ArchVizPRO Interior Vol.5 HDRP

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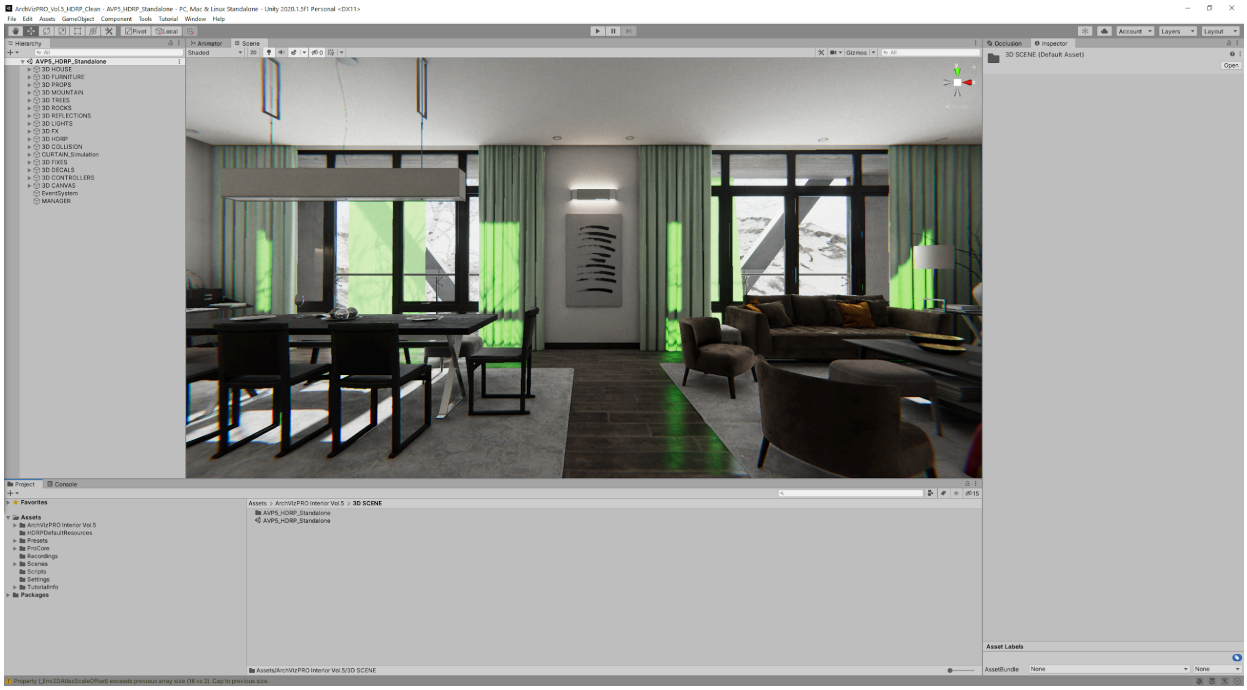
Quick Project Setup

