Camera360v3 - camera system for VR180 , 360, Fulldome, Cilindrical and Spherical Mirror - Mono and 3D Stereo version)

This product contains a set of popular projections for visualization of various directions, including working in Editor and Runtime mode, which can be useful in everyday work.

This product is designed as an optimized solution that uses rendering with a single camera, which means that it will be enough for you to work even on a weak machine.

Attention: This product does not contain Camera 360v1 and Camera 360v2.

Features:

- Raytracing, PathTracing , Lumen working;
- VR180, 360, Cylindrical, FullDome, Spherical Mirror - Mono and 3D Stereo;
- Works as a render pass for Movie Render;
- DLSS, Bloom, AA, Pathtracing, Stereo.
- Mega Highresolution for Mono projection ~ 60k maybe more, for stereo 20k
- This plugin is focused on ease of operation.
- Support JPG, PNG, EXR (Compassion support), BMP

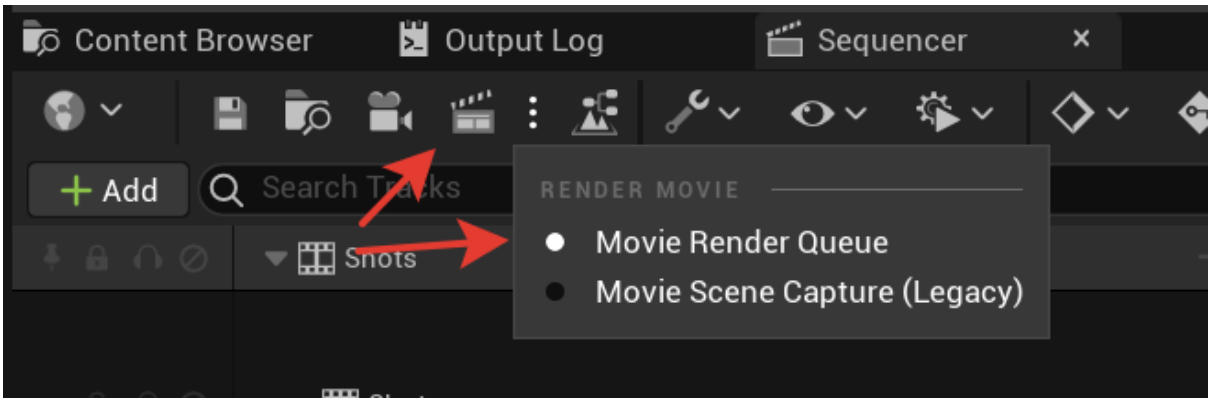
Known issues:

1. To render layers,stencil layer, Alpha use EXR.
2. Support working with rendering layers, stencil layer, Alpha in EXR, but at the moment I'm working on optimizing the solution to speed up the processing processes. Rendering layers in stereo mode for other formats (JPG,PNG,BMP) is still in production. For now, you can work in Mono mode.
3. ObjectId is not available yet, but I have plans to address this issue.
4. At the moment, the plugin only works in image rendering mode. I will add the possibility of video conversion later.

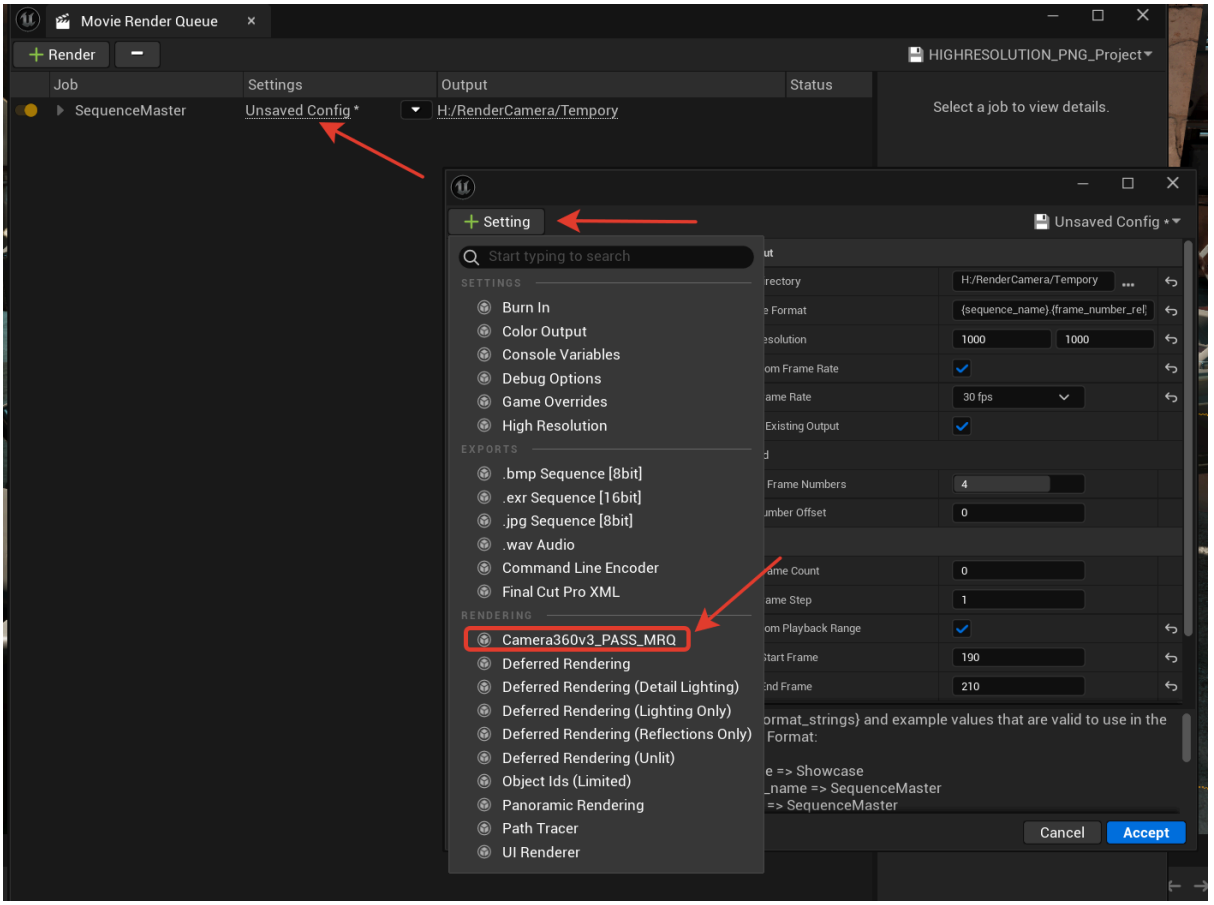
The plugin is still in production and it will be gradually updated with functionality.

First Start:

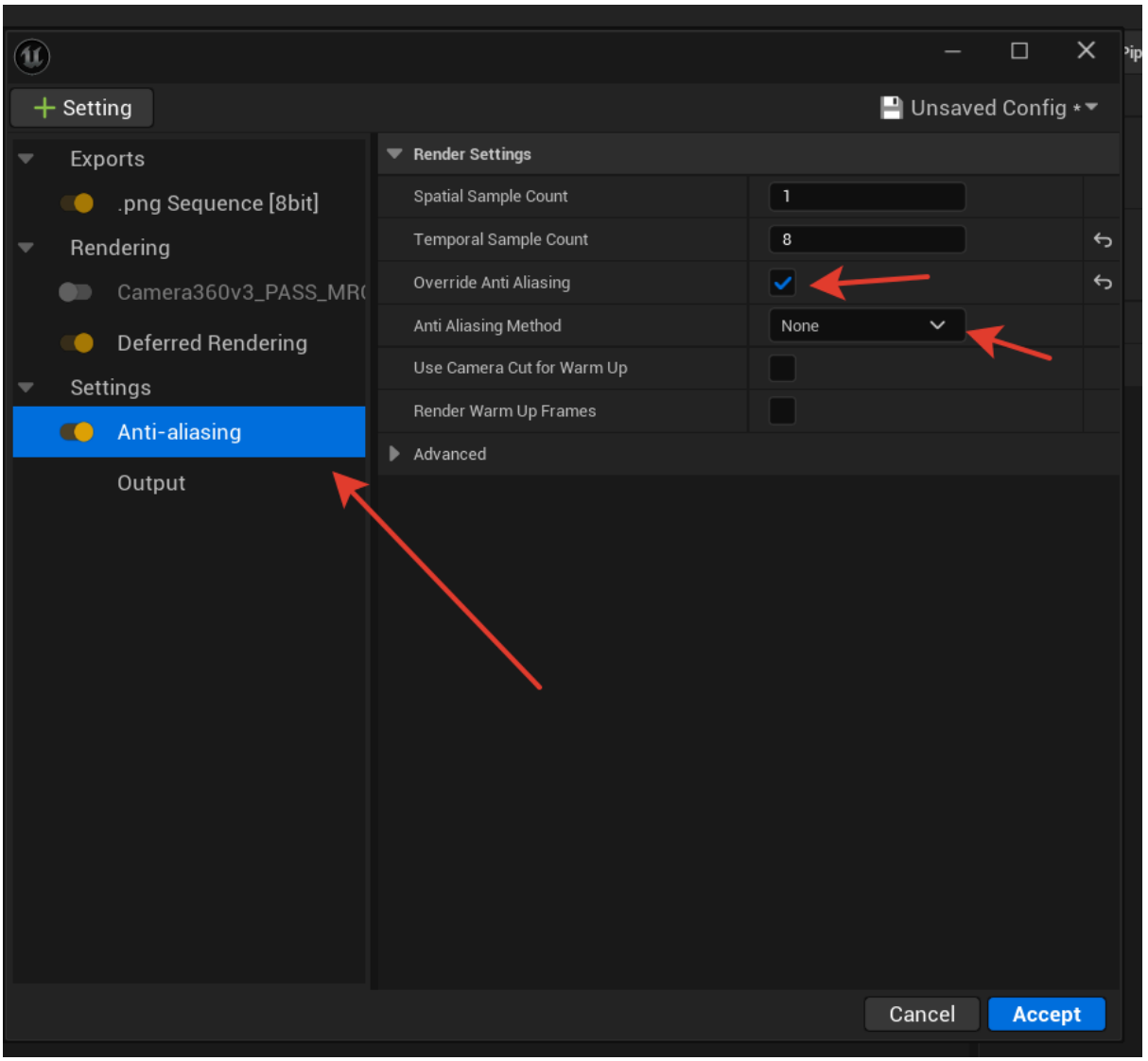
1. Open your Sequence and Movie Render Queue:



