CGI Studio 3.0.1

- Candera V3.0.1
  - Candera Engine 2D
  - Candera Engine 3D
  - Candera AssetLoader
  - Candera Device
  - TextEngine
- Courier V3.0.1
- SceneComposer V3.0.1
  - SceneComposer Usability Improvements

Candera V3.0.1

Release Date: August 14, 2014

To keep backwards compatibility for any interface change in the public API the old interface has been kept and marked as deprecated. The deprecated interfaces will be removed in future versions. Compiler warnings will be generated when using a deprecated interface through the usage of Candera Macro CANDERA_DEPRECATED_3_1_0.

Candera Engine 2D

Checks on set Bounding and Layout Rectangle

New methods Node2D::IsBoundingRectangleSet and Node2D::IsLayoutingRectangleSet have been introduced. BoundingBox calculation of groups and layout of DefaultLayouter now also consider set bounding boxes on groups.

New feature flag to disable 2D Layout

A new CMake feature flag CANDERA_2D_LAYOUTING_ENABLED (default ON) has been introduced, which allows to remove the whole code for dynamic layout.

Candera Engine 3D

Camera: Set up and lookAt vectors in one call

Camera::SetUpAndLookAtVectors allows setting the up and lookAt vectors at once. It is useful to avoid situations like when setting one of them could cause fail because is collinear with the default value of the other one, which is going to be changed anyway.

Candera AssetLoader

Release Orphaned Cached Objects

A new method DefaultAssetProvider::ReleaseOrphanedObjects has been introduced to release all cached shared objects that are only referenced by the DefaultAssetProvider. Objects referenced also from other places are maintained so that they may be retrieved at a later time.

Candera Device

Mapping from OpenGL to Candera for Blend Settings

The GlTypeMapper has been enhanced to map blend factor and operation from OpenGL type to Candera enums. The functions are used to resync the render state cache for blend factor and blend operation.

TextEngine

Configuration for Hinting and Anti-Aliasing

New interfaces allow configuration of hinting. According functionality is supported by FreeType integration.

The new method TextRendering::Font::SetRequestedGlyphFormat allows also to choose value "Monochrome" as Candera::TextRendering::GlyphBitmap::Format which disables anti-aliasing but might give good results with small font sizes or in use cases with low color resolution (e.g. monochrome display).

See also:

- TextRendering::Font::SetHintingMode
- TextRendering::Font::SetHintingEnabled
- TextRendering::Font::SetAutohintEnabled
- TextRendering::Font::SetForceAutohintEnabled
- TextRendering::Font::SetRequestedGlyphFormat

Courier V3.0.1

Notes

SceneComposer V3.0.1

SceneComposer Usability Improvements

Shader Warnings

Shader warnings generation was activated (deactivated in previous version, 3.0.0).

See also:

- Shader Consistency Checker in SceneComposer User Manual

Shader Consistency Checker

Shader Consistency Checker refers to validations of the shader params (attributes and uniforms defined in shaders) based on some rules. Most shader param problems are reported for appearances of nodes after checking the vertex buffer of the mesh versus the shader program referenced by the appearance versus the uniform setter of the appearance.

See also:

- Shader Consistency Checker in SceneComposer User Manual
