**Subject: DO NOT use elevators of any kind on MP maps**
Posted by Anonymous on Fri, 10 Jan 2003 19:49:00 GMT
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Greg Hjelstrom himself said at some point that if you use an elevator on a MP map, you WILL get mega lag at typical 56k speeds no matter what you do as far as tweaking the elevator model.

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**Subject: DO NOT use elevators of any kind on MP maps**
Posted by Anonymous on Fri, 10 Jan 2003 19:55:00 GMT
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I don't know, DMCenter seemed to work just fine with two elevators in it.

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**Subject: DO NOT use elevators of any kind on MP maps**
Posted by Anonymous on Fri, 10 Jan 2003 19:56:00 GMT
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I didn't think they caused any lag...

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**Subject: DO NOT use elevators of any kind on MP maps**
Posted by Anonymous on Fri, 10 Jan 2003 20:11:00 GMT
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an increase in the folowing factors can increase the lag:1.the amount of movement that the meshes with collision flags set have to do.2.the number of players in the game3.the ping of the players in the gameand 4.the size of the mapUsing client_physics_optomizaiton helps but not much.So, doors dont lag so much because they only move a small way but an elevator has to move further so it lags more. Basicly, any mesh that moves and has collision flags set will cause lag of some kind. Whether its noticable/causes a problem depends on the 4 factors above.Its something to do with the way the renegade engine/netcode works.

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**Subject: DO NOT use elevators of any kind on MP maps**
Posted by Anonymous on Fri, 10 Jan 2003 20:18:00 GMT
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quote:Originally posted by Jonathan Wilson:an increase in the following factors can increase the lag:1.the amount of movement that the meshes with collision flags set have to do.2.the number of players in the game3.the ping of the players in the gameand 4.the size of the mapUsing client_physics_optomizaiton helps but not much.So, doors dont lag so much because they only move a small way but an elevator has to move further so it lags more. Basicly, any mesh that moves and has collision flags set will cause lag of some kind. Whether its noticable/causes a problem depends on the 4 factors above.Its something to do with the way the renegade

engine/netcode works.4. Wrong.

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quote:Originally posted by aircraftkiller2001: quote:Originally posted by Jonathan Wilson:an increase in the folowing factors can increase the lag:1.the amount of movement that the meshes with collision flags set have to do.2.the number of players in the game3.the ping of the players in the gameand 4.the size of the mapUsing client_physics_optomizaiton helps but not much.So, doors dont lag so much because they only move a small way but an elevator has to move further so it lags more. Basicly, any mesh that moves and has collision flags set will cause lag of some kind. Whether its noticable/causes a problem depends on the 4 factors above.Its something to do with the way the renegade engine/netcode works.4. Wrong.We tested this sucker... elevators blew because the client and the server were constantly fighting over where the elevator should be... imagine 10 players calling an elevator from the top and the bottom at the same time... it breaks no matter how good the connection is.

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## Subject: DO NOT use elevators of any kind on MP maps
Posted by Anonymous on Fri, 10 Jan 2003 20:58:00 GMT
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quote:Originally posted by DoctorNerve: quote:Originally posted by aircraftkiller2001: quote:Originally posted by Jonathan Wilson:an increase in the folowing factors can increase the lag:1.the amount of movement that the meshes with collision flags set have to do.2.the number of players in the game3.the ping of the players in the gameand 4.the size of the mapUsing client_physics_optomizaiton helps but not much.So, doors dont lag so much because they only move a small way but an elevator has to move further so it lags more. Basicly, any mesh that moves and has collision flags set will cause lag of some kind. Whether its noticable/causes a problem depends on the 4 factors above.Its something to do with the way the renegade engine/netcode works.4. Wrong.We tested this sucker... elevators blew because the client and the server were constantly fighting over where the elevator should be... imagine 10 players calling an elevator from the top and the bottom at the same time... it breaks no matter how good the connection is.Unless you play on a nice speedy LAN game... that will work err... ok

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## Subject: DO NOT use elevators of any kind on MP maps
Posted by Anonymous on Fri, 10 Jan 2003 22:21:00 GMT
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quote:Originally posted by DoctorNerve: quote:Originally posted by aircraftkiller2001: quote:Originally posted by Jonathan Wilson:an increase in the folowing factors can increase the lag:1.the amount of movement that the meshes with collision flags set have to do.2.the number of players in the game3.the ping of the players in the gameand 4.the size of the mapUsing client_physics_optomizaiton helps but not much.So, doors dont lag so much because they only

