

**See also:**

- [Automatic Imports](#) in SceneComposer User Manual
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## Transitions. Rule Editor

The Rule editor allows the designer to define rules on how to handle transition requests (Mantis 6144).

The user will be able to:

- Create new rules or remove rules. Filter the rules to quickly find the desired rule.
- Ordering the rules by drag and drop a rule or using the up and down icons from the beginning of each row which correspond to a transition rule.
- Defining a specific source object or "any"-identifier for each rule (AnyScene2D, AnyScene3D, SpecificScene2D, SpecificScene3D, AnyNode2D, AnyNode3D,

SpecificNode2D, and SpecificNode3D).

- Optionally defining a destination identifier/object for each rule.
  - Defining a hint for each rule.
  - Optionally adding hint details. The user will be able to enable/disable the fade, enable/disable the Fade Timeline, set the Fade Timeline.
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## Enable 8 Byte Alignment of Bitmap Pixels Data in Asset

SceneComposer provides now a solution option, "Enable 8 byte alignment of bitmap pixels data in asset", to enable bitmap pixel data alignment to a position multiple of 8 in the asset file (Mantis 6408).

### See also:

- [Enable 8 Byte Alignment of Bitmap Pixels Data in Asset](#) in SceneComposer User Manual
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## Minor Improvements

- **Linking Compatibility Guard** SCHost.lib can no longer be linked with an incompatible SCHost.dll. Compatibility checks have been added, upon build a suggestive linker error will show up (Mantis 5735).
  - **Removed Property** LayoutingRectangle property was removed. Solutions of older versions are updated during conversion process (Mantis 6401).
  - **Handling of Dynamic Layout Properties** Dynamic properties that propagate value (have PropagatesValue flag), are written into the asset when they have default value. Currently, LayoutDirection property has such a flag and obeys this rule (Mantis 6380).
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