2. Open Config and Add Camera360v3_PASS_MRQ



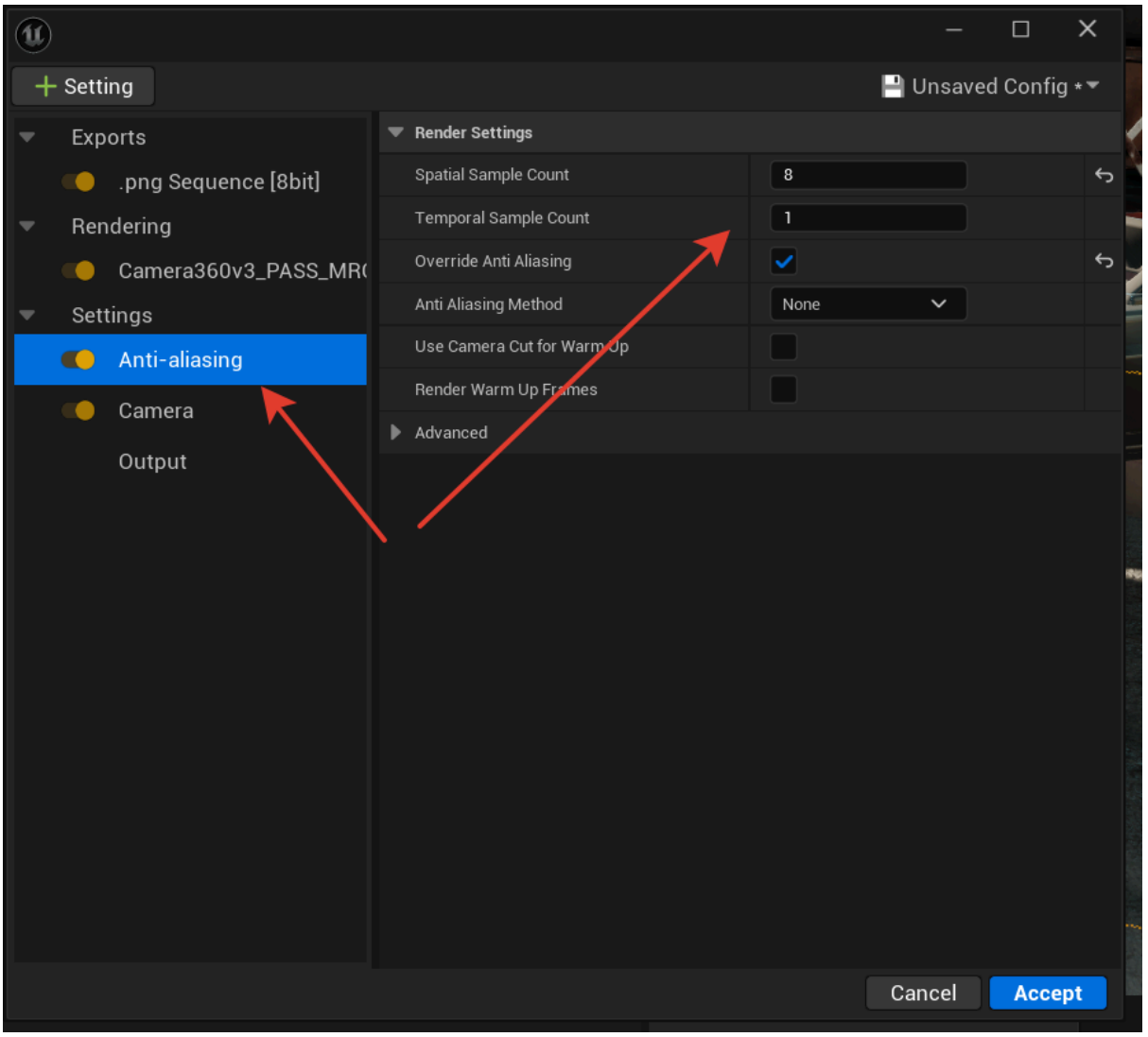
3. **Add Anti-Aliasing (for working rendering)**



Try Using **Temporal Sample Count** or **Spatial Sample Count.**

When the **Temporal Sample Count is used, we use the history for Lumen, and this reduces the seams of global illumination.**

and AA

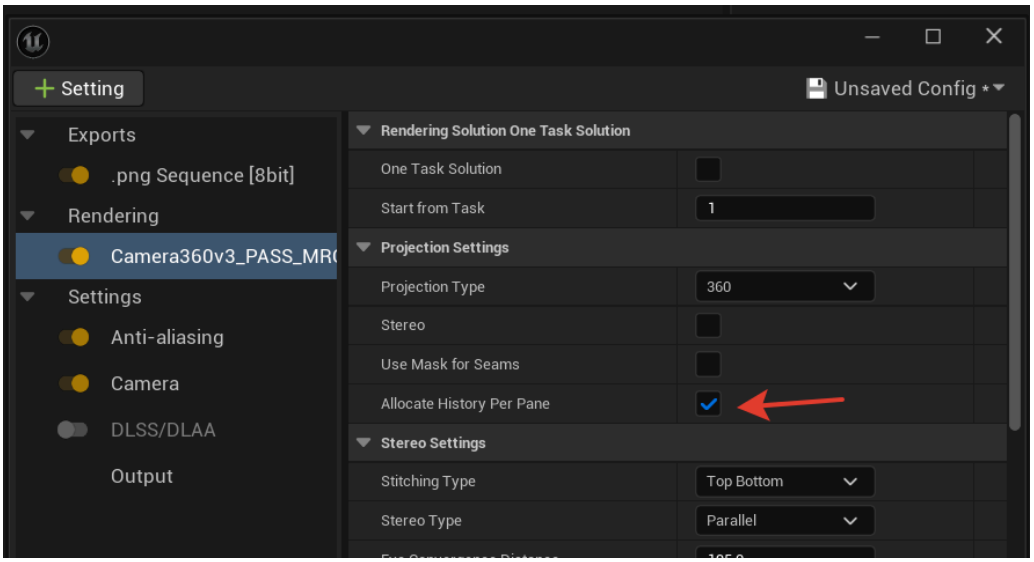


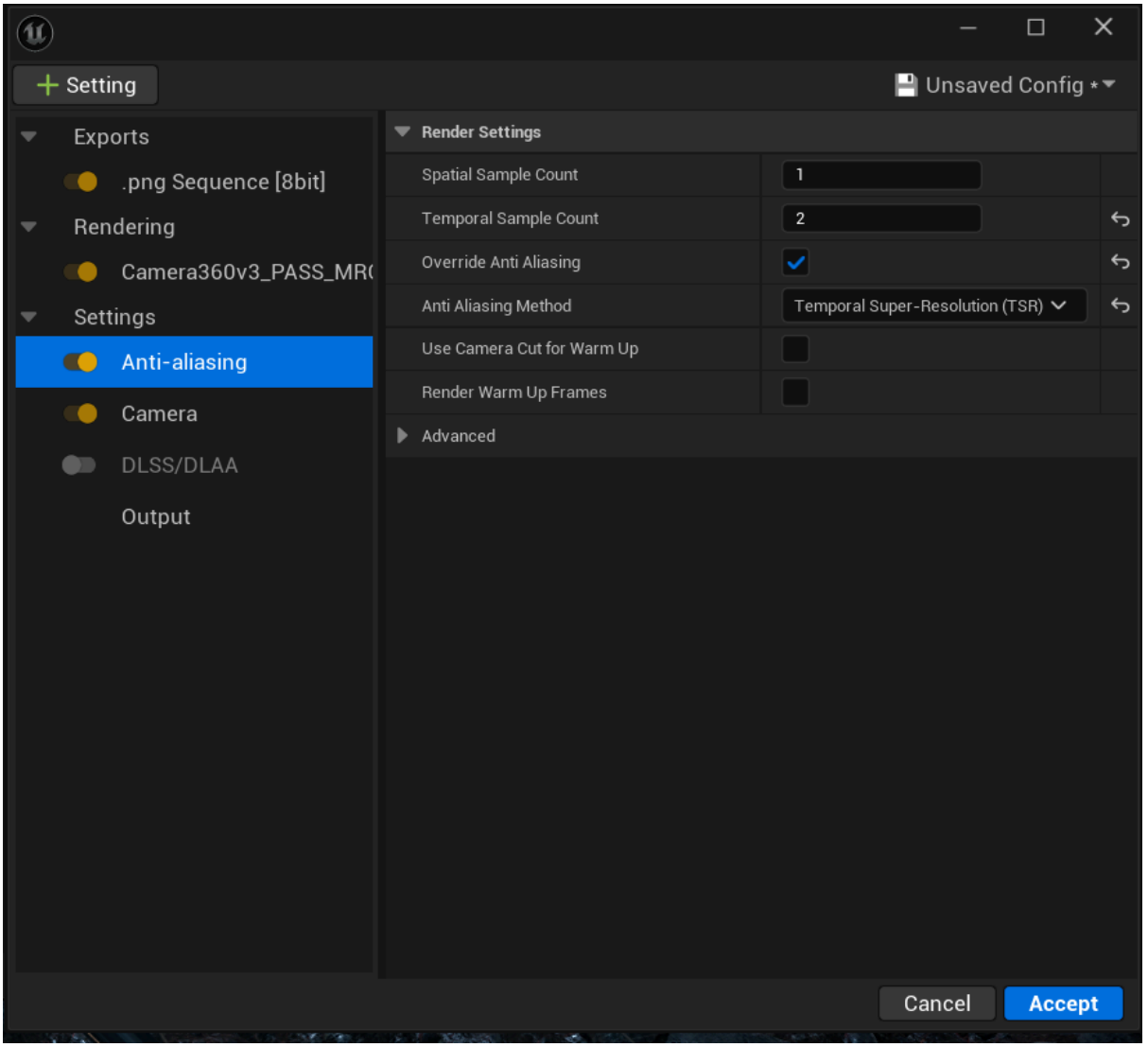
Update 05.02.2025.
Anti-Aliasing faster methods (TSR and DLSS).

Video Tutorial: https://youtu.be/4Sgv6GBEPVU

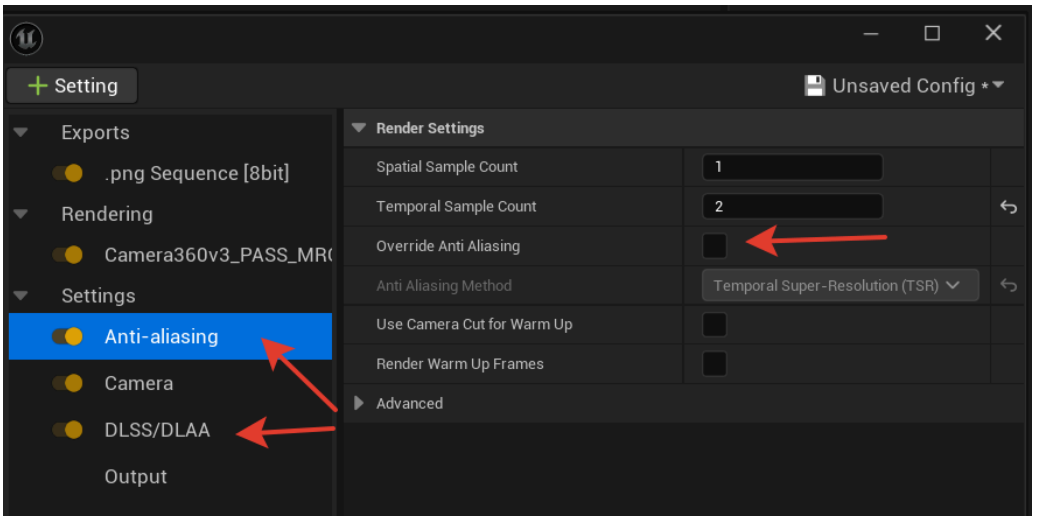
For synchronous rendering and all types of anti-aliasing, you can use Mono Projection, but for Stereo and Use Mask Seams, you need to activate One Task Solution.

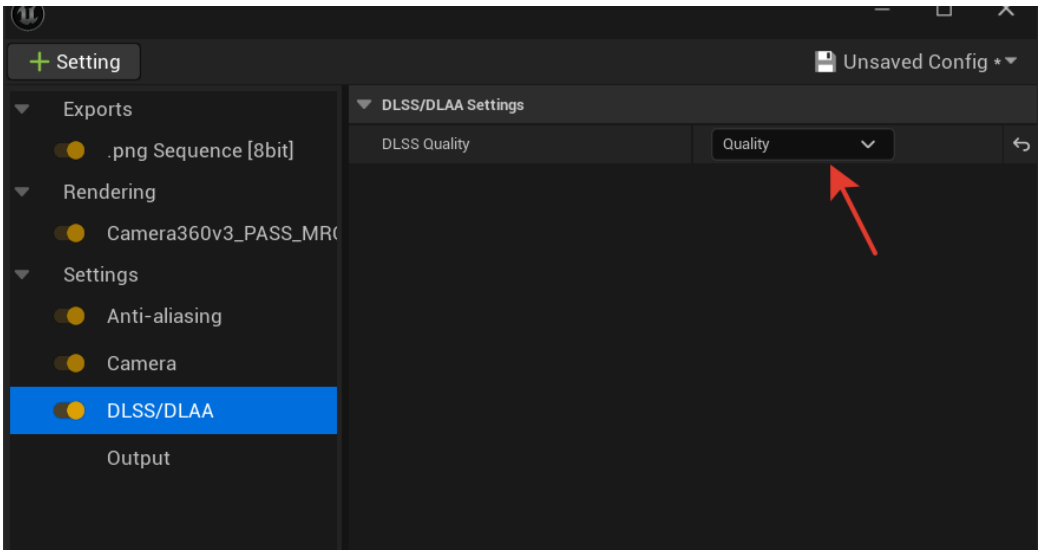
For synchronous Mono projection:
Temporal Super-Resolution (TSR)



