#### Subject: ACK Posted by iRANian on Sat, 23 Mar 2013 08:45:31 GMT View Forum Message <> Reply to Message

Could you fix the FPS issues on Fjords?

Subject: Re: ACK Posted by Aircraftkiller on Sat, 23 Mar 2013 15:04:41 GMT View Forum Message <> Reply to Message

There's three options:

1) Buy/build a computer that meets standards of 2010 or higher

2) Work with Saberhawk to program the tool that lets vis calculation work with multiple cores, so it wouldn't take me weeks upon weeks of leaving LevelEdit open to run vis calculations

3) Deal with it

Subject: Re: ACK Posted by iRANian on Sat, 23 Mar 2013 15:26:24 GMT View Forum Message <> Reply to Message

I have a PC I bought in November 2010 for about 600 euros Iol, i get about 50 FPS playing Farcry 3 on high detail settings. (which is a shitty console port)

Why can't you just add VIS to the map lol

Subject: Re: ACK Posted by BAGUETTE on Sat, 23 Mar 2013 15:50:26 GMT View Forum Message <> Reply to Message

I have a similar case to Iran, play BF3 ultra high 70-90 fps np.

Plays fjords, depending on where I'm looking at 20-310fps, I can't imagine what would happen to my FPS if a mass were to be going on.

Lots of people who play ren, play it because its all their PC will handle lol, mrhero101 for example gets 13 fps on that map making it unplayable

Subject: Re: ACK Posted by iRANian on Sat, 23 Mar 2013 15:55:45 GMT I get 100 fps in Nod's base, but when looking into the middle it drops sharply, at the waterfall i get like 30 lol

Subject: Re: ACK Posted by Aircraftkiller on Sat, 23 Mar 2013 15:58:41 GMT View Forum Message <> Reply to Message

iRANian wrote on Sat, 23 March 2013 11:26 Why can't you just add VIS to the map lol

Quote:Work with Saberhawk to program the tool that lets vis calculation work with multiple cores, so it wouldn't take me weeks upon weeks of leaving LevelEdit open to run vis calculations

It's like asking me "Why don't you just go stand in front of a moving train?" I'd do it if it wouldn't require so much personal time. I don't want to leave my computer running for weeks just to render the vis points, which I'd have to go back through and fix, assuming I didn't get a power outage and lose everything before it finished. If I removed the flying units, it would take a tenth of the time to calculate, but it would still take a long time to do it because of the size of the map.

If you can work with Saberhawk to get a better vis calculator, I'll gladly use it and implement it. That or I'll just make a smaller map. Either or.

Subject: Re: ACK Posted by Generalcamo on Sat, 23 Mar 2013 16:15:22 GMT View Forum Message <> Reply to Message

It appears that single core computers work the best, on testing. Multi-core computers suffer greatly, due to the fact that Renegade only uses 2 threads...

Subject: Re: ACK Posted by iRANian on Sat, 23 Mar 2013 16:45:33 GMT View Forum Message <> Reply to Message

Can't you just give someone else the map source and have them generate the VIS?

I don't really understand why this is such an issue lol

Subject: Re: ACK Posted by Aircraftkiller on Sat, 23 Mar 2013 16:59:33 GMT View Forum Message <> Reply to Message Because I don't give away my source files, generally speaking. Even if I did, someone would still have to fly through the map and check every single accessible spot to make sure it's not screwing up. If you know someone who wants to spend the time to make it work, let me know. I'll consider sending them the files to work with. I don't want 10 different versions of my maps floating around, so that's why I don't give away source files.

/And I don't want someone who's going to do a half-ass job taking my source files. I'd rather not have my name attached to that

Subject: Re: ACK Posted by Generalcamo on Sat, 23 Mar 2013 17:13:27 GMT View Forum Message <> Reply to Message

Well, I would like to see another version anyway. You could really take advantage of new 4.1 abilities, such as proper helipads.

Subject: Re: ACK Posted by NACHO-ARG on Sat, 23 Mar 2013 18:50:06 GMT View Forum Message <> Reply to Message

where can i get the last build of Fjords?

