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Subject: [SSGM 4.0 Plugin] Range and RoF Cheat Detection

Posted by [iRANian](#) on Wed, 14 Mar 2012 18:29:11 GMT

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This plugin requires scripts 4.0 Beta 4 or higher. THIS PLUGIN IS EXPERIMENTAL AND MIGHT CRASH OR LAG YOUR SERVER, IT MIGHT ALSO GIVE OUT FALSE WARNINGS. I'M NOT RESPONSIBLE FOR WHAT THIS PLUGIN DOES.

This plugin adds detection for Rate of Fire cheats and range cheats (this includes \*cheat name removed\*spectate shooting in most circumstances) to the FDS, if the plugin detects odd range or Rate of Fire values it will log text to RenLog that looks like these:

Range warnings look like:

[19:57:38] [IRANSTUFF][Range Warning]RebdogFuckingHax (Automatic Rifle) attempted to attack Mel\_Gibson from out of range. Distance: 164.42 meters Max Distance: 0.00 meters.

RoF warnings look like:

[19:57:38] [IRANSTUFF][RoF Exceeded]Name: RebdogFuckingHax ID: 2 Ping: 96 Hits: 79 HitMultiplier: 1 DefHits: 10 Allowance: 1 MaxHits: 11 Weapon: Automatic Rifle

To install, place 'RangeRofDetection.dll' in the root FDS folder and add an entry under [Plugins] in SSGM.ini. A BRenBot plugin to output these messages to the IRC admin channel can be found [here](#).

Ported the code from OnOeS made by Hex, pvtschlag and jnz. Thanks to Tiberian Technologies for adding the damage hook to scripts 4.0 Beta 4 and StealthEye in particular for answering my questions. Additional thanks go to rebdog, Blacky and BillieJoe67 for helping me with testing.

Known bugs/limitations:

- Vehicle Rate of Fire isn't checked. (I'll investigate adding it in the future)
- Can trigger the range warning when someone is 'ghosting'.

### File Attachments

1) [Range and RoF Cheat Detection SSGM 4.0 Plugin v1.zip](#),  
downloaded 335 times

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Subject: Re: [SSGM 4.0 Plugin] Range and RoF Cheat Detection

Posted by [Starbuzz](#) on Wed, 14 Mar 2012 19:24:22 GMT

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iRANian wrote on Wed, 14 March 2012 11:29RebdogFuckingHax

Imao

btw, good job Iran with all these releases!

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Subject: Re: [SSGM 4.0 Plugin] Range and RoF Cheat Detection  
Posted by [Gen\\_Blacky](#) on Wed, 14 Mar 2012 20:38:40 GMT  
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Quote:A BRenBot plugin is in the work but there's been some issues getting the regex hook to work with BRenBot 1.53 and SSGM 4.0.

that was herp derping.

here is a brenbot plugin that outputs those messages to irc.

#### File Attachments

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1) [IranHasTheJunk.zip](#), downloaded 310 times

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Subject: Re: [SSGM 4.0 Plugin] Range and RoF Cheat Detection  
Posted by [halo2pac](#) on Wed, 14 Mar 2012 23:47:32 GMT  
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I thought BITACH / TT was supposed to cover that sort of anit-cheat.....

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Subject: Re: [SSGM 4.0 Plugin] Range and RoF Cheat Detection  
Posted by [Xpert](#) on Thu, 15 Mar 2012 02:08:13 GMT  
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The thing the public BIATCH lacked for the public was a RoF detector and range detector. Why is that? And is it included in the current 4.0 or still not.

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Subject: Re: [SSGM 4.0 Plugin] Range and RoF Cheat Detection  
Posted by [Ani](#) on Thu, 15 Mar 2012 02:54:38 GMT  
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Xpert wrote on Wed, 14 March 2012 19:08The thing the public BIATCH lacked for the public was a RoF detector and range detector. Why is that? And is it included in the current 4.0 or still not.

I'm going to take an educated guess and say it's not currently included with TT. Thats now though, but considering TT has adopted some of Iran's releases previously, I can see this plugin being implemented internally or made as an official plugin or something..

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Subject: Re: [SSGM 4.0 Plugin] Range and RoF Cheat Detection  
Posted by [halo2pac](#) on Fri, 16 Mar 2012 03:17:50 GMT  
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One big flaw in this design. What if a player lags? His data gets bottled up on his PC then Bursts to the server. I have had a Ramjet fire 4 shots within a half second because of a lag burst. Seriously without cheats of any type. I have laid a lot of c4 in the wrong position quickly because of lag.

Same thing with these stupid PT hack detectors. I have lag walked to a PT terminal only to find my self half way across the base. I could have been banned for trying to access a terminal from more than 5 meters.

Take into account a laggy-ass game.

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Subject: Re: [SSGM 4.0 Plugin] Range and RoF Cheat Detection

Posted by [Ethenal](#) on Fri, 16 Mar 2012 04:29:50 GMT

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halo2pac wrote on Thu, 15 March 2012 22:17One big flaw in this design. What if a player lags? His data gets bottled up on his PC then Bursts to the server. I have had a Ramjet fire 4 shots within a half second because of a lag burst. Seriously without cheats of any type. I have laid a lot of c4 in the wrong position quickly because of lag.

