Subject: Hooking

Posted by halo2pac on Fri, 09 Sep 2011 03:49:49 GMT

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Besides what is provided in the default ssgm plugin, what other things are able to be hooked?

I see things such as AddKeyHook, addConnectionAcceptanceFilter, from dllmain.cpp... Are there others such as hooking when the client is downloading resources?

and can someone explain how to use addConnectionAcceptanceFilter?

Subject: Re: Hooking

Posted by StealthEye on Fri, 09 Sep 2011 13:28:22 GMT

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The SSGM plugin interface (see example plugin) basically contains all hooks that are available. You should use that instead of the Add...Hook functions, because contrary to what the name suggests, they support only a single hook, and SSGM is already using it. Calling the Add...Hook functions will often break SSGM or plugin functionality.

If there is any hook you think would be useful, let us know, so that we can implement it.

As for addConnectionAcceptanceFilter, best look at ConnectionAcceptanceFilter.h and BanSystem.cpp. A connection acceptance filter is basically used to check whether a user can join or not, and makes it possible to do some relatively time consuming background checking asynchronously without stalling the server and causing lag for all players ingame. This allows for "nice" banning of the player, instead of the join-and-kick behavior that was used before TT.

The ban system currently handles serial validation, and waits for the serial to be fetched before allowing the player to join. For example, this may be useful to implement route-based/"localnode" banning nicely without the join-and-kick bahavior.

Subject: Re: Hooking

Posted by halo2pac on Fri, 09 Sep 2011 17:28:47 GMT

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StealthEye wrote on Fri, 09 September 2011 09:28For example, this may be useful to implement route-based/"localnode" banning nicely without the join-and-kick bahavior.

It has been detected that your a wanker from the UK and your ping would be too high to play with. Entrance denied.

Jk lol.

But I could see us only or uk only servers using this

And the offer of you guys adding more hooks is a bad idea...I have a long list.

Direct connect detected hook. (I know how in ssgm 2..just not 4)

Resource download hook ( I was kicked off xwis yesterday because packages didn't download)

All the hooks from hooks.dll

Key hooks. All keys (or a good precentage of)

Thanks.

Subject: Re: Hooking

Posted by StealthEye on Fri, 09 Sep 2011 19:24:59 GMT

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How did you detect DC in SSGM 2?

What's the purpose of the ersource download hook? When would it trigger?

Can you list the hooks that are contained in hooks.dll?

As far as I know you can hook keys much like in previous versions of SSGM.

Subject: Re: Hooking

Posted by halo2pac on Sat, 10 Sep 2011 01:17:48 GMT

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HMODULE hooks = LoadLibrary("hooks.dll");

LoadHook(hooks, (void \*\*)&RequestSerial, "RequestSerial");

LoadHook(hooks, (void \*\*)&AddSerialHook, "AddSerialHook");

LoadHook(hooks, (void \*\*)&AddLoadingEHook, "AddLoadingEHook");

LoadHook(hooks, (void \*\*)&AddDamageHook, "AddDamageHook");

LoadHook(hooks, (void \*\*)&AddChatEHook, "AddChatHook");

LoadHook(hooks, (void \*\*)&AddPingHook, "AddPingHook");

LoadHook(hooks, (void \*\*)&AddSuicideHook, "AddSuicideHook");

LoadHook(hooks, (void \*\*)&AddRadioHook, "AddRadioHook");

"As far as I know you can hook keys much like in previous versions of SSGM." Its flakey, and doesnt hook most keys at all.. just things defined in keys.cfg., and keys.cfg is a pain in the ass to deal with server and client wise.

"What's the purpose of the ersource download hook? When would it trigger?" it would trigger the moment a player starts downloading the server's resources. if I am not mistaken this is before the player even joins... As it would be nice to see who is lagged behind waiting for there download to finish.

Daniel had some other hooks that were awