**A vis\_leafgroup guide**

With this thread I would like to present my findings when playing with the VIS texture under common and the VIS\_leafgroup. After testing I have found that the usage of VIS brushes and VIS\_leafgroup could be as serious FPS booster but as usually when boosting FPS you are also boosting VIS.   
  
The testmap as usual an empty box, this time I drew an rather high wall dividing the map into two sides, there was an opening in the wall so you could walk from one side to an other (no door just an opening). On one side I drew two arbitrary brushes (50 sides each). They were my testobjects and I wanted to see when they got drawn.  
  
**Finding no:1**  
My first test was without any VIS brushes and VIS\_leafgroup. The compiled map gave the following:  
64 portalclusters  
176 numportals  
162 numfaces  
Visdatasize:520  
  
As everyone might suspect, YES wherever you stand in the map the arbitrary brushes are drawn, see picture 1. Please keep on reading after the picture.  
  
**NO PICTURE AVAILABLE**  
  
Now let's see if I can make myself understood. Now I'm going to describe a plain VIS brush (no leafgroup yet). If you look at the picture and imagine that you draw a brush that completly surrounds the arbitrary brushes, then you apply the common VIS texture to that brush. If that brush can't be seen from the point you are standing then nothing that are completly inside that brush will be drawn. Once you move around in the map so that you reach an angle where that VIS brush is seen then everything inside will get drawn. (ok! the vis brush isn't visible in the game but you know what I mean if you know something about mapping)  
  
**Finding no:2**  
Now on to the the VIS\_leafgroup. In this example I have drawn a VIS brush around the arbitrary brushes as mentioned earlier. I have also drawn a VIS brush on the other side of the map. Then you select one of the VIS brushes and give it the VIS\_leafgroup entity, then deselect and select the other one and give that one the VIS\_leafgroup entity. Then we will use the target and targetname properties. The VIS\_leafgroup that contains the arbitrary brushes are given a targetname "v1" and the other VIS\_leafgroup are given a target "v1". Compiling gives the following:  
77 portalclusters  
200 numportals  
202 numfaces  
Visdatasize:1240   
  
Now I'll try and explain what happens. When looking at picture 2 you should know that we are **not standing inside** the "empty" VIS brush and we are standing in such angle that the VIS brush that has the arbitrary brushes are seen. As you can see they are drawn (keep on reading after the picture)  
**NO PICTURE AVAILABLE**  
  
In the next picture, pic 3, we have moved into the empty VIS brush. Now you can see that the arbitrary brushes are not drawn. This means that when inside this VIS\_leafgroup brush anything inside targeted VIS\_leafgroup brushes are not drawn. This could be very useful in maps. (keep reading after the picture, I'm nearly done!!)

**NO PICTURE AVAILABLE**  
  
Finally I just want to say that be careful when using this because when inside a VIS\_leafgroup brush any targeted brush will not be drawn even if things inside it are (should be) viewable. I'm showing this in picture 4 and 5. Picture 4 still inside the brush, picture 5, moved out. In these pictures a static/model was added just wanted to see if they also were affected by the VIS\_leafgroup. As you can see they where. The last picture is just a picture from the editor showing how the map looks. Maybe not seen in that picture but both VIS\_leafgroup brushes have the VIS texture. Over and out (you must be sick of my post so I'll go to bed now).  
  
**NO PICTURES AVAILABLE**

**Extra Text:**

I've been looking some in the m4l0.map about VIS and I just want to say that they have used a lot of VIS\_leafgroup in that one. In that map I also found a couple of VIS brushes that I couldn't understand why they where there so this is by no means a complete guide, it might be more ways to use the VIS brushes. Feel free to add to this thread, that would make the tutorial even better. (By TheStorm)

Try and remeber that the map u are referring to is a SP map.......also that map is one of the biggest maps in the game size wise..... So Vis------ and Vis\_leafgroup brushes are very much needed. No doubt those brushes make a difference. Even on your test map they seem to make a difference however its is very very small difference......You have to ask your self is it worth the effort. On a tastefully made MP map that is modest in size.....Vis\_leafgroup etc is hardly needed. Now if your intentions are to make a massive MP or SP map with lots of effects, Models and lots of buildings such as a A large city etc Then I highly recommend this process. (By Vampir)

**Extra Q&A on VIS\_leafgroup**

I just want to report that the VIS\_leafgroup thing works even if you compile with -fast VIS. Parts that are in VIS brushes are not drawn if not seen and targeted VIS\_leafgroups are not drawn.

Questions

I have read the post here and the other post, help me understand something----  
  
1.) When using the VIS\_leafgroup, u have to give it a targetname and a value, if i understand this right, what are the values again, got lost in the other post about VIS...  
  
2.) When using the VIS itself, it has to incompass the VIS\_leafgroup, so all the VIS\_leafgroups have to have the same targetname and value???  
  
  
3.) When using the VIS itself, this is gonna cover everything that isn't seen, say behind the wall???  
  
  
4.) Final thing, should the VIS\_leafgroup cover static items, or should it be just the VIS????

Answer

If you make one VIS\_leafgroup brush then give that brush a KEY: "target" and VALUE: "anytext1" (choose your own value/text). Then you can set the KEY: "targetname" in an other VIS\_leafgroup and set the VALUE: "anytext1". When inside the one that says "target anytext1" the one with "targetname anytext1" will not be drawn. You can give every VIS\_leafgroup both a target and a targetname. You can set several targets inside one VIS leafgroup and that will shut down all targeted VIS\_leafgroups. (don't know if this helps you, feels messy!!).  
  
Try and look at the m4l0.map that came with the editor, selecta a VIS brush and hit N key. Look how they have set several targets.  
  
Anything that you want to be affected by the vis brush should be completly inside the brush. Try and read my other thread a couple of more times.

Questions

ok, now i need to know how the heck i can see what u see in the link above, where it shows what is being drawn and what isn't, i know it is a console command, just not sure what it is........  
  
so far what tests i have run show no difference in the fps, that is why i am asking for the console command, that way i can "see" what it is doing, thanx again.....

Answer

Try **r\_showtris 2**, it shows in wireframe everything that is drawn from the point that the player are standing. r\_showtris 1 only wireframes what the player actually can see. (messy messy, are you with me???) (FPS increases when VIS\_leafgroup is created)

Questions

ARRRG!!!!! keeps telling me it is cheat protected, wtf does that mean, maybe because i set cheats for single player??, not sure, just asking if u know how to get it to work.....

Answer

Copy your BSP file to the SP folder maps/ instead of maps/dm/. Then bring down the console and type **maplist**, select your map and VoilÃ¡ now it works for you!!!!

Question

and what is the name of the single player map folder??

Answer

MP FFA/TDM is  
  
main\maps\dm  
  
MP OBJ is  
  
main\maps\obj  
  
SP is  
  
main\maps\  
  
Compile you map, then use explorer and copy your BSP file. Browse to your mohaa game directory, go into folder main and then folder maps, paste the BSP (if you don't have a maps folder in main then just make one). Launch game with cheats enabled and then use maplist command. Double click on your map in that list.