SceneComposer Usability Improvements

Reusable Solution Library

The main goal of a shareable component library (SCL) solution is to make all the resources from a particular SCS solution available to be used in other solutions. SceneComposer provides the possibility to reuse any part from a solution that is exported as a SCL.

See also:

- Reusable Solution Library in SceneComposer User Manual

Appearance Wrapper

In some circumstances it could be necessary to expose for the user just those properties which should be modified to get a desired setting of an object. The Appearance Wrapper feature allows to expose only some properties of an appearance attached to a node or the properties pertaining to its containments (material, render node, shader, uniform setter, texture).

See also:

- Appearance Wrapper in SceneComposer User Manual

Shader Details

Shader requirements are now available in SceneComposer. This includes the number of lights, materials and textures. They are displayed in a new tab "Details" in the Property Grid, when a shader program is selected. The tab also contains the available attributes and uniforms.

See also:

- Shader Editor in SceneComposer User Manual

Problem Viewer Extensions

Due to the huge quantity of informations which can be displayed on the Problems browser, it is possible to suppress warnings or messages solely related to imported content.

To get focused on problems related to SceneComposer solution configuration, many changes were made related to problem management:

- The problems configuration panel is available from the problem browser via "Configure problems" button.
- Now it is possible to ignore Warning/Info problems for an item or for all descendants of a folder (these are user suppression flags stored in user data file outside of the solution).
- Now it is possible to ignore a specific Warning/Info problem for entire solution (these are global suppression flags stored in the solution).
- The items which have Error problems can not be rendered and it is also not possible to generate an asset library for them.

See also:

- Problems Browser in SceneComposer User Manual

Bitmap Usage Validation

Custom formats available for each bitmap converter will have an additional property to specify for which engine are they supported (Candera2D, Candera3D, Mixed). This information is displayed in the properties panel of the BitmapProfile used by the Bitmap (see property CanderaModelType). During validation of the solution, if CanderaModelType of the bitmap profile used by the bitmap does not match the texture, effect, widget, a warning will be displayed (Mantis 4461).

See also:

- Bitmap Profile in SceneComposer User Manual

Activate Referenced Items

The possibility to activate items referenced through paths has been added. The Activate button will load the item in the property grid and in others panels linked to the type of the item (Mantis 4621).

See also:

- Activation of Items Referenced in SceneComposer User Manual

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Uniform Auto Activation

Uniform setters contain some flags used to enable the activation of various auto uniforms (camera position, lights, material, texture, etc.) which are defined in shader programs.

A new property was added to uniform setters:

- **Enable Auto Activation.** This property becomes available just if the "Enable uniform setter auto activation" flag (Solution Options>General Configuration panel) is properly set. After this operation, a check box with the same name will become available in the Properties panel. This property specifies if the auto activation of the flags should be enabled based on the global values stored in the solution properties or locally in this item (Mantis 4657).

See also:

- Generic ShaderParamSetter in SceneComposer User Manual
- Candera::GenericShaderParamSetter

Multi Materials Import from FBX

This feature enables the user to import FBX objects that have multiple materials (Multi/Sub object) associated to the geometry (For example different polygons are associated different materials). As Candera does not support multi-material objects, an object that has a multi-material is split into separate objects in which the polygons share the same material. Therefore, such an object will be imported as a group containing the sub-meshes that sum up to the FBX object.

See also:

- How to Import Resources in SceneComposer User Manual

Auto-hide in Selected Panels

Auto-hide is offered in selected panels, similar to VisualStudio. Also available are the following options: Float, Dock as Tabbed Document, Hide and Close.

See also:

- SceneComposer GUI in SceneComposer User Manual

Perspective Support

It is now possible to save a new perspective layout, which will be based on the current perspective. Also the possibility to delete, to export and to import a perspective was added.

See also:

- SceneComposer GUI in SceneComposer User Manual

Scene Templates

Scene templates are now supported in SceneComposer. A scene created by the user can be made template by checking its IsTemplate property. The dialogue used to create new scenes was modified to allow the user to select an existing template or import.

See also:

- Scene Templates in SceneComposer User Manual

Import Fonts Button

A new "Import Fonts" button was added in the Text Style Palette section from the Solution Options ("File" > "Solution Options"). If there are no fonts already imported, the user can import any available fonts by using the "Import Fonts" button which is placed on the upper-right corner of the Text Style Palette section.

See also:

- Text Style in SceneComposer User Manual

Support for Display and Device Meta-Info

Display is now a dynamic item and has dynamic properties (like widget, render target, effect and layouter properties). Device Package is a new dynamic item which is displayed as the root element in the Render Target Explorer panel.

See also:

- Add a new Display in SceneComposer User Manual

Render Target Preview

Preview functionality for render targets has been extended: when deactivating/activating a render target - by unchecking/checking the checkbox - in order to disable/enable the preview of it, the render target gets also unloaded/uploaded. Therefore, one can make use of several WindowSurfaceRenderTarget objects having the same layer by activating only one of them - the others will not be uploaded (Mantis 3935).

See also:

- Add Render Target in SceneComposer User Manual

Import KTX Image Format

A new image format - "Khronos Texture" (.ktx) - can be imported and used in SceneComposer.

See also:

- Import .KTX Image Format in SceneComposer User Manual

Global Cameras Rendering Order

The global cameras rendering order changed. The rendering sequence for 2D and 3D cameras is:

- 1) 2D cameras
- 2) 3D cameras

See also:

- Rendering Order in SceneComposer User Manual

Minor Improvements

- **Animation Editing Modes.** In Animation Timeline Editor and Animation Curve Editor, the buttons representing the keyframe edit modes were replaced with one ComboBox containing all the options.

- **Comments on Composite Properties.** Now it is possible to set a description for the composite properties. This description will be shown as tooltip in the properties panel for the associated property of the the composite node.

- **Ghosting.** This functionality pertains to the "keyboard support" feature which is still under development. Ghosting was implemented for the panels with a tree structure. A placeholder will indicate the possible position of a node (on the same level as another, as child of another node or as property for a node).

- **Usages Panel.** If a reference has usages in the solution, when trying to remove it, a panel containing these usages will be displayed.

- **Added TextStyle.** New TextStyle support was added in Theme.

- **Default Solution.** Folders for the new item types like ClearMode, TextStyle and BitmapProfile were added. Also some folders were moved or removed.

- **Optional SVNModule.** Due to performance reasons, the SVNModule is now optional in SceneComposer. If the assembly FTC.SourceControl.SVN.dll does not exist in the same folder as SceneComposer executable no SVN functionality will be available. Additionally it is possible to disable the SVNModule via a checkbox in the Preferences->SourceControl panel (Mantis 4362).

- **Texture Generation.** No longer available for vertex buffer editing (Mantis 4204).

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