Unreal Tips

Here are some useful notes for working with unreal.

PIX Captures

To enable pix captures, you can either run with the commandline "-attachPIX" or, in ConsoleVariables.ini, you can set r.D3D12.AutoAttachPIX=1

Note that by default, the editor will stop rendering / render at a lower frame rate when it doesn't have focus. This can be a problem when trying to do a pix capture. You can dsable this.

Go to Edit->Editor Preferences and select Miscellaneous under the General heading you can uncheck the box for "Use Less CPU when in Background" option.

Culled Passes

If a render pass only writes to things not read after that point, that pass will be culled and not run.

Sometimes this comes up during development, before we've hooked everything up but want to verify that what we have so far is working.

At runtime you can turn this off in the console with "r.RDG.CullPasses 0"

You can also use the pass flag ERDGPassFlags::NeverCull in your pass.

DX12 GPU Validation

If you want to turn on DX12 gpu validation, to get more information about a problem, you can run with the command line "-gpuvalidation"