Subject: Re: ACK Posted by BoMbZu on Sun, 24 Mar 2013 13:42:25 GMT View Forum Message <> Reply to Message

This topic caught my attention, I was wondering what exactly is VIS or are VIS points, and why would calculating them result in a smoother rate of frames.

I tried a Google search but couldnt find anything useful. Just curious

Subject: Re: ACK Posted by Bazil on Sun, 24 Mar 2013 13:42:48 GMT View Forum Message <> Reply to Message

NACHO-ARG wrote on Sat, 23 March 2013 21:50where can i get the last build of Fjords?

Subject: Re: ACK Posted by Reaver11 on Sun, 24 Mar 2013 14:33:58 GMT BoMbZu wrote on Sun, 24 March 2013 06:42This topic caught my attention, I was wondering what exactly is VIS or are VIS points, and why would calculating them result in a smoother rate of frames.

I tried a Google search but couldnt find anything useful. Just curious

To put it simple VIS=Visibility It is a system to determine what the computer needs to render from the players position in the map.

Parts of the map that cant be seen from that position wont be rendered thus decreasing load on your system.

That's the simple version of what VIS is.

Manual VIS points are placed in LE to correct for errors that Renegade's Visibility system makes (these points are placed manually!) sadly Ren makes allot of errors.

Errors manifest in disappearance of trees parts of the map, building interiors.

Subject: Re: ACK Posted by EvilWhiteDragon on Sun, 24 Mar 2013 14:47:52 GMT View Forum Message <> Reply to Message

I won't mind making my computer work hard by calculating this. I do however not want to work in leveledit to fix issues with VIS.

Subject: Re: ACK Posted by Ethenal on Sun, 24 Mar 2013 16:45:32 GMT View Forum Message <> Reply to Message

If Fjords had VIS it would just be even more so the SHIT

Subject: Re: ACK Posted by Speedy059 on Sun, 24 Mar 2013 17:14:29 GMT View Forum Message <> Reply to Message

Can you do this kind of rendering on a remote computer, like a Windows Server? Or does it need local graphics card access?

ACK, contact me if a remote server could do the trick. Letting it run for a week or longer wont be a problem.

### Subject: Re: ACK Posted by Aircraftkiller on Sun, 24 Mar 2013 17:30:37 GMT View Forum Message <> Reply to Message

You would have to install LevelEdit on your machine, and let it run the vis calculations. Then someone would have to run through it and place all of the points by hand, including all of the vis points that need to be placed in the air up to 90 meters in the sky. It's a very time consuming process and it's why I didn't end up doing it at the end.

Subject: Re: ACK Posted by Gen\_Blacky on Mon, 25 Mar 2013 03:22:14 GMT View Forum Message <> Reply to Message

Quote:It's a very time consuming process and it's why I didn't end up doing it at the end.

The vis calculations don't take that long depending on how big each of your vis sectors are. The hard part is doing the detail hand work for the vis system and takes a very long time to do it right specially flying maps.

I would make and oversized vis sectors if you even added one. 30 x 30

Did you ever add all the vis planes for flying? I assume not.

3) Deal with it

Subject: Re: ACK Posted by Aircraftkiller on Mon, 25 Mar 2013 05:04:14 GMT View Forum Message <> Reply to Message

Judging by what I saw, it would've taken over a week to calculate the points. That isn't even accounting for manual placement times.

Subject: Re: ACK Posted by Ani on Mon, 25 Mar 2013 05:36:02 GMT View Forum Message <> Reply to Message

Are manual placements actually necessary? Why can't some of the advanced coders Renegade has to offer be able to fix and/or optimize the VIS algorithms?

I'm not a map designer, coder or any of that but what would be the problem if we just had VIS points uniformly placed throughout the entire map. There wouldn't be dead zones where shit wouldn't load, and if i'm not mistaking using this method would probably drastically cut down the times for calculating the zones?

Then again, knowing all the shitty limitations that Renegade has, this might not be possible.

Subject: Re: ACK Posted by Reaver11 on Mon, 25 Mar 2013 19:20:41 GMT View Forum Message <> Reply to Message

Manual placements are needed in every map you apply vis. With the source of Renegade it might have been possible to optimize VIS. Since I don't see this happening with just scripting.

