Using 'FreezeRendering' & 'View Culling/Occlusion'

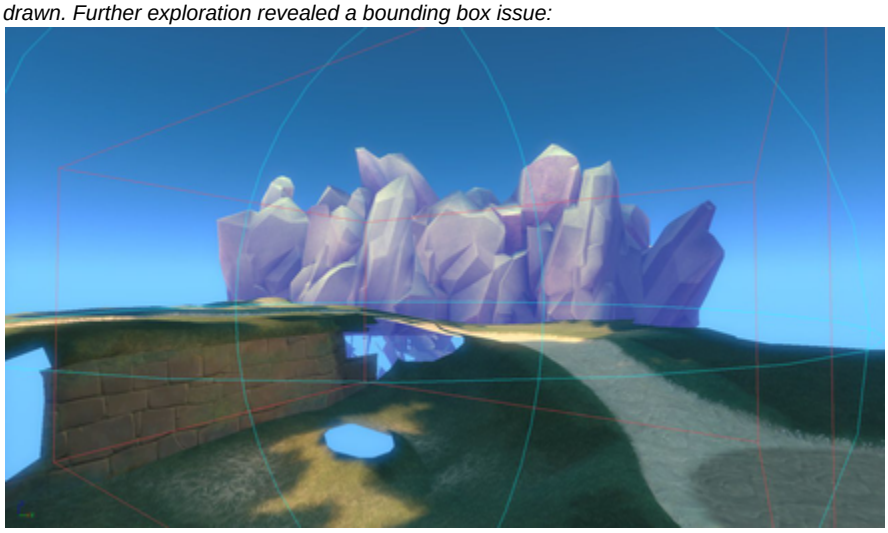
These are two functions that helps you look at what is being drawn for reducing drawcalls.
You can isolate if culling distances are too large or if bounding boxes are too big for occlusion.

'**FreezeRendering**' is a console command that captures the current frame and allows movement around the world to see what is drawn from the set viewpoint.
'**View Culling/Occlusion'** is a setting that allows you to see the freezeRendering functionality from different angles in editor.

'FreezeRendering' Tutorial

1. In game, stand in a spot that needs to be checked.
    a. 
2. Press ~ or [to open console and type *freezerendering*
    a. This will freeze everything that's currently drawn/not drawn and let you move around.
3. Walk around the level to take note of potential occlusion/bounding box issues. What is being drawn that shouldn't or is unnecessary?
    a. 
    This island of rock meshes was not physically visible behind the brick wall. But walking up and around revealed that it's still

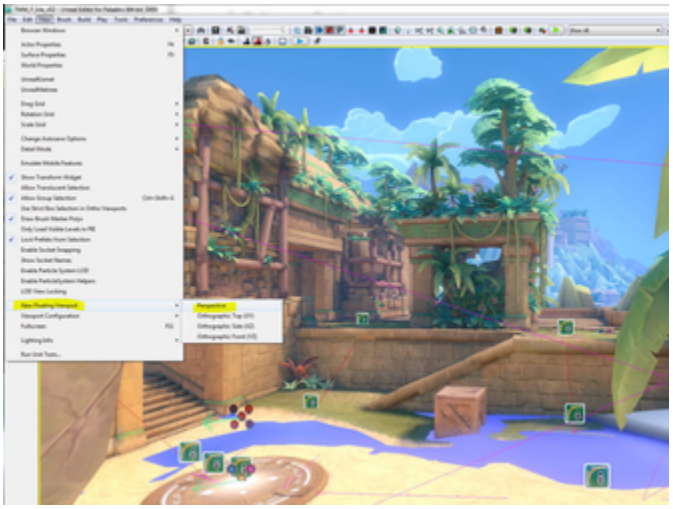
drawn. Further exploration revealed a bounding box issue:



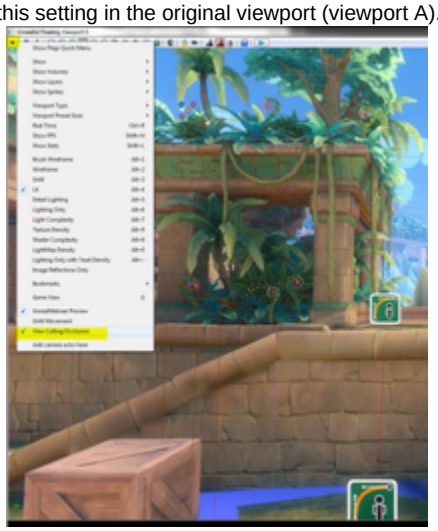
b. *Check this against the Combining Meshes Document. This would benefit from being split up, even though it's a play-space border mesh.*

'View Culling/Occlusion' Tutorial

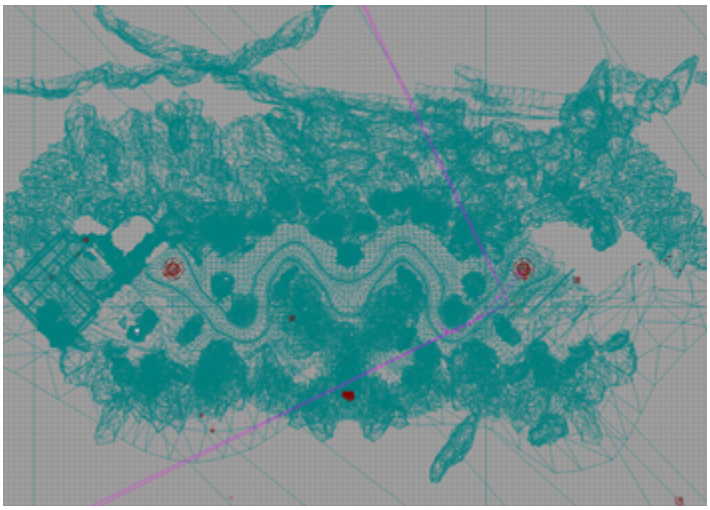
1. Open a new viewport in the editor (viewport B)
   a.



2. In the viewport settings (the downward arrow) & find 'View Culling/Occlusion' near the bottom. Enable this setting in the original viewport (viewport A).
   a.



3. Move around in viewport A. Explore what is occluded/culled to see if there are any issues in viewport B.
    a. You should see a representation of the camera's FOV in viewport B represented by the pink lines.
    b. 
    c. It is also useful to set viewport B to be Top view for an overarching view of what is culled/occluded.



1. As you can see, not many meshes are occluded from this viewpoint.