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## Subject: DO NOT use elevators of any kind on MP maps
Posted by Anonymous on Fri, 10 Jan 2003 23:06:00 GMT
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quote:Originally posted by aircraftkiller2001: quote:Originally posted by DoctorNerve: quote:Originally posted by aircraftkiller2001:   quote:Originally posted by Jonathan Wilson:an increase in the folowing factors can increase the lag:1.the amount of movement that the meshes with collision flags set have to do.2.the number of players in the game3.the ping of the players in the gameand 4.the size of the mapUsing client_physics_optomizaiton helps but not much.So, doors dont lag so much because they only move a small way but an elevator has to move further so it lags more. Basicly, any mesh that moves and has collision flags set will cause lag of some kind. Whether its noticable/causes a problem depends on the 4 factors above.Its something to do with the way the renegade engine/netcode works.4. Wrong.We tested this sucker... elevators blew because the client and the server were constantly fighting over where the elevator should be... imagine 10 players calling an elevator from the top and the bottom at the same time... it breaks no matter how good the connection is.I would imagine so... The thing is, I doubt it will happen... Or rarely so.Back a while ago, I played DMCenter (The map I e-mailed you about, remember? With the Nod Communications Center in the middle?) on The Pitts, a server I help administrate... The playercount went to 40 players, and the two elevators on the Communications Center didn't hinder performance in the slightest. However, my shoddy GF2 MX200 video card and 256 MB of RAM were running badly when people used flamethrower type weapons. Other than that, the map ran perfectly. I would imagine it would work fine for another server as well.Maybe they don't lag because they go short distances and also the map isn't too big.

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## Subject: DO NOT use elevators of any kind on MP maps
Posted by Anonymous on Fri, 10 Jan 2003 23:33:00 GMT
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Doesn't matter. The distance and the size of the map is inconsequential.

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## Subject: DO NOT use elevators of any kind on MP maps
Posted by Anonymous on Sat, 11 Jan 2003 01:38:00 GMT
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quote:Originally posted by Jonathan Wilson:Greg Hjelstrom himself said at some point that if you use an elevator on a MP map, you WILL get mega lag at typical 56k speeds no matter what you do as far as tweaking the elevator model.I don't think anoyone who plays renegade uses a 56K modem. Anyway, back to the point, I did experiance problems with the elevators on hand DM, when more than one person gets in the elevator. This, i can only assume the first person triggers the elevator to move then the second one does. This only happens some of the time and causes you to "fall" down the elevator shaft. We run a Infantry server that has Death Match maps on it and sometimes the elevotors do play up, but only when more than one person get in. I am not saying that is the reason the elevators are not used but i may be one. As you or may not know the control tower on the multiplayer airstrip buildon did have an elevator (indicated by the space and the hole in the airstrip). Why this was omitted, i don't know.This is to ACK, i lag in flames on my Geforce 4 ti 4200 , i can only assume its the game engine or my processor (AMD Athlon 1400Mhz + 256 MB DDR)  [ January 11, 2003, 01:40: Message edited by: General Havoc ]

## Subject: DO NOT use elevators of any kind on MP maps
Posted by Anonymous on Sat, 11 Jan 2003 01:55:00 GMT
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quote:Originally posted by Jonathan Wilson:WRONG.The distance that a moving mesh with collision options set on has to travel has a big effect on how laggy things get. Greg himself said so to me a while back. The physics type probobly also has an effect on the lag you get (elevators proboly require more processing and therefore more lag)The number of elevators on the map also has an effect on the lag you get (lots = more lag)  Maps aren't a moving mesh.Almost 75\% of the elevators in Renegade are the standard ones... And they cause little problems with latency.