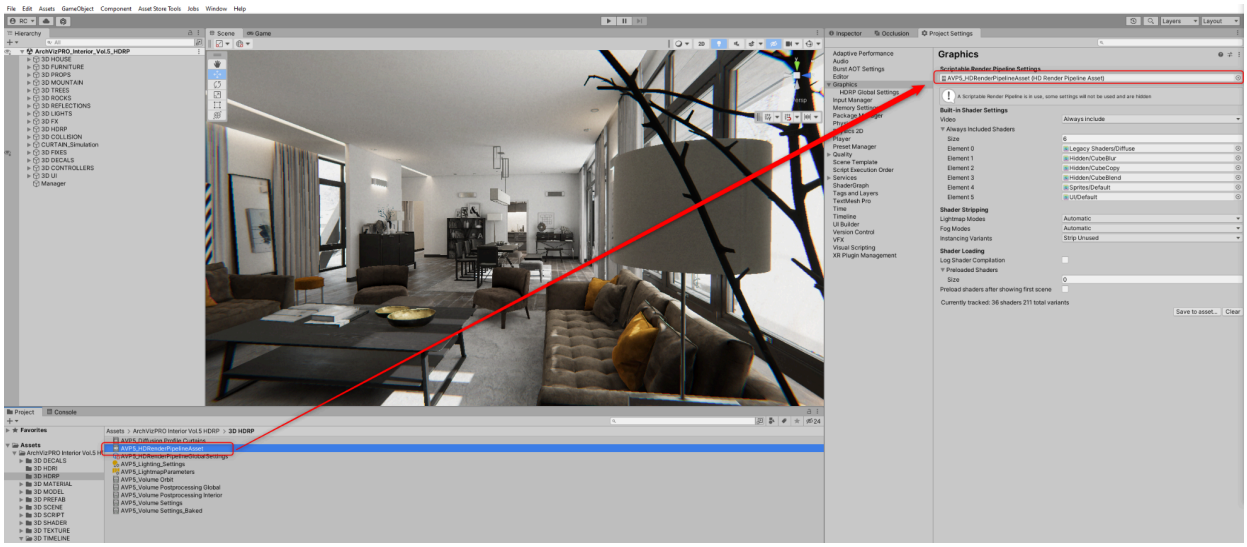
1) Open Unity Hub and create a new Unity 2021.3.4f1 (or higher) project with an **High_Definition_RP Template**. (If HDRP Template is not available, start from a 3D Template and install HDRP from Package Manager and "Fix All" errors with the "**HDRP Wizard**").

2) Download and import ArchVizPRO Interior Vol.5 HDRP from Asset Store.
If prompted about Unity Package Manager dependencies choose "**Install/Upgrade**".

3) Open Assets\ArchVizPRO_Interior_Vol.5 HDRP\3D SCENE**ArchVizPRO_Interior_Vol.5_HDRP**. You should see the scene as in the next screenshot.

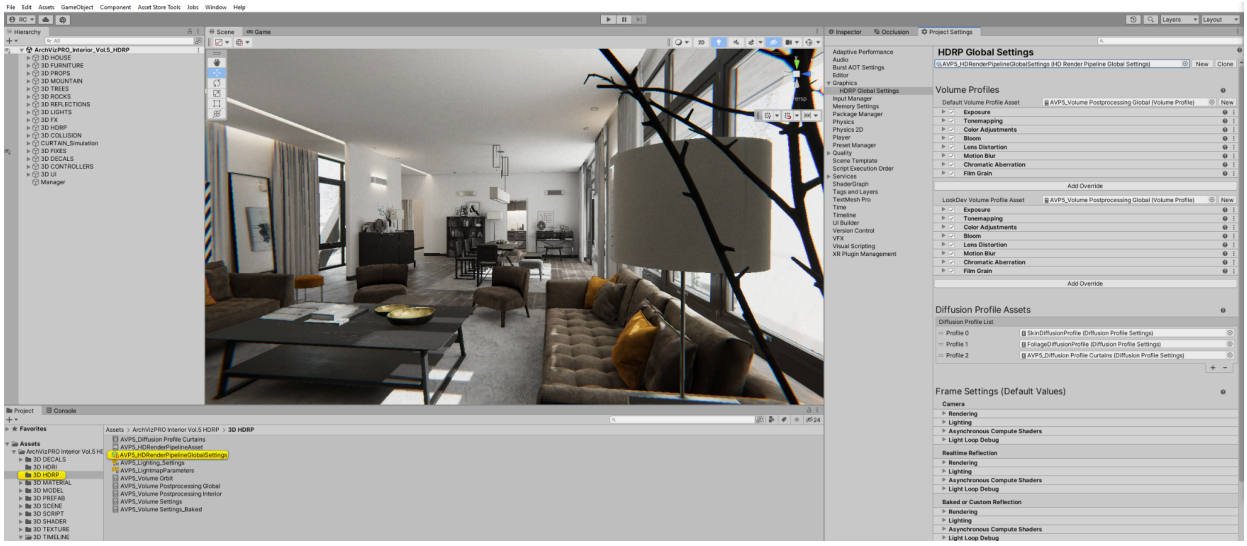


4) Go to Edit/Project Settings/Graphics and assign **AVP5_HDRenderPipelineAsset** in Scriptable Render Pipeline Settings.