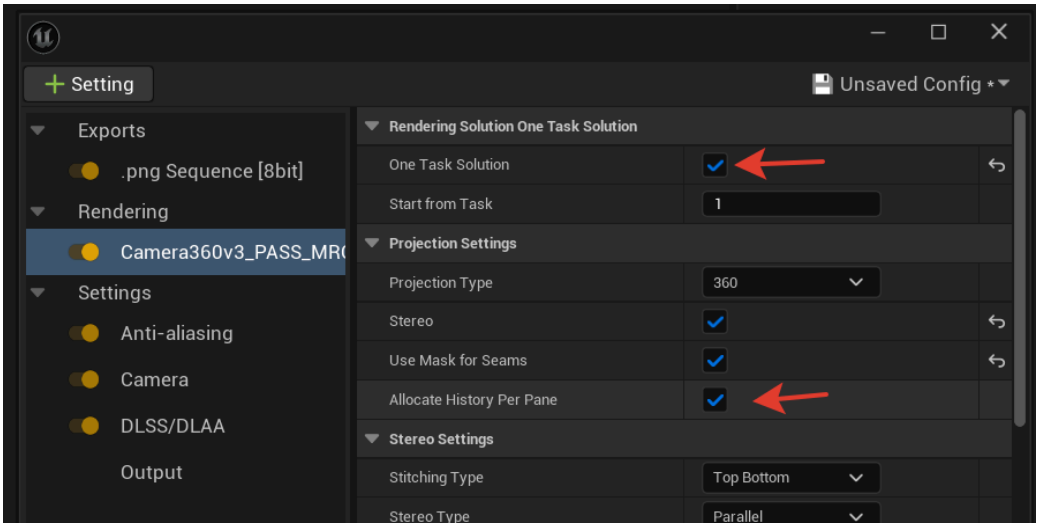


For DLSS



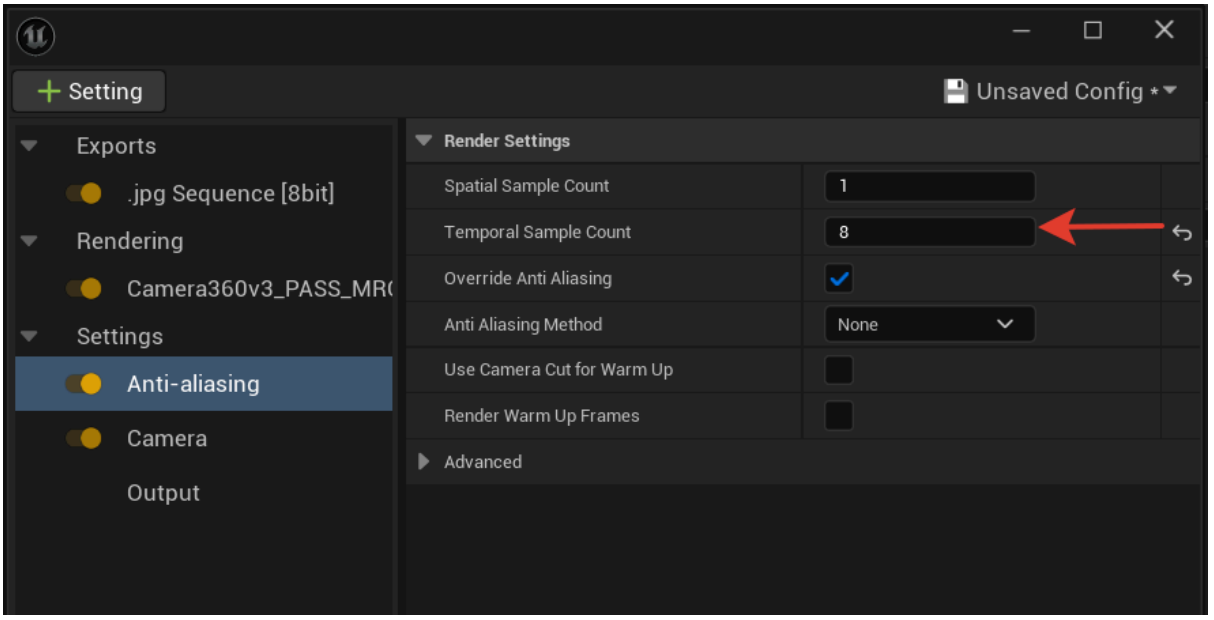


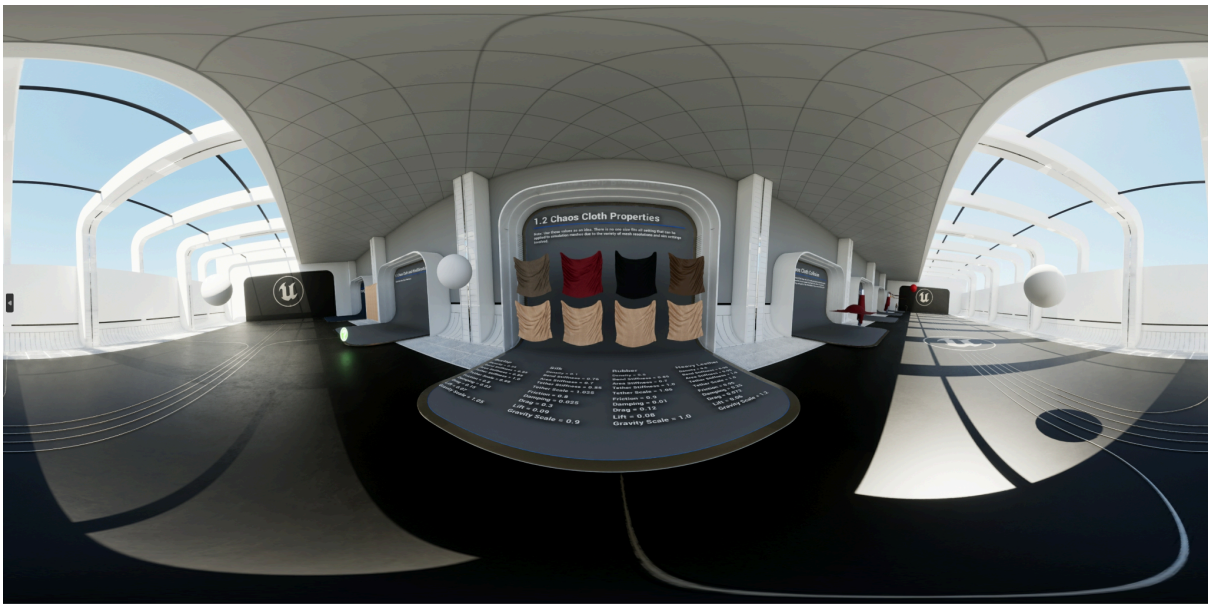
For the rest of the rendering options (Stereo or Use Mask), use the **One Task Solution.**



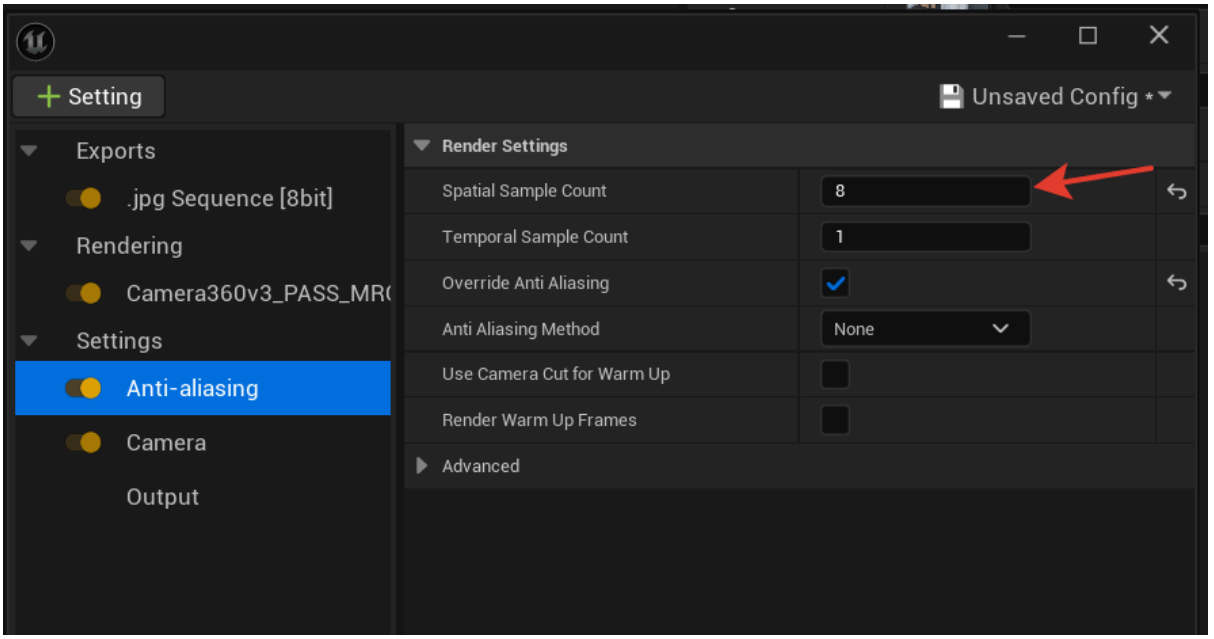
Attention:

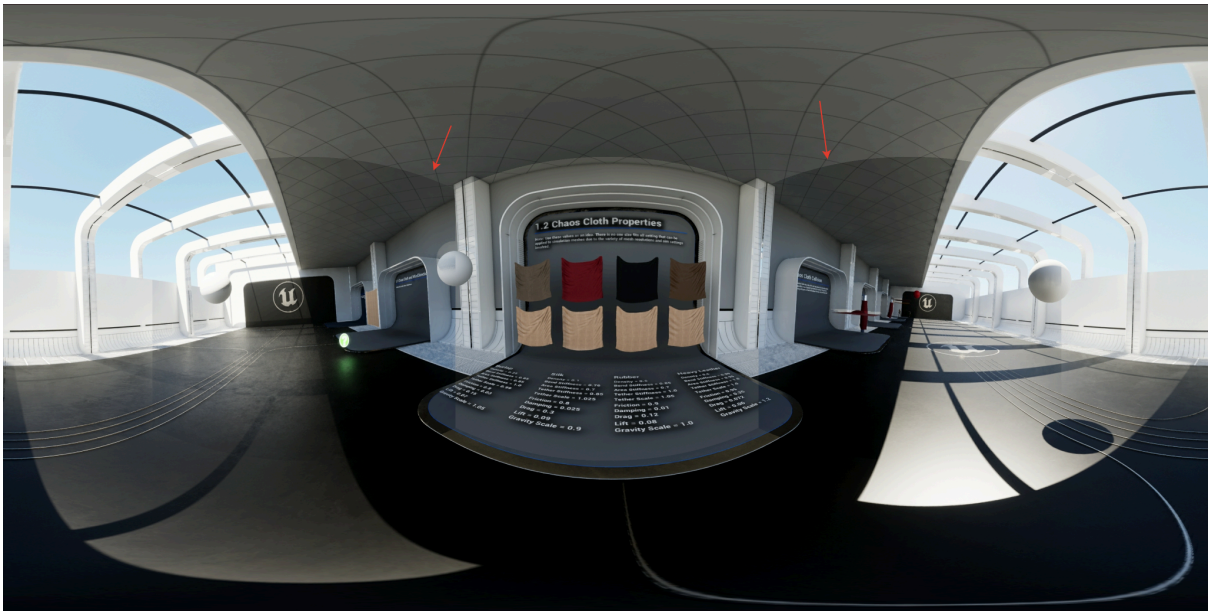
If using **Temporal you see Save History for Lumen**





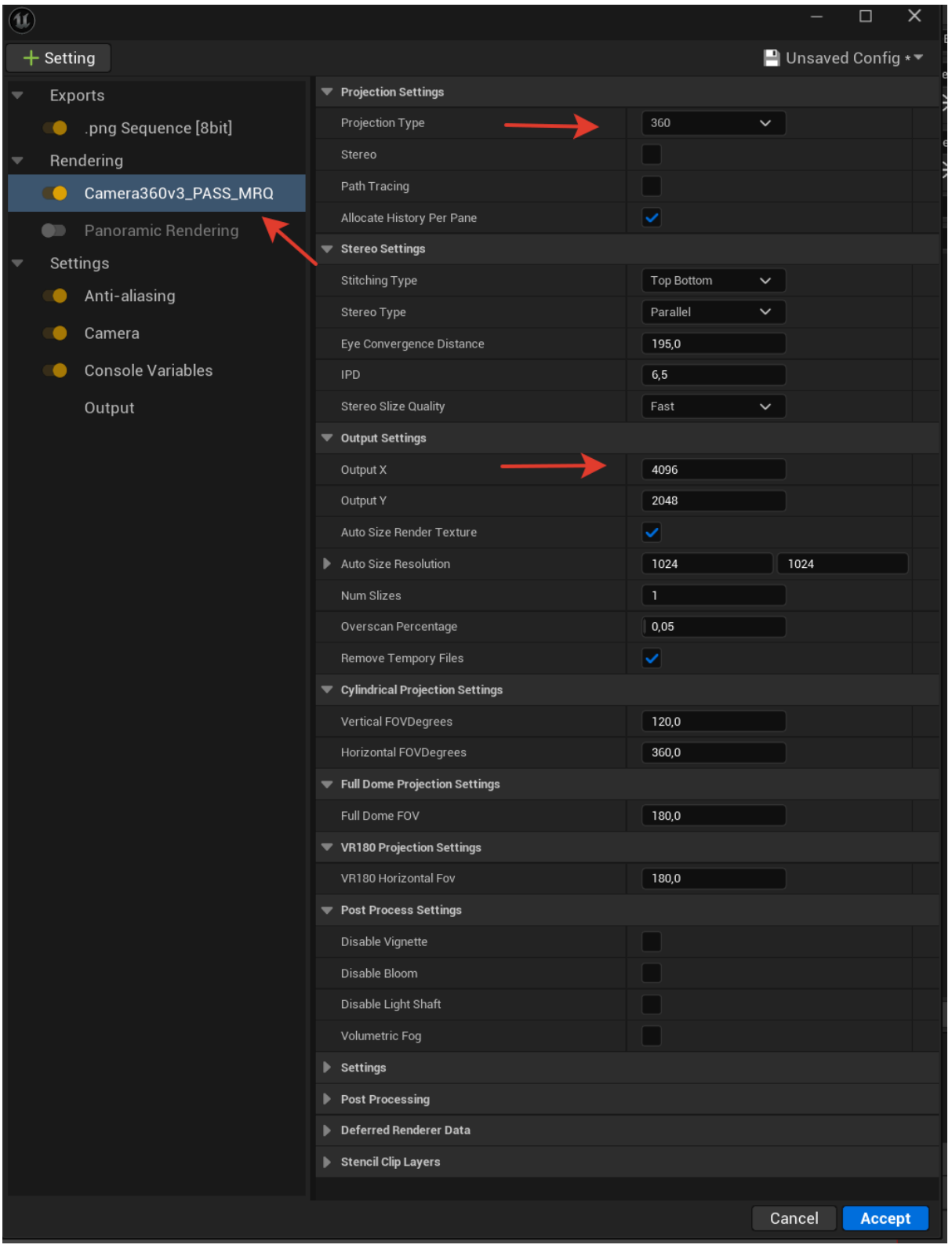
If using **Spatial Count**



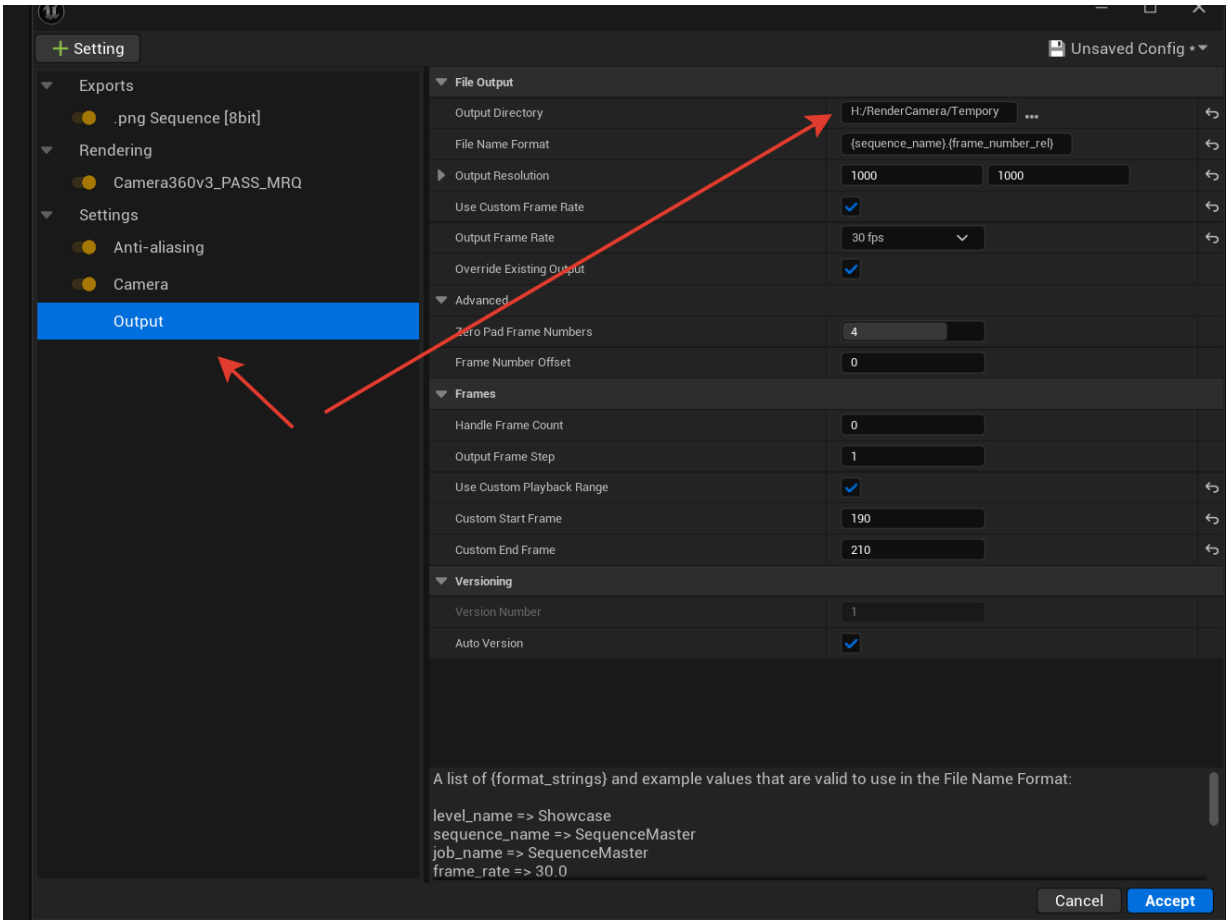


You can combine two methods **Spatial and Temporal.**

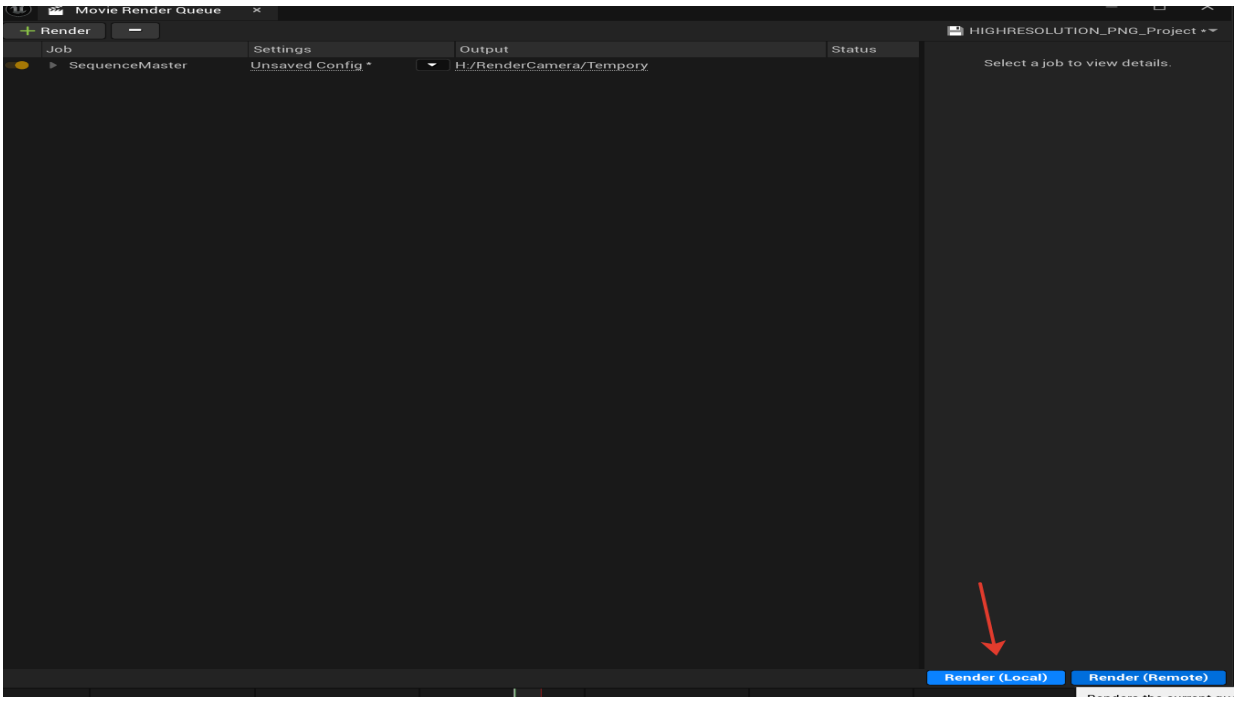
4. Select Projection and Output Size final image



5. Select Output Folder (Attention: please select **not project folder** or not rendering)



6.Accept and Start Render

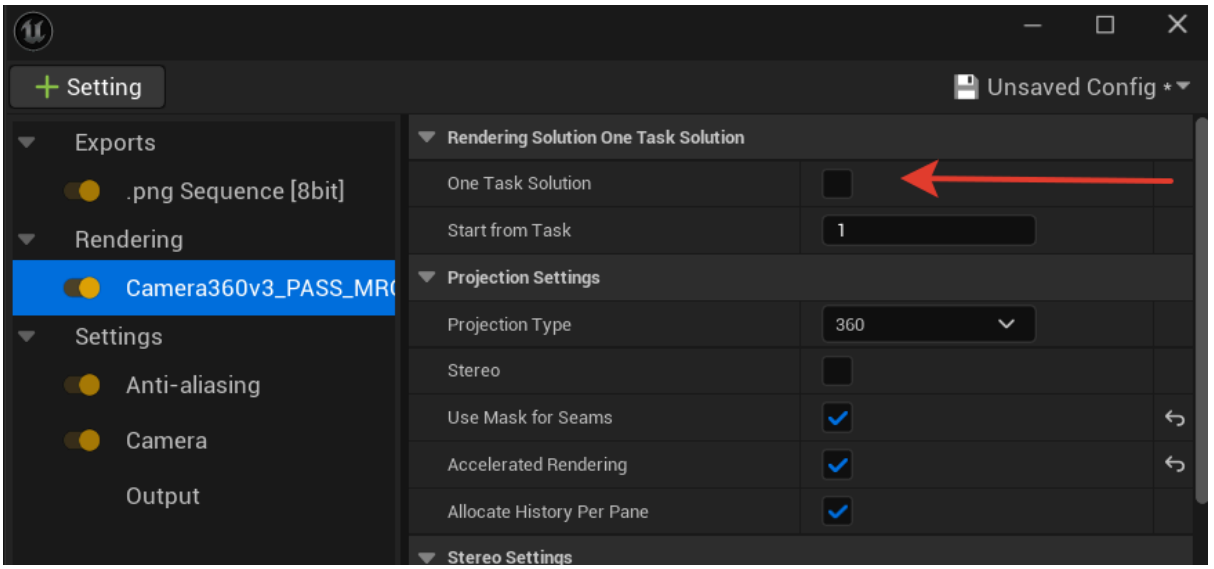


When Finish, you see Message from Movie Pipeline
example:
Too many temporal samples for the given shutter angle/tick rate combination. Temporal Samples: 8 Shutter Angle: 0.500000 