## Subject: DO NOT use elevators of any kind on MP maps
Posted by Anonymous on Sat, 11 Jan 2003 03:03:00 GMT
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Basicly, when you have an elevator in a MP map, because of how renegade works, it has to send a lot of data about the position of the elevator and also  data related to testing for collisions back and forth over the network. On slow network connections, this data doesnt get sent back and forth fast enough and so the position of the elevator as seen by the server and the position of the elevator as seen by the clients can get "out of sync" (basicly, the clients and server think the elevator is in different places). If this gets servere enough, it has actually been shown in tests (by StoneRook and by myself) that you can potentially acually "fall out" of the elevator car and end up in the shaft.You dont see it if the connection between you and the server is fast enough such that it doesnt "desync" enough to be noticable.Thats my understanding based on what Greg Hjelstrom has told me. And I am more inclined to believe the person that likely wrote, helped write, approved or supervised the code in question over someone that hasnt even seen the code.If Greg Hjelstrom says elevators cause lag on slow connections in MP, I believe what he says, regardless of what ACK or anyone else says

## Subject: DO NOT use elevators of any kind on MP maps
Posted by Anonymous on Sat, 11 Jan 2003 03:46:00 GMT
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quote:Originally posted by Jonathan Wilson: And I am more inclined to believe the person that likely wrote, helped write, approved or supervised the code in question over someone that hasnt even seen the code.If Greg Hjelstrom says elevators cause lag on slow connections in MP, I believe what he says, regardless of what ACK or anyone else says    score one for Jonathon Wilson

## Subject: DO NOT use elevators of any kind on MP maps
Posted by Anonymous on Sat, 11 Jan 2003 12:39:00 GMT
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WRONG.The distance that a moving mesh with collision options set on has to travel has a big effect on how laggy things get. Greg himself said so to me a while back. The physics type probobly also has an effect on the lag you get (elevators proboly require more processing and therefore more lag)The number of elevators on the map also has an effect on the lag you get (lots = more lag)

## Subject: DO NOT use elevators of any kind on MP maps
Posted by Anonymous on Sat, 11 Jan 2003 13:07:00 GMT
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quote:Originally posted by vloktboky03:My CTF map has elevators in them.  I haven't noticed any lag with them, except for misplacment when you exit an elevator.  You may lose sight for a second or two, but that is all I have noticed from them.maybe "lag" is the wrong word --try "warping" - or "out of sync" -- you see it with doors sometimes - ever run up to one and it doesn't open? -- your client isn't in sync with the server - so - it doesn't open.but it will get in sync eventually - and you run in - usually- most people just take it in stride.However - if your in an elevator - you *might* fall down the shaft due to being out of sync where the elevator car is and your character.(and if the maker of the map didnt block the bottom - off you go to the blue pit...)Now - i have played other maps with elevators - sometimes they work - sometimes they don't."if" everyone is on a good rig - speedy connection - and on a super server - you may not experience any of the above.On a LAN game - we never had a problem with them - as soon as we went on the 'net - warping and falling to blue hell occured.However - it happens enough (warping) to make me avoid using them.There are simpler ways to move up and down.i suggest you do the same. but - hey - you can do anything you want... regardless how wrong it may be....

## Subject: DO NOT use elevators of any kind on MP maps
Posted by Anonymous on Sat, 11 Jan 2003 13:16:00 GMT
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quote:Originally posted by Jonathan Wilson:Basicly, when you have an elevator in a MP map,

because of how renegade works, it has to send a lot of data about the position of the elevator and also  data related to testing for collisions back and forth over the network. On slow network connections, this data doesnt get sent back and forth fast enough and so the position of the elevator as seen by the server and the position of the elevator as seen by the clients can get "out of sync" (basicly, the clients and server think the elevator is in different places). If this gets servere enough, it has actually been shown in tests (by StoneRook and by myself) that you can potentially acually "fall out" of the elevator car and end up in the shaft.You dont see it if the connection between you and the server is fast enough such that it doesnt "desync" enough to be noticable.Thats my understanding based on what Greg Hjelstrom has told me. And I am more inclined to believe the person that likely wrote, helped write, approved or supervised the code in question over someone that hasnt even seen the code.If Greg Hjelstrom says elevators cause lag on slow connections in MP, I believe what he says, regardless of what ACK or anyone else says The thing here is... If you're on a bad connection to begin with, you'll see bad lag regardless of what you do.So why would an elevator matter, considering the nature of lag anyways?

