Subject: Visibility explanations, otherwise known as VIS explanations
Posted by Anonymous on Mon, 23 Dec 2002 18:40:00 GMT
View Forum Message <> Reply to Message

:: saved to bookmarks::Great help! Thanks:) [December 23, 2002, 18:41: Message edited by: greenhaze2003]

Subject: Visibility explanations, otherwise known as VIS explanations
Posted by Anonymous on Mon, 23 Dec 2002 18:44:00 GMT
View Forum Message <> Reply to Message

Great post ACK. I knew what VIS was in general, but your info helped me fully understand it.

Subject: Visibility explanations, otherwise known as VIS explanations
Posted by Anonymous on Tue, 24 Dec 2002 00:38:00 GMT
View Forum Message <> Reply to Message

Alright, I promised that I'd explain why the visibility system isn't needed in your maps, but is just an optional thin you may decide to do.According to a friend of mine in Westwood, this is the total purpose of the visibility system, also known as VIS. quote:The heightfield itself will still occlude models, but the interior/exterior transition of buildings and other such instance objects are not occluded unless the vis is run. Unfortunately, the models are built in such a way that they never really vis out effectively, as you can see the interiors through doors and other portals (glass, etc.), regardless of whether the door is open or not. This is why I say vis is not absolutely necessary, it does very little occlusion. It was built for making the terrain mesh in Max and importing it, rather than using the heightfield system (which didn't exist until after Renegade shipped).In other words, he's saying that the visibility system isn't doing a semi-decent job at making objects become invisible when they're out of your view.Ways to solve this, however, are actually simple and take a bit of time on your part.When you construct your VIS sectors, I suggest that you take every mesh on the map that is able to be walked on and select them all at once. Hold shift, drag the new clones of them down about two or three meters, then right click and hide everything that is unselected.Take the sectors and detach medium-sized polygons from them, make sure that the polygons are attached to each other and not across the map from each other. Name each one VIS(Numbers).You'll usually end up with about 100-300 VIS sectors after doing that. Take each mesh and check hide and VIS in the W3D Tools section of Max.Now, select each mesh named VIS and click File > Save Selected. Save it as C&C_YourMapName_Emis.Export it to your map folder's Levels folder, exporting it as anything that ends with _emis.w3d.Open your map in LevelEdit, then make a new temporary preset in the Terrain section. Call it anything that ends with _emis.Make it, you won't see it appear but it will be there.Auto-generate VIS. Set it to a granularity of eight.It should finish within 20-60 minutes, so just do something else while it chugs away.After it finishes, look around your map for a bit just for an initial run-through to see if anything is wrong.After doing that, click on two buttons at top. First, the display VIS sector button, showing where your sectors are located when you run over them. It shows the boundaries of them and makes it easier to know where to place a manual correction point.Two, click the wireframe button. People may wonder why I would use wireframe to do my VIS optimizations... But think about it;

you can tell exactly where to place a point and where not to because you can see through objects now. That means you can tell if there's a mountain behind that GDI Weapons Factory, and if there isn't, then leave it alone! The problem with all maps is that the VIS isn't occluding anything well enough to make your FPS increase... And this is why.So, start your trek around your map in wireframe mode. If you're unsure if something should be invisible or not, hit F9 while running around and it will toggle between wireframe and non-wireframe. It should be self-explanatory from here on. Go behind mountains and such, if anything you see goes invisible, that's good! If it doesn't, that's bad... But, if you see something invisible in plain sight, then make sure to place a manual correction point.Finally, manual correction points are placed by pressing ctrl+`, the button next to the number one key. [December 23, 2002, 13:25: Message edited by: aircraftkiller2001]

Subject: Visibility explanations, otherwise known as VIS explanations
Posted by Anonymous on Tue, 24 Dec 2002 10:09:00 GMT
View Forum Message <> Reply to Message

I dont know if you'll answer this because im a madcow but here is my list of questions regarding your tutorial.1. When autogenerating vis i set granularity to 8 as you discussed but there are options at the bottom do i need to click any of those for best results.2. My map has a center mountain with a floor circling all the way around it. I believe you stated previously that there should be a vis sector surrounding the mountain correct? 2-2. If 2 is correct Should i clone the floor the mountain sits on and sepearate every 10 meters.or should the vis layer around the mountain not touch and or go through the mountain for best results.3. Is there a chart or significance to the color codes in the vis window? (i notice bacface is always gray.)4. Im having trouble locating information on how to fix the backface overflow. my hon top layer disappears when walking up middle ramp and i cannot place a manual vis point due to backface overflow rejected. When looking in the vis window the backface is gray and seems to be the outside of the window and in some spots the backface seems to be the box barrier around the map i use for the mountains around the map.5.I dont seem to have an option in the vis menu to display vis sectors. Can u tell me where that option is please. In conclusion i'll say answer these or not the post helped my fps greatly about a 5 to 10 times increase thanks. [December 24, 2002, 12:31: Message edited by: Cowick]

Subject: Visibility explanations, otherwise known as VIS explanations
Posted by Anonymous on Tue, 24 Dec 2002 14:27:00 GMT
View Forum Message <> Reply to Message

Okay thanks again.

Subject: Visibility explanations, otherwise known as VIS explanations
Posted by Anonymous on Wed, 25 Dec 2002 00:46:00 GMT
View Forum Message <> Reply to Message

For flight enabled maps, you need to take the VIS sectors and clone them every ten meters until they extend past the flight barrier in the sky.

Subject: Visibility explanations, otherwise known as VIS explanations
Posted by Anonymous on Wed, 25 Dec 2002 10:24:00 GMT
View Forum Message <> Reply to Message

yep, no more worries.

Subject: Visibility explanations, otherwise known as VIS explanations
Posted by Anonymous on Mon, 24 Feb 2003 15:48:00 GMT
View Forum Message <> Reply to Message

should i check vis b4 i export my buildings to my heightfeild map?And can i place manual vis cameras around the problem areas in a heightfield map and just run the manual vis cameras?

Subject: Visibility explanations, otherwise known as VIS explanations
Posted by Anonymous on Tue, 25 Feb 2003 10:03:00 GMT
View Forum Message <> Reply to Message

The vis camers won't help you much because there not actual vis sectors. The cameras are used after you generated VIS to correct terrain glitches. Say before you enter a building when your in walk mode in leveledit the interior goes white then back into view. You would add a vis camera where the interior went white and it would make it show up again. Heightfield shouldn't really be used for big maps as titan discovered his 150,000 polygon 500 metre square map terrain was.

Subject: Visibility explanations, otherwise known as VIS explanations
Posted by Anonymous on Wed, 26 Feb 2003 12:56:00 GMT
View Forum Message <> Reply to Message

thanks havoc i changed the density and made the map smaller i started with 500x500 this time but i cut out what i didnt use im prob at about 250x200 I noticed that spawing weapons allover the place will count as poly too(almost positive)my new map is at 22,000 poly and running at 60 FPS all around except where you can veiw about 20,000 poly at once, where the fps are at 30...shouldnt effect gameplay though!!Almost complete with completely redoing my map....pain the ash it is to place pt's and spawners all over again

---