TicksPerOutputFrame: Frame: 1000 Subframe: 0.000000 TicksPerSample: Frame: 62 Subframe: 0.500000. Consider converting to Spatial Samples instead!

This not Error, This does not affect the rendering. This error occurs because a lot of ticks and a lot of frame captures are used for rendering in one frame.

This happens if you use Synchronous Rendering.

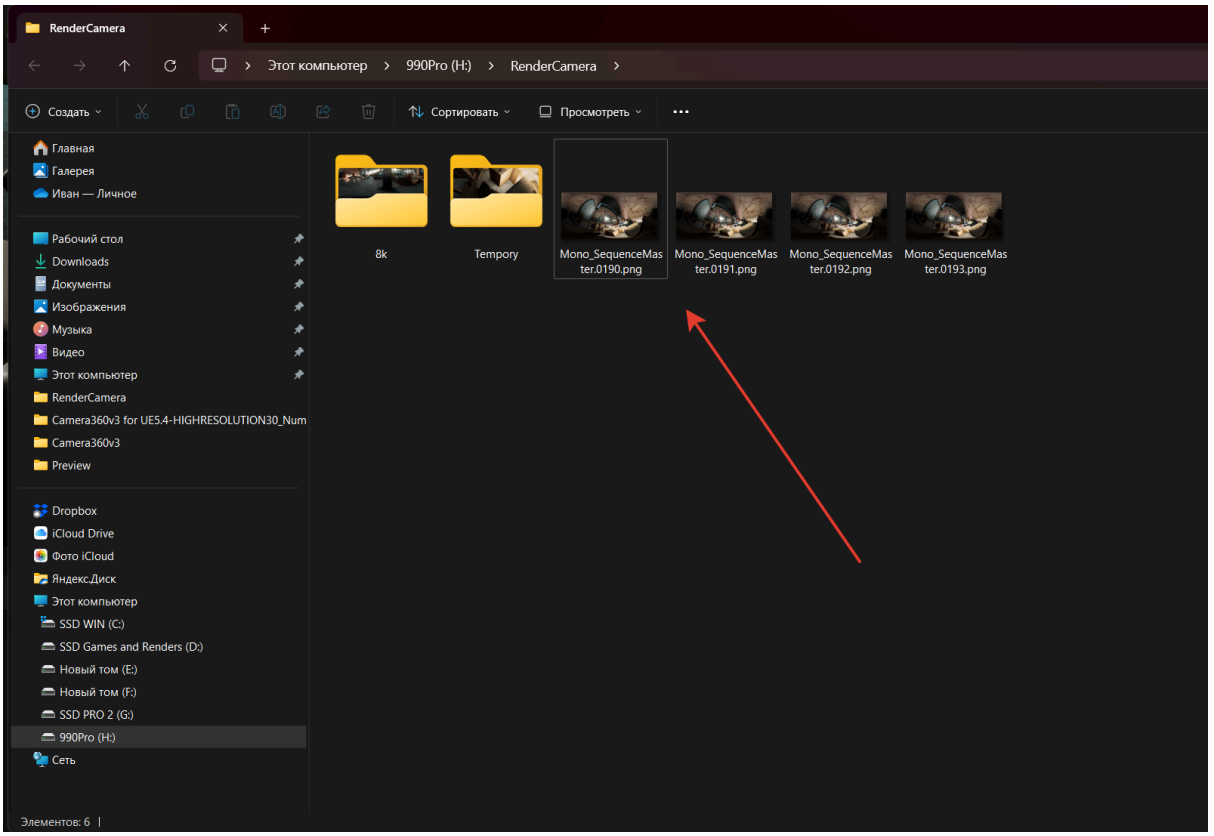
If you using OneTaskSolution you not see error.



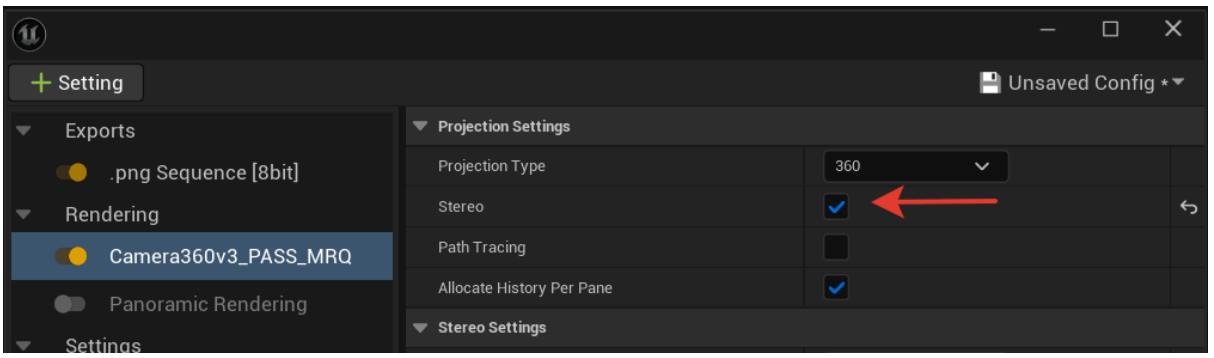
A folder “Tempory” for temporary files is also created for rendering. There will be several unused files left in it.

Also, 1-3 frames are not used during rendering. For this reason, it is recommended to take into account the size of the sequence 3 frames more than necessary. For example, if you need 7 frames, take 10 frames.

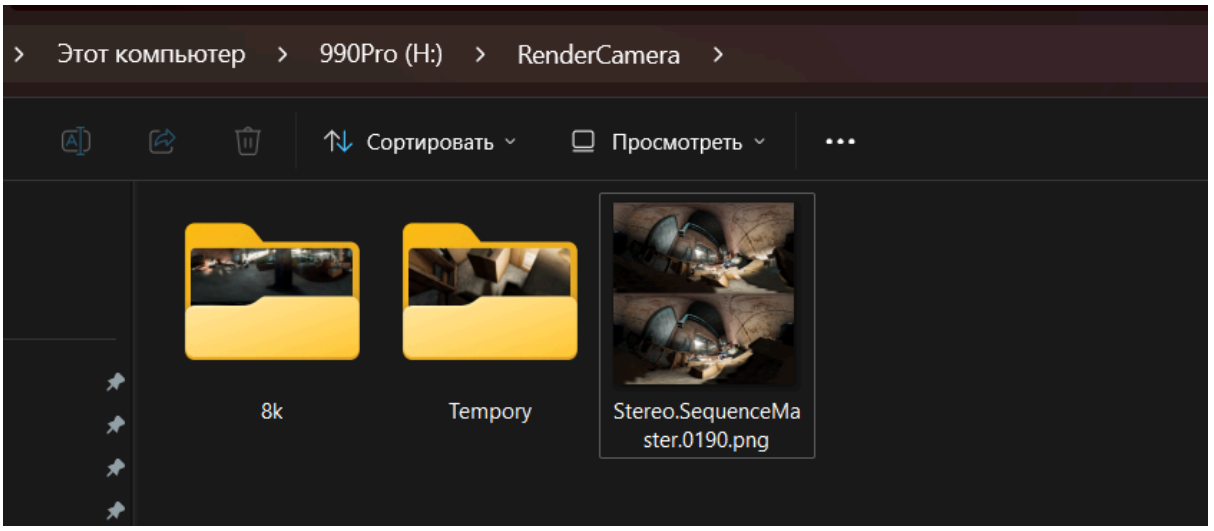
7. Result



If need stereo

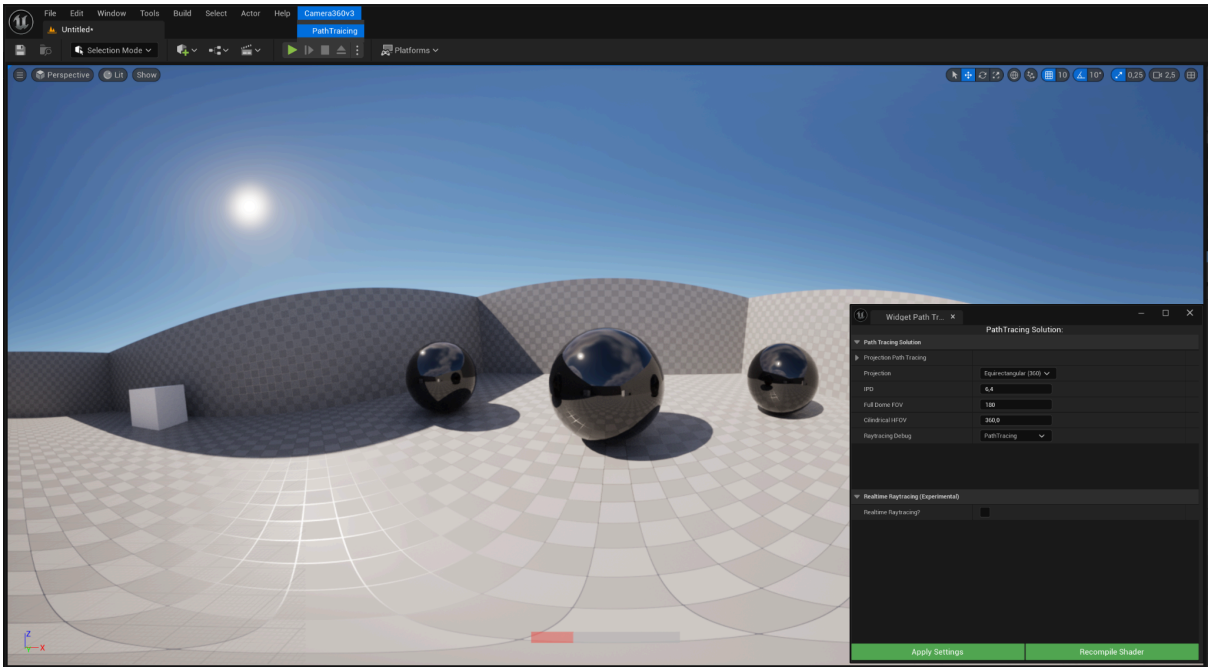


Result

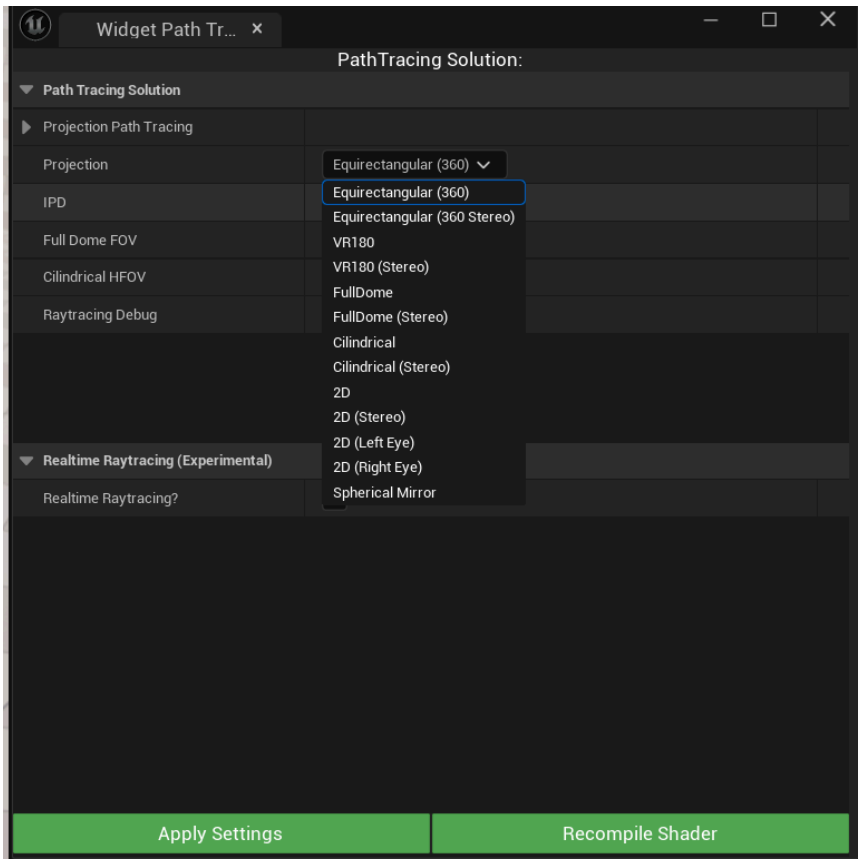


PathTracing:

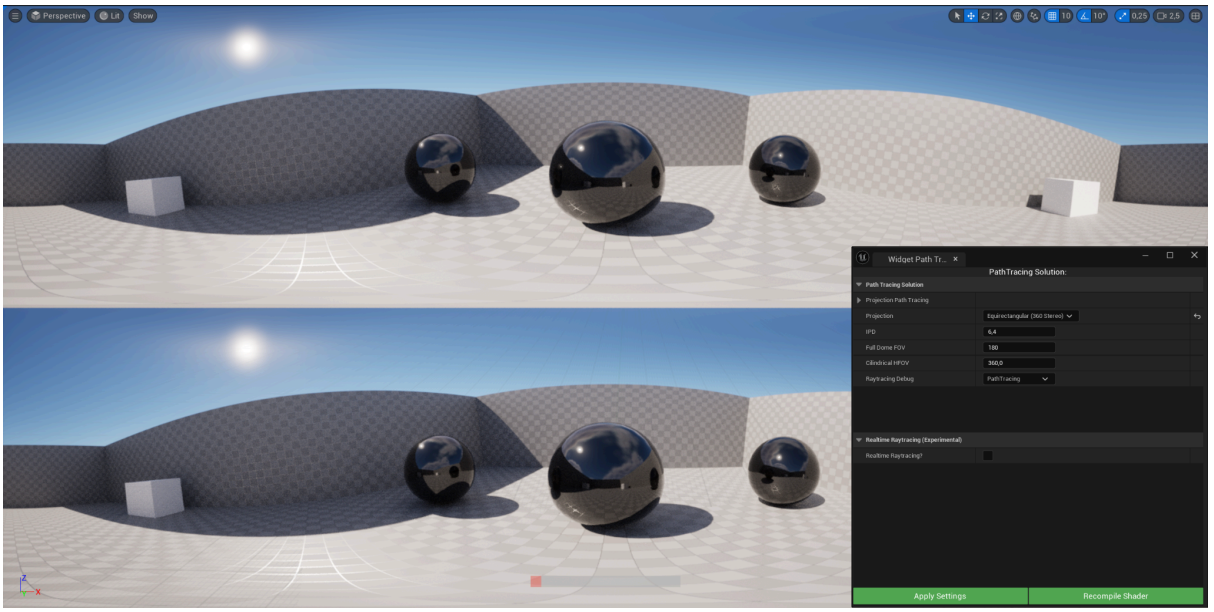
1. **You need select Menu Camera360v3 -> Select PathTracing**



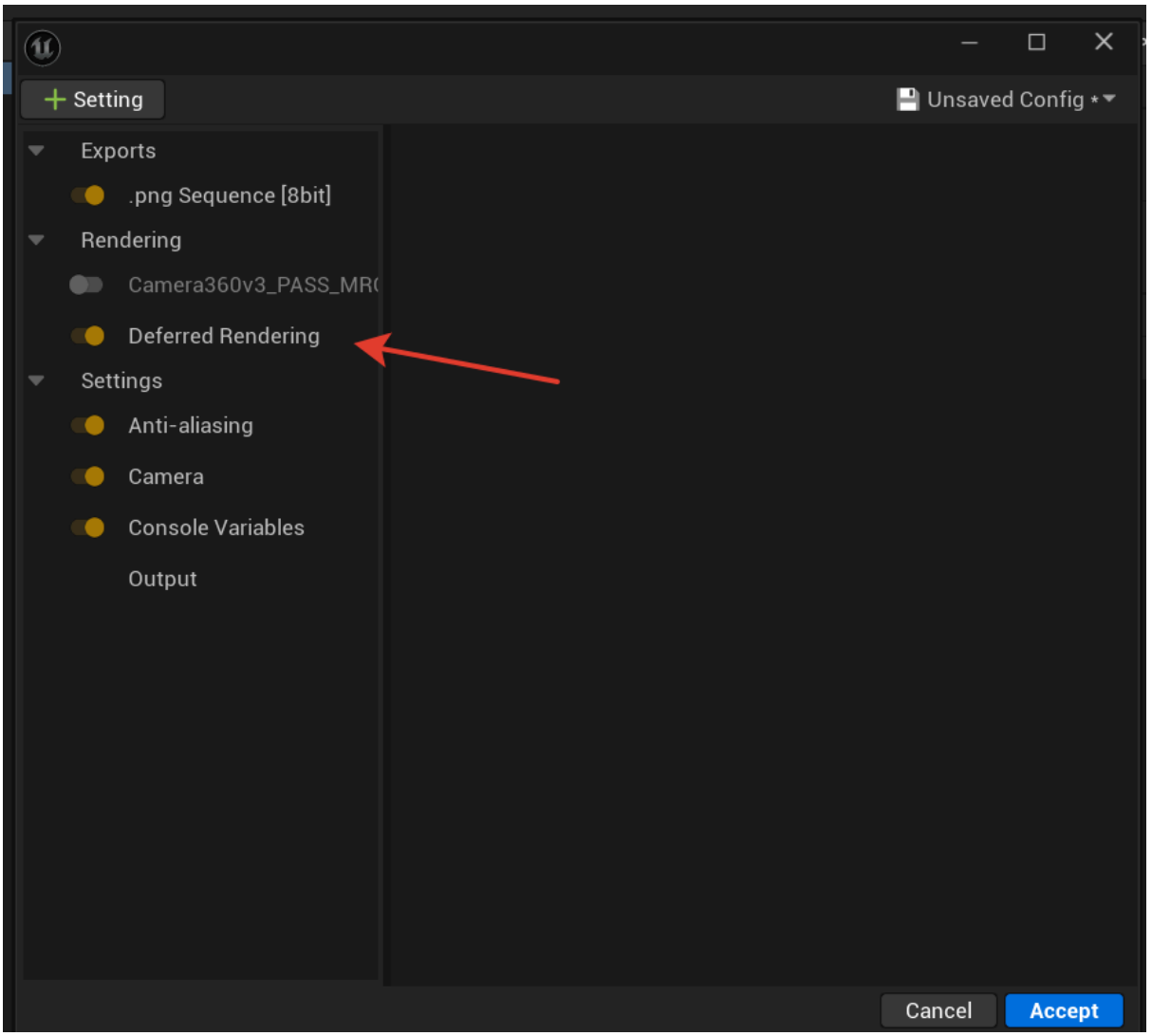
Select Projection



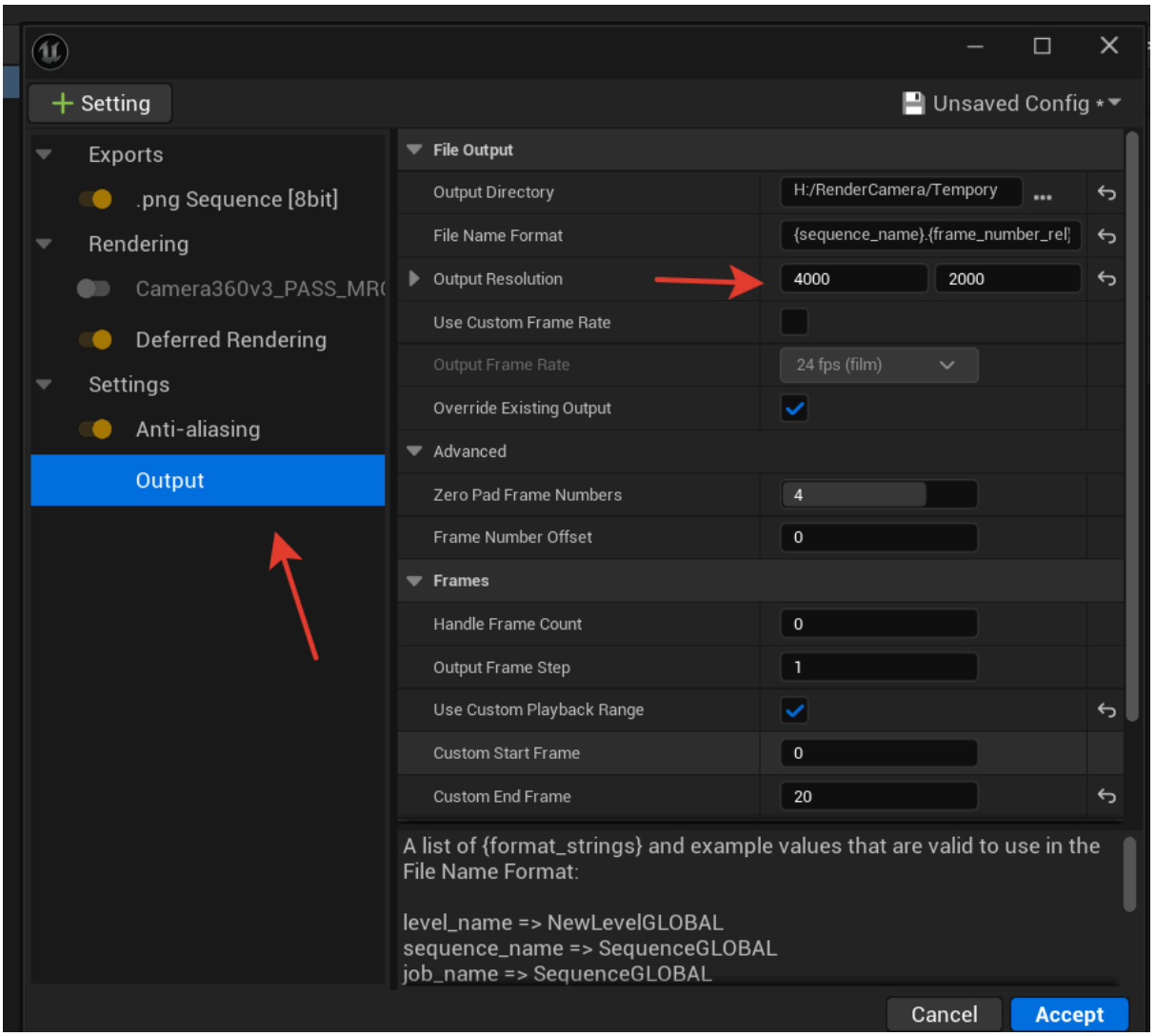
Apply Settings and Recompile Shaders.



Open Movie Render and add Deffered Render



select size for projection



Start Render