Subject: Re: Changelist for scripts.dll 4.0

Posted by Naamloos on Mon, 23 Jun 2008 12:00:29 GMT

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Saberhawk wrote on Mon, 23 June 2008 02:14Naamloos wrote on Sun, 22 June 2008 16:35Saberhawk wrote on Sun, 22 June 2008 21:38It culls by first attempting to draw the AABB (worldbox?) of a PhysClass onto the already drawn scene with color and depthbuffer writes off. It then counts the pixels that would have been rendered, if above 0 it would draw the object regularly. It'd cull basically anything you can set a physics type on. However, it's not ment as a complete replacement for VIS, and depending on how the map is set up may cull very little.

I'm not sure I fully understand the first part there, but you mean it will always still draw the 'box' around a physical object and decide whether or not to render the object if anything at all of it is visible?

Unless I'm getting it wrong this is basically what VIS does, just a different method. If so, why can't this become a full replacement for VIS? Assuming it can be improved and all that...

I know many modern games use a script-side 'culling' method rather then Renegade's VIS as it simply takes too much time to do VIS. This is also why most maps in games are a bit maze-like with a lot of walls to optimize the use of these systems.

Yes, it will always draw the bounding box and decide if it will be visible or not off of that. But that's just 20 polygons, and with no textures, lighting, or even actual rendering turned on, it's instantaneous.

Most modern games use occlusion culling to cut down on objects to render, \*but\* in those cases the engine was designed to take advantage of occlusion culling. Renegade wasn't. And we can't fake being designed for it either because we have no control over draw order. Because the draw order can be seriously messed up at times, occlusion culling can't be completely depended upon.

And there is no way to change the draw order at all unless you have \*magic words\* the W3D source code...

Hmm. Ok then here comes another question then. I'd like to know if anything is changable about LOD? (level of detail) It's currently based on both range AND a specific number of polygons being rendered. If it's possable to make it only range-dependant so let's say you get max detail objects within 100 meters, lesser between 100 and 400, and lowest detail at 400+. (possably a 4th where the model is removed completely). I'd like to hear your opinion on this being possable or not.