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## Subject: DO NOT use elevators of any kind on MP maps
Posted by Anonymous on Sat, 11 Jan 2003 13:37:00 GMT
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Replace the elevator with a square or circular spiral staircase and be done with it.....granted it doesnt look as good but you will have no lag problembs with elevators if you remove the elevators for mp online games.Greg H. told us long ago that elevators and any static animation "transport" vehicles will undoubtedly cause lag{warping....caused by latency between host and client}I use a 56k connection and play renegade online......it usually isnt a problemb but i know from experience that elevators and static animated "transport vehicles" do cause lag problembs in mp maps.I tried to use a static animated C5 galaxy transport for transporting large numbers of troops from base to base only to discover that people lag right out of the cargo door and fall to the ground.....or get stuck in the animation mesh and halt the animation leaving everybody stuck 200 feet in the air without a parachute.If you are planning to make it a MP lan game to be played in an internet cafe only that's one thing.....but to make it for online play where there are too many variables that cannot be controlled by the host is another.My suggestion is to still use the multi story buildings in multiplayer and CTF....a lot of us aggree that they make the game more interesting....but replace the elevators with staircases.....this alleviates the lag problemb.This way you can you can still use multi story buildings from single player missions but not have the lag issues   Eric.

---

## Subject: DO NOT use elevators of any kind on MP maps
Posted by Anonymous on Sat, 11 Jan 2003 14:37:00 GMT
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You have to assume that there's a reason that Westwood didn't put elevators in the multiplayer maps.I can't think of any game engines at all that handle this kind of moving object well in multiplayer. None of the Quake engines do, nor the Unreal variants. Moving objects add to the network overhead, as the translation of the objects have to be dealt with and distributed to the clients by the server, which adds far more potential for the phenomenon known as "lag"

Subject: DO NOT use elevators of any kind on MP maps
Posted by Anonymous on Sat, 11 Jan 2003 14:48:00 GMT
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Well, if someone can take the time and remake the SP HON interior with staircases instead of elevators, I'll use it.  I just don't have time to do that.

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Subject: DO NOT use elevators of any kind on MP maps
Posted by Anonymous on Sat, 11 Jan 2003 14:56:00 GMT
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I have a circular spiral ramp{staircase} that you can insert into any two story elevator shaft if you would like to use it......It's 634 polygons.http://www.planetcnc.com/sgtmay/images/previews/spiral_prev.JPGhttp://www.planetcnc.com/sgtmay/images/previews/spiral_prev_02.JPGhttp://www.planetcnc.com/sgtmay/images/previews/spiral_prev_03.JPGTaximes has a 140 poly square staircase for two story elevator shafts too.....pm him and ask him if you want that one....i'm sure he wouldnt mind donating it to your project.http://cncsg.cncuprising.com/images/stair1.jpghttp://cncsg.cncuprising.com/images/stair2.jpge-mail me if you want to look at mine.Eric.

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Subject: DO NOT use elevators of any kind on MP maps
Posted by Anonymous on Sat, 11 Jan 2003 14:59:00 GMT
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you wont have to do anything but remove the elevator bones and the elevator platform mesh from the elevator shaft......then just drop the staircase in.It's pretty simple to do.....i'm sure you can handle it   Eric.

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Subject: DO NOT use elevators of any kind on MP maps
Posted by Anonymous on Sun, 12 Jan 2003 00:38:00 GMT
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quote:Originally posted by Beanyhead:I didn't think they caused any lag...I must agree with Jonathan Wilson.I have included some elevators in my Mod and it really causes huge lags!  [

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Subject: DO NOT use elevators of any kind on MP maps
Posted by Anonymous on Sun, 12 Jan 2003 00:54:00 GMT
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My CTF map has elevators in them.  I haven't noticed any lag with them, except for misplacment when you exit an elevator.  You may lose sight for a second or two, but that is all I have noticed

from them.

---

## Subject: DO NOT use elevators of any kind on MP maps
Posted by Anonymous on Sun, 12 Jan 2003 03:12:00 GMT
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Spiral staircase done and fitted to SP_Hand of Nod
http://www.planetcnc.com/sgtmay/images/previews/spiral_prev_04.JPGI made an updated version of the staircase for the upper lift and used the older version for the bottom.the top one is round on the inside and square on the outside    I also enabled the transparancy on the texture so that you can see right through the holes in the deck plate metal used for the stairs.I've e-mailed it to you.Eric

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