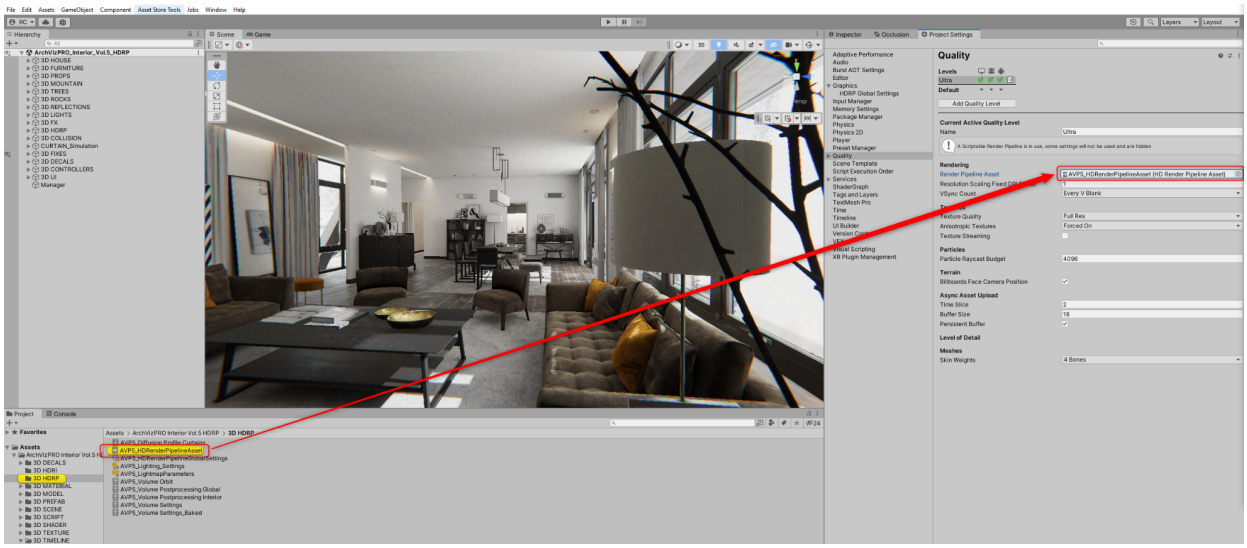


Wait until “Compiling Shader” has finished.

5) Go to Edit/Project Settings/Graphics/**HDRP Global Settings/** and assign**AVP8_HDRenderPipelineGlobalSettings** in Rendering.



6) Go to Edit/Project Settings/Quality and assign **AVP5_HDRenderPipelineAsset** in Rendering.



Scene Overview

Scenes are located at Assets\ArchVizPRO Interior Vol.5 HDRP\3D SCENE:

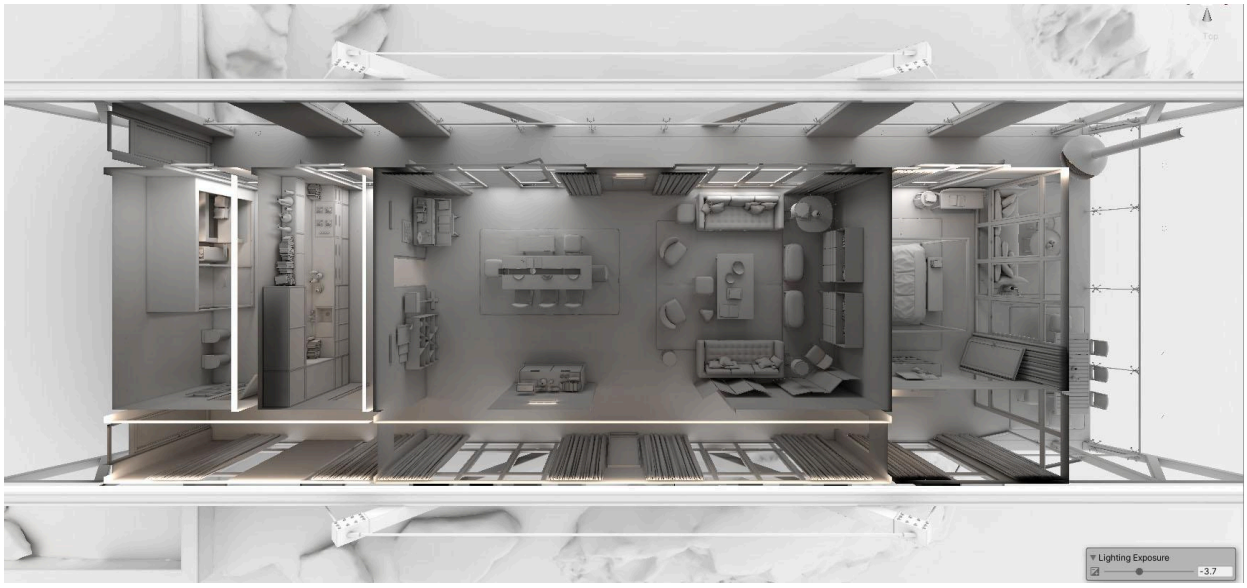
ArchVizPRO_Interior_Vol.5_HDRP:
Setup optimized for Pc Standalone.
Key **1**: First Person Mode
Key **2**: Timeline cinematic animation
Key **3**: Orbit Mode
Key **WASD** : Move character
Key **Left Ctrl** : Crouch
Key **Shift**: Sprint

Key **Right Mouse Button**: Zoom
Mouse : Look

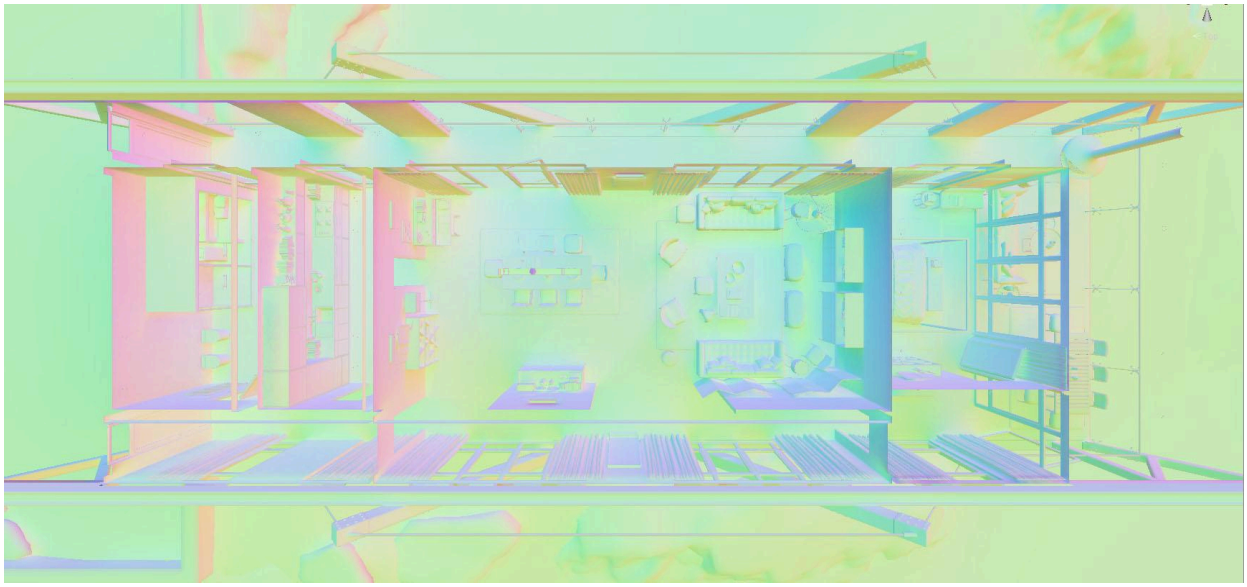
Progressive Lightmapper

ArchVizPRO Vol.5 HDRP uses Progressive GPU as the main baking engine.
It's tested to work with a GTX 1070 (8Gb VRAM) and it takes around 30 minutes to bake.

Baked Lightmap:



Directionality:



Shadow Mask:

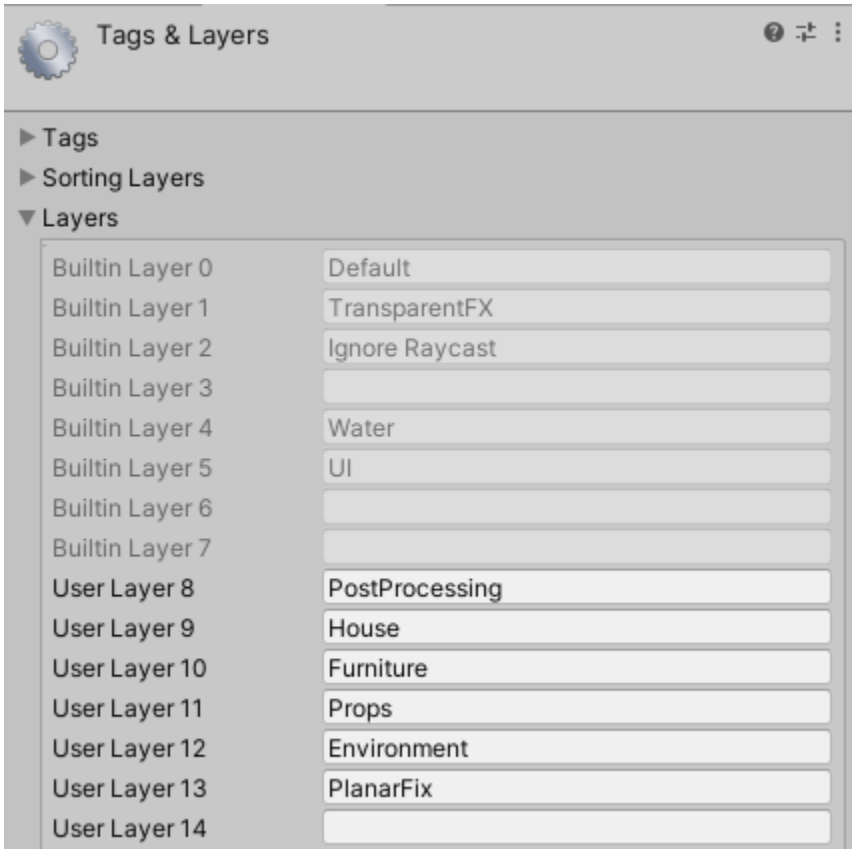
Shader Graph

Custom shaders are made in Shader Graph.
Shaders are located in Assets\ArchVizPRO_Interior_Vol.5 HDRP\3D SHADER\

Fabric_Rim_Detail: A Fabric shader with Rim.
Fire: A simple flipbook shader for animating fire.
Vegetation: Use vertex Color for simulating wind on trees.

Layers

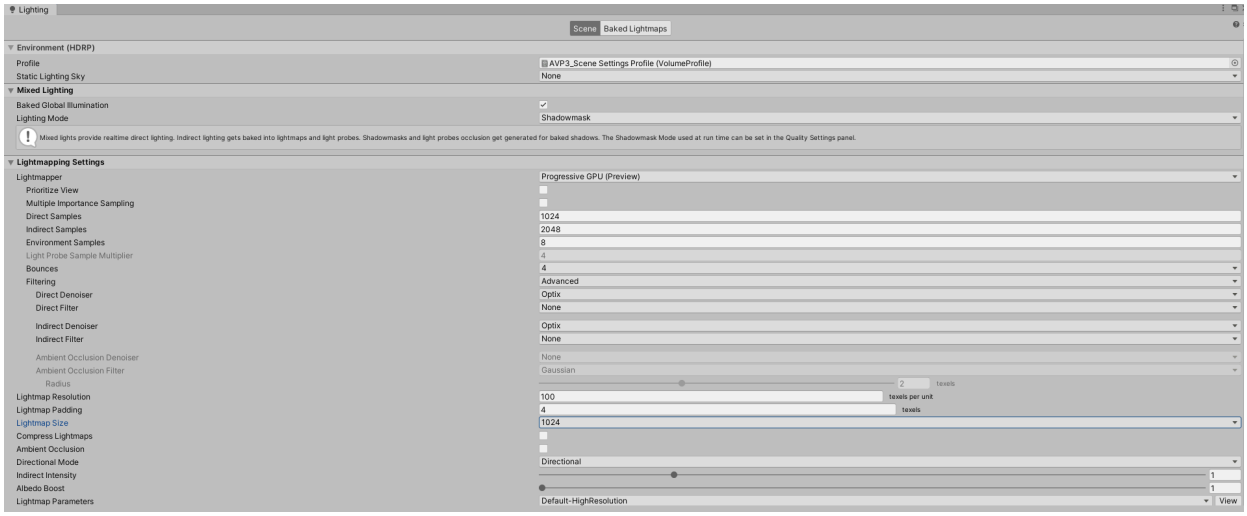
Camera and Reflection Probes use Layer exclusion to hide or show gameobject.
Usually when importing from a package, layers names are hidden.
Restore them by adding names in empty fields as in this screenshot:



FAQ:

1) Progressive GPU fallback to CPU.

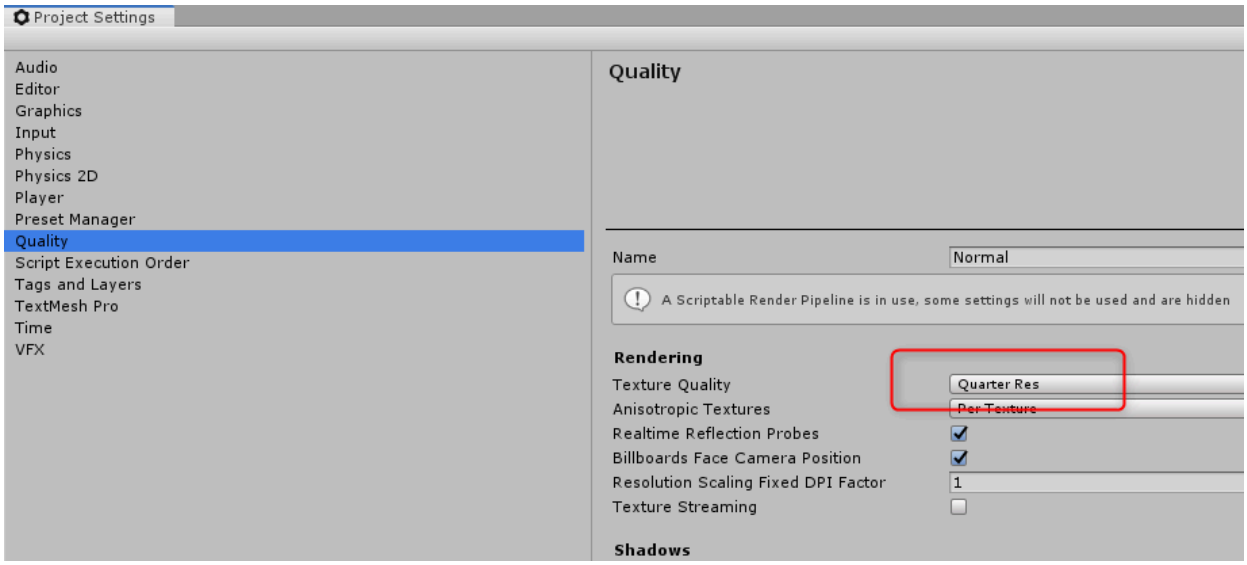
To bake the lightmaps at the current Lighting Settings you need at least 8 Gb of Vram.