Same thing with these stupid PT hack detectors. I have lag walked to a PT terminal only to find my self half way across the base. I could have been banned for trying to access a terminal from more than 5 meters.

Take into account a laggy-ass game.

How this is a big flaw? I don't know if you noticed, but all this plugin does is output a message to the log (and the optional BR plugin outputs it to IRC). Did it say anywhere that this is an automated ban system? No. The PT hack detectors have always wonderfully if you don't base a player's legitimacy on a single PT warning. Same with rate of fire. The range thing is actually quite a nice (unique) release.

So what was that point you were making again?

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Subject: Re: [SSGM 4.0 Plugin] Range and RoF Cheat Detection

Posted by [iRANian](#) on Fri, 16 Mar 2012 13:21:58 GMT

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There's what Ethenal said and there's a really really small hit allowance built-in, I don't know if lag triggers it, it would be really helpful for me if someone else could test it with high ping. The hit allowance is so small that people using RoF cheats designed to give a small advantage will be caught by this. The range detection is similar.

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Subject: Re: [SSGM 4.0 Plugin] Range and RoF Cheat Detection  
Posted by [iRANian](#) on Fri, 16 Mar 2012 16:29:09 GMT

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Is anyone running this on their server? I was planning for Area54 to test it but we're waiting on getting a few things ready before we're done with porting the area54 server to 4.0.

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Subject: Re: [SSGM 4.0 Plugin] Range and RoF Cheat Detection  
Posted by [EvilWhiteDragon](#) on Sat, 31 Mar 2012 15:39:52 GMT

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Xpert wrote on Thu, 15 March 2012 03:08The thing the public BIATCH lacked for the public was a RoF detector and range detector. Why is that? And is it included in the current 4.0 or still not. Because it is highly inaccurate. Or at least, our testing showed that RoF can easily be triggered by a high ping or sudden bad connection, so one would have to compensate for that.

Same thing with the range, weapons actually shoot further than the effective range and again, with a lot of lag one can be say up to 20 renometers from where the guy is on the server. This means that you have to set quite a large margin.

I don't know what countermeasures to this iRANian has (tried to) make, but we deemed it too inaccurate, specifically after we saw how easy some serverowners banned on PT messages, which are also lagsensitive. These reasons were for BlackIntel the reason not to release it.

Edit:

Read all replies before posting EWD.

halo2pac wrote on Fri, 16 March 2012 04:17One big flaw in this design. What if a player lags? His data gets bottled up on his PC then Bursts to the server. I have had a Ramjet fire 4 shots within a half second because of a lag burst. Seriously without cheats of any type. I have laid a lot of c4 in the wrong position quickly because of lag.

Same thing with these stupid PT hack detectors. I have lag walked to a PT terminal only to find my self half way across the base. I could have been banned for trying to access a terminal from more than 5 meters.

Take into account a laggy-ass game.  
Exactly what I wanted to say.

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Subject: Re: [SSGM 4.0 Plugin] Range and RoF Cheat Detection  
Posted by [EvilWhiteDragon](#) on Sat, 31 Mar 2012 15:43:06 GMT

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iRANian wrote on Fri, 16 March 2012 14:21There's what Ethenal said and there's a really really small hit allowance built-in, I don't know if lag triggers it, it would be really helpful for me if someone else could test it with high ping. The hit hit allowance is so small that people using RoF cheats designed to give a small advantage will be caught by this. The range detection is similar.

Easy enough to try, set your SBBO very low (and make sure the server doesn't put it upwards) and nur to 6 (or was it . This should already help a lot in getting more lag. Additionally you can lower the serverfps to 15 or so.

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Subject: Re: [SSGM 4.0 Plugin] Range and RoF Cheat Detection

Posted by [reckneya](#) on Mon, 09 Apr 2012 09:45:04 GMT

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I've got the plugin installed on our DM server + the BRenBot plugin that outputs the messages in IRC. It triggers the RoF detection when going from firing weapon A to firing weapon B directly after and if weapon B has a slower rate of fire then weapon A. So for example firing a flamethrower, chemsprayer or voltgun at an object or at the abyss and then switching to almost any other weapon will trigger it. It will prompt it's weapon B that exceeds its default RoF.

Maybe this is something you can account for in a future version? I really like the detection of RoF, but at this point it will probably be giving a lot of false positives. It's of course up to the moderators to know how to interpret what's actually happening when it triggers.

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Subject: Re: [SSGM 4.0 Plugin] Range and RoF Cheat Detection

Posted by [iRANian](#) on Mon, 09 Apr 2012 10:52:29 GMT

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That isn't supposed to happen, lemme check some things.