Subject: Re: ACK Posted by Ani on Mon, 25 Mar 2013 20:15:13 GMT View Forum Message <> Reply to Message

Didn't jonwil release a version of LevelEdit at one point that included some fixes? How was he able to do that?

I still think it'd be easier to just have a VIS point (or whatever) every couple of renemeters uniformly placed all around a map.

Subject: Re: ACK Posted by Gen\_Blacky on Mon, 25 Mar 2013 20:29:22 GMT View Forum Message <> Reply to Message

Ani wrote on Mon, 25 March 2013 14:15Didn't jonwil release a version of LevelEdit at one point that included some fixes? How was he able to do that?

I still think it'd be easier to just have a VIS point (or whatever) every couple of renemeters uniformly placed all around a map.

Nothing was done with the vis system as far as i know.

Not possible with the current system I would imagine. Hard to calculate changes in the meshes with different camera types.

http://renhelp.laeubi.de/tutorial-vis-tutorial.html

### Subject: Re: ACK Posted by Generalcamo on Tue, 26 Mar 2013 02:56:36 GMT View Forum Message <> Reply to Message

If the VIS System is "fixed", it might horribly break maps that have it implemented.

Subject: Re: ACK Posted by Ethenal on Tue, 26 Mar 2013 04:37:36 GMT View Forum Message <> Reply to Message

I'm fairly sure jonwil's LE was mainly to fix some crash bugs and improve compatibility with his scripts and things of that nature.

I highly doubt he could magically "fix" VIS with a bunch of assembly hacking.

Subject: Re: ACK Posted by Oblivion165 on Tue, 26 Mar 2013 07:09:35 GMT View Forum Message <> Reply to Message

Wow what a crappy system they made. I use view frustums and bounding boxes. Done and done.

Subject: Re: ACK Posted by saberhawk on Tue, 26 Mar 2013 11:29:05 GMT View Forum Message <> Reply to Message

Oblivion165 wrote on Tue, 26 March 2013 00:09Wow what a crappy system they made. I use view frustums and bounding boxes. Done and done.

View frustums and bounding boxes don't solve the problem of overdraw. VIS does. Renegade has frustum culling already...

Subject: Re: ACK Posted by Gen\_Blacky on Tue, 26 Mar 2013 23:59:46 GMT View Forum Message <> Reply to Message

I made a test map with a vis system and had really no problems or time consuming work. Took me about 45 mins to create this map,make the vis sectors, plus 10 min to generate the vis points (9417).

I had to create a total of 3 manual vis points.

The only reason I had to make any manual points is because i just slapped the tib field in their. Only about 15% of the generated points where bad and could be reduced.

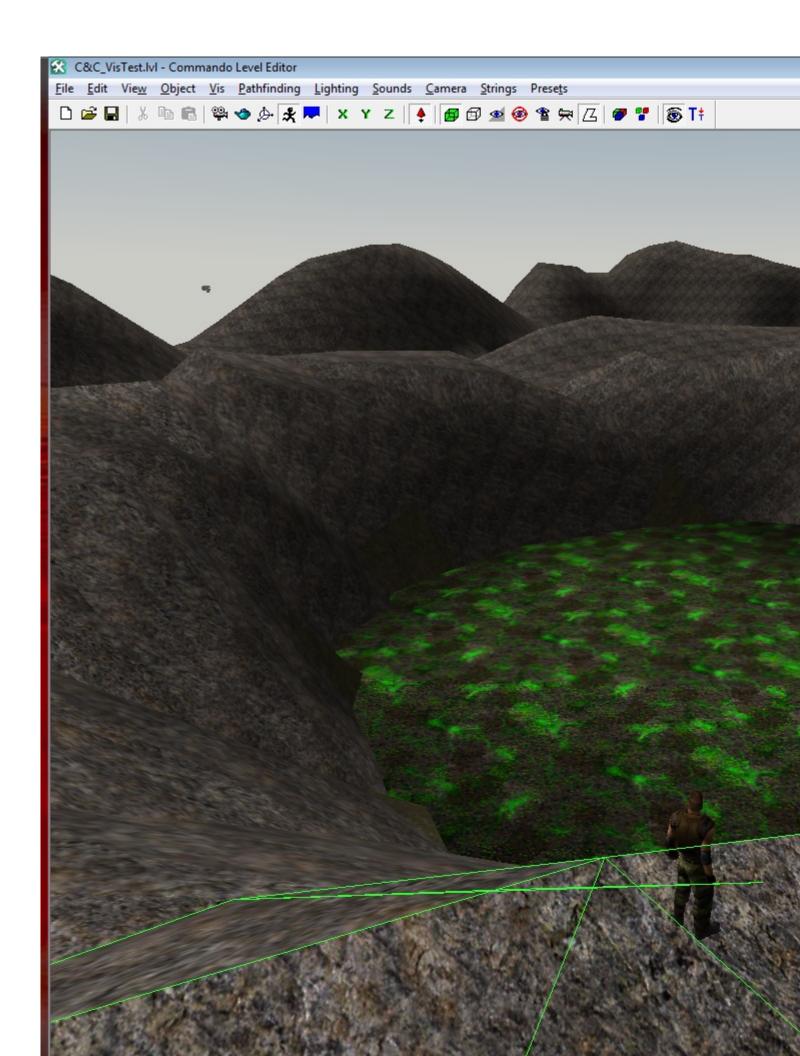
This map is really basic and had no challenging terrain features, buildings, tunnels, non flying.