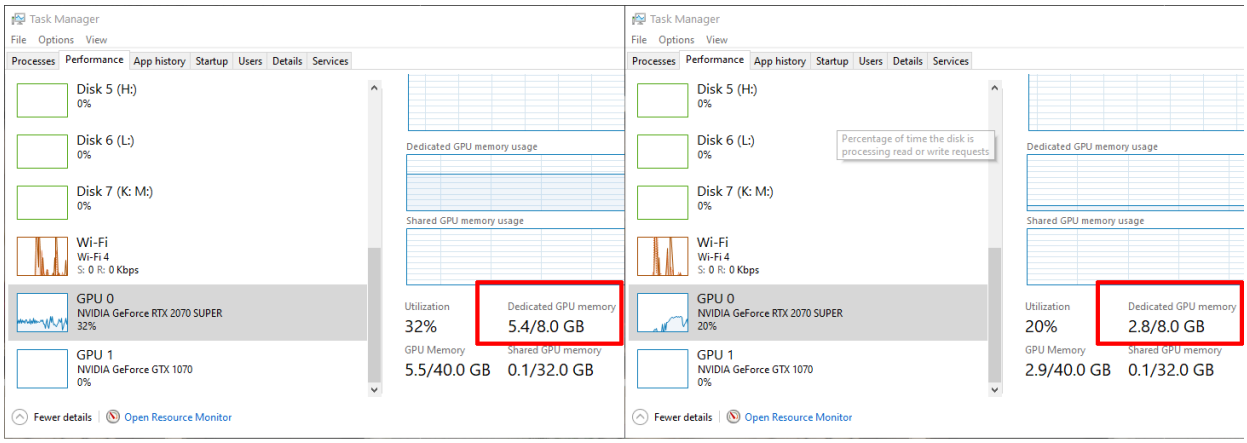
With a GTX 1070 8 GB baking times are around 50 minutes at 120 Lightmap Resolution.

If you have **less than 8 GB of VRAM** available you have to:

- Go to Project/Settings and change **Texture Quality = Quarter Res**.



- Save, restart and reopen the project.



Texture Quality = Full Res **Texture Quality = Quarter Res**

With Quarter Res we have earned **2.6 GB** of available VRAM!

- Once the bake is finished bring back textures to Full Res

- if Lightmap Size is 2048 and still fallback to CPU, try to use 1024 or 512.

2) I have 2 video cards, can Progressive GPU take advantage of them ?

It is possible to select one GPU for rendering the Scene and another GPU for baking lighting. If the automatic GPU assignment don't fit your needs, you can specify which graphics card to use for baking.

To see which GPU Unity currently uses for baking, in the Editor: In your Project, open the Lighting window. Next to Bake Performance, you can see the GPU.

To see the available GPUs in your machine:

1. Make sure you've selected the Progressive GPU lightmapper in the Editor.
2. Generate the lighting in your Scene.
3. Open File Explorer, and navigate to the following path: *C:\Users\USER\AppData\Local\Unity\Editor*. Open the file called *Editor.log*.

4. In the file, search for the line *Listing OpenCL platforms*. This should jump to the part of the log with information about OpenCL devices. Here, you can see your available GPUs along with their corresponding platform and device indexes.

To select a specific GPU for baking:

To select a specific GPU for baking, enter this command at the command line (replace platform and device index with the relevant numbers):

Unity.exe "-OpenCL-PlatformAndDeviceIndices" <platform> <device index>

Your choice of assignment should depend on your needs while you're working on the Scene. If you assign the strongest GPU to either activity, this can incur a performance impact on the other activity. If you encounter issues, try re-assigning GPUs.

3) Baked Lightmap view is showing nothing
Rebake the scene. It's a Unity bug, hope it will be fixed soon.

4)After Exiting Play Mode the Scene View is completely blank just gizmo showing
It's a Unity bug. A quick fix is to right click on any script (for example the script you find in 3D SCRIPT) and click reimport. This force the recompile and should fix the problem.

Contacts:

For any asset related issue please contact me at: ruggero.corridori@gmail.com
If you are interested in our services, write at: info@oneirosvr.com