Candera Platform

Owner Requirement

OpenGL Offscreen Render Targets (Frame Buffer Objects) are now required to have an owner RenderTarget to ensure that the used EGL context is safe. For this reason RDenderTarget now has the "IsOwnerRequired" function which returns if a parent render target is needed. The concrete RenderTarget implementation needs to implement the function accordingly. If IsOwnerRequired returns true, an Upload of the RenderTarget will only succeed if the owner is set. RenderTarget3D has additionally a protected SetOwner function that classes derived from RenderTarget may call to set their parent render target. This mechanism can of course also be used for non-OpenGL implementations. Widgets and Behaviors need to take care that owners are set correctly.

GlInclude Header File

From now on, the GlInclude header file only includes Open GL header files if a CGIDEVICE_OPENGLES_xx has been defined. E.g. the NullRenderDevice does no longer include them.

Interface to load / store binary shader programs

Binary Shader Programs or Object can be retrieved from the driver and stored to an arbitrary persistence mechanism (e.g. a file.). This is supported by the RenderDevice and can be used by Device Packages. Therefoe RenderDevice::UploadStoredShaderBinaryProgram and RenderDevice::RetrieveShaderBinaryProgram have been added if the CANDERA_SHADER_PROGRAM_PERSIST_INTERFACE_ENABLED flag is defined.

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