Each vis sector was 16 polygons exactly. If you design your map with vis in mind it will save you a lot of work.

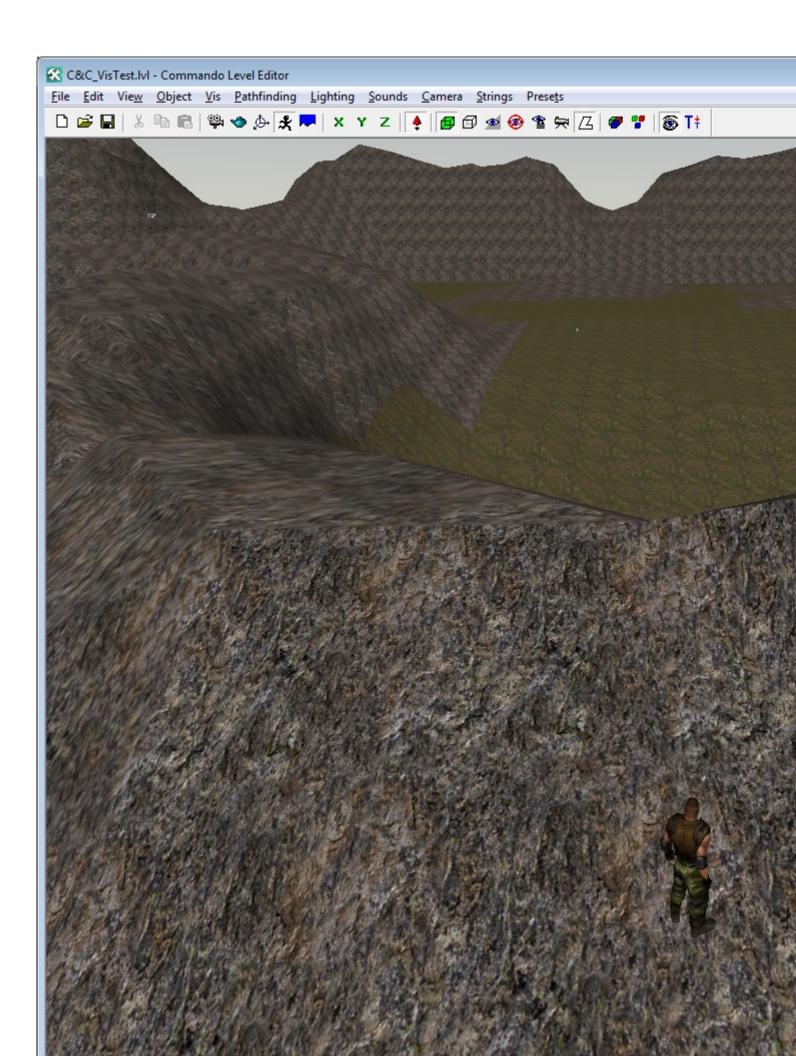
**Toggle Spoiler** 

# File Attachments 1) vis.jpg, downloaded 665 times

Page 8 of 16 ---- Generated from Command and Conquer: Renegade Official Forums

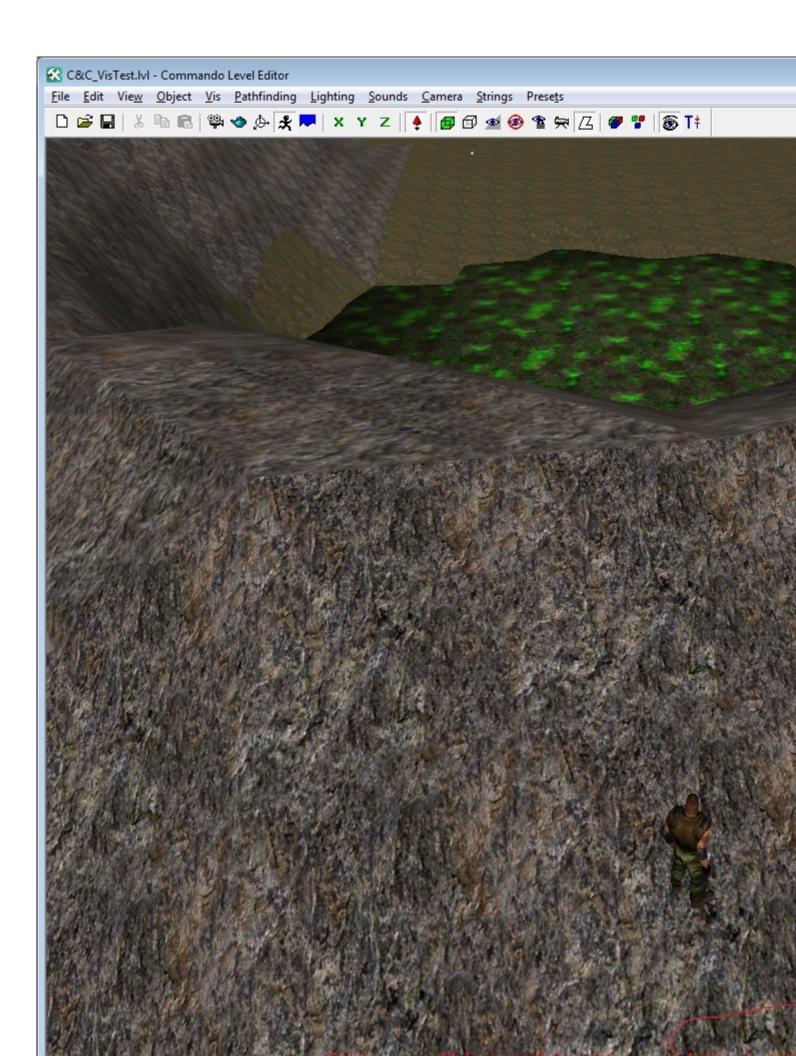


Page 10 of 16 ---- Generated from Command and Conquer: Renegade Official Forums

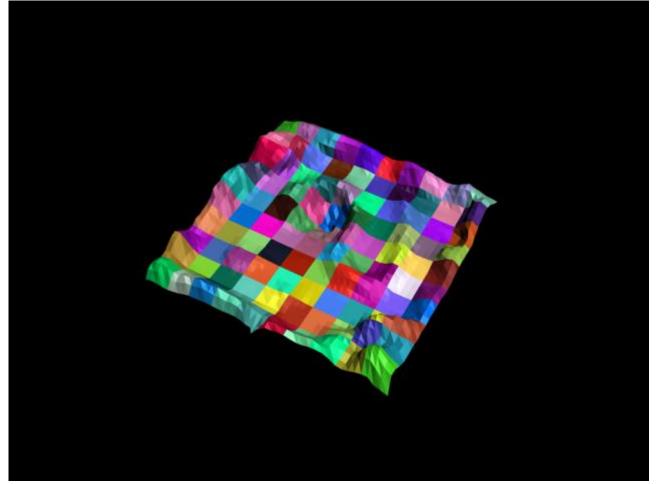


## 3) fixvishill.jpg, downloaded 671 times

Page 12 of 16 ---- Generated from Command and Conquer: Renegade Official Forums



### 4) sectors.jpg, downloaded 661 times



Subject: Re: ACK Posted by saberhawk on Wed, 27 Mar 2013 00:09:32 GMT View Forum Message <> Reply to Message

And yet, that map was not designed with VIS in mind. It is bowl shaped without any interesting occluders and probably would run better without VIS because there's nothing here.