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Subject: Re: [SSGM 4.0 Plugin] Range and RoF Cheat Detection

Posted by [reckneya](#) on Mon, 09 Apr 2012 11:00:08 GMT

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Update: If I shoot at something that can take damage with weapon A I only have to switch to weapon B to trigger it. I don't actually have to fire weapon B. When I do this trick and fire into the abyss (the sky f.e.) it will trigger sometimes, when I fire on an object it will trigger almost all the time.

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Subject: Re: [SSGM 4.0 Plugin] Range and RoF Cheat Detection

Posted by [iRANian](#) on Mon, 09 Apr 2012 11:07:09 GMT

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Could you try out this version? From the looks of it whoever coded it did the check if the weapon being held changed after actually reporting it.

<http://dl.dropbox.com/u/21865790/RangeRoFDetection.dll>

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Subject: Re: [SSGM 4.0 Plugin] Range and RoF Cheat Detection

Posted by [reckneya](#) on Mon, 09 Apr 2012 15:50:13 GMT

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Iran and I tested it on the server and the 3rd version (not sure if this is the 2nd or 3rd in your last post) seems to not trigger false positives as quickly as the first version. It may still trigger false positives, but we were unable to recreate it the way we could with version 1.

We'll keep an eye out and not ban unless it's blatant. We had a RoF cheater in the server. Would've been nice to see the plugin go wild on his ass.

Thanks Iran. This plugin will keep the server a little safer for none cheating gameplay.

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Subject: Re: [SSGM 4.0 Plugin] Range and RoF Cheat Detection

Posted by [iRANian](#) on Mon, 09 Apr 2012 16:28:29 GMT

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Here's the latest version:

<http://dl.dropbox.com/u/21865790/RangeRoFDetection.dll>

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Subject: Re: [SSGM 4.0 Plugin] Range and RoF Cheat Detection

Posted by [iRANian](#) on Fri, 20 Apr 2012 20:45:01 GMT

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Small bugfix for an error in the range detection reporting:

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### File Attachments

1) [RangeRoFDetection.dll](#), downloaded 290 times

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Subject: Re: [SSGM 4.0 Plugin] Range and RoF Cheat Detection

Posted by [Ani](#) on Tue, 10 Jul 2012 01:39:48 GMT

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Does does not work on beta 5? Or is it already included? I get a popup error when the server starts when it comes to loading this plugin.

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Subject: Re: [SSGM 4.0 Plugin] Range and RoF Cheat Detection

Posted by [Xpert](#) on Tue, 10 Jul 2012 02:19:31 GMT

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Here, for beta 5. This is my edit of the plugin. I changed the prefix to [BIATCH] so I wouldn't have to change anything in my bot. So don't go blaming biatch for the messages when you see them output.

Might I warn you, please do not rely on the RoF message detection that much. This is still a BETA TEST of the plugin. So don't go thinking off the back someone is cheating.

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#### File Attachments

1) [RangeRoFDetection.dll](#), downloaded 274 times

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Subject: Re: [SSGM 4.0 Plugin] Range and RoF Cheat Detection

Posted by [Ani](#) on Sat, 14 Jul 2012 01:13:31 GMT

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How do I make it so the plugin for BRenBot that was released with this plugin works with Xpert's updated version?

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Subject: Re: [SSGM 4.0 Plugin] Range and RoF Cheat Detection

Posted by [Xpert](#) on Sat, 14 Jul 2012 01:38:04 GMT

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Animoskity wrote on Fri, 13 July 2012 21:13How do I make it so the plugin for BRenBot that was released with this plugin works with Xpert's updated version?

I wouldn't call it "updated" since all I did was change the prefix so that it works with my bot. I would just not use the plugin for the time being if you really want to rely on it. There's still false positives with this plugin.

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Subject: Re: [SSGM 4.0 Plugin] Range and RoF Cheat Detection

Posted by [Ani](#) on Sat, 14 Jul 2012 01:50:26 GMT

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It helped pick up some guy with 0.0 scripts who had 2.3x the range on a normal railgun that would've slept by if I never looked into the logs. It would've been nice if there was a way for BRenBot to relay [BIATCH] logs. :/

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Subject: Re: [SSGM 4.0 Plugin] Range and RoF Cheat Detection

Posted by [Xpert](#) on Sat, 14 Jul 2012 01:55:09 GMT

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Fixed in next 4.0.

Problem was brought up by Iran already.  
Here's his quote.

iRANian wrote on Fri, 06 July 2012 17:31The regex in biatch.xml needs to be updated to:

```
<hook event="biatchMessage" regex="\[BIATCH\]"/>
```

The 4.0 BIATCH messages don't prepend a whitespace to "[BIATCH]", which pre-4.0 BIATCH does. The original regex looks for this whitespace and that's why it didn't trigger.

You should really look into coding. Simple stuff like this, you could easily fix on your own and not have to wait on others. You've been around Renegade too long already (Not insulting you, just a tip).

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Subject: Re: [SSGM 4.0 Plugin] Range and RoF Cheat Detection  
Posted by [Ani](#) on Sat, 14 Jul 2012 05:04:10 GMT  
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Trust me I don't take that as an insult. I just wish I had someone around to teach me all the "hello world" shit.

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