Subject: Re: ACK Posted by Gen\_Blacky on Wed, 27 Mar 2013 00:17:27 GMT View Forum Message <> Reply to Message

saberhawk wrote on Tue, 26 March 2013 18:09And yet, that map was not designed with VIS in mind. It is bowl shaped without any interesting occluders and probably would run better without VIS because there's nothing here.

true. I just wanted to play around with the vis system. See how long it would take to generate the vis points with 100 sectors. Not spend time on anything special.

I don't think you realize how complex Fjords is. There's three levels to it.

- 1) The main terrain
- 2) The sky

3) The underground caves, GDI sewer system, and basements of GDI/Nod buildings

I went back and opened up the Max file for the vis sectors, and I don't want to touch it. It's too messy and complicated to bother with. While it might help reduce framerate problems on the map, I'm quite honestly not interested in dedicating a month of my life toward it. Especially when I get the inevitable whining that comes with "Hurrdurr y i see tre disapear I0I dis m4p sux0r"

If you want to run the vis work, I'll gladly send the files over to you to work with. Otherwise, no, it's not happening for this map - not for a long time, if ever.

Subject: Re: ACK Posted by Lazy5686 on Wed, 27 Mar 2013 02:15:51 GMT View Forum Message <> Reply to Message

BoMbZu wrote on Sun, 24 March 2013 06:42This topic caught my attention, I was wondering what exactly is VIS or are VIS points, and why would calculating them result in a smoother rate of frames.

I tried a Google search but couldnt find anything useful. Just curious Vis points/sectors determine what Renegade renders. If there are none then Renegade renders the entire map, and every object on the map. On Fjords this means rendering hundreds of trees and makes my FPS less than that of Crysis 2 on maximum settings.

Generating vis points on Fjords would be an enormous task due to the way trees break up line of sight as well as how large the map is. Then you need to go through and manually place points due to the camera behavior of vehicles and aircraft.

Subject: Re: ACK Posted by Oblivion165 on Thu, 28 Mar 2013 05:30:13 GMT View Forum Message <> Reply to Message

saberhawk wrote on Tue, 26 March 2013 07:29Oblivion165 wrote on Tue, 26 March 2013 00:09Wow what a crappy system they made. I use view frustums and bounding boxes. Done and done.

View frustums and bounding boxes don't solve the problem of overdraw. VIS does. Renegade has

frustum culling already...

What do you mean by overdraw? For instance a tree is completely blocked by a tree in front of it?

Subject: Re: ACK Posted by saberhawk on Thu, 28 Mar 2013 07:36:34 GMT View Forum Message <> Reply to Message

Oblivion165 wrote on Wed, 27 March 2013 22:30saberhawk wrote on Tue, 26 March 2013 07:29Oblivion165 wrote on Tue, 26 March 2013 00:09Wow what a crappy system they made. I use view frustums and bounding boxes. Done and done.

View frustums and bounding boxes don't solve the problem of overdraw. VIS does. Renegade has frustum culling already...

What do you mean by overdraw? For instance a tree is completely blocked by a tree in front of it?

Let's say I'm in a building, looking at a wall. What do I draw? The wall, obviously. But I'm on Fjords and there is a forest out there that is also rendered. That overdraw.

Subject: Re: ACK Posted by liquidv2 on Wed, 03 Apr 2013 15:59:46 GMT View Forum Message <> Reply to Message

are the flying units absolutely necessary? try a non-flying version and fix those vis points then lol if it would save that much time and whatnot

p.s. treefuckinggonorrhea

Subject: Re: ACK Posted by Ethenal on Thu, 04 Apr 2013 02:54:47 GMT View Forum Message <> Reply to Message

liquidv2 wrote on Wed, 03 April 2013 10:59[color=skyblue]are the flying units absolutely necessary? try a non-flying version and fix those vis points then lol if it would save that much time and whatnot

you clearly have not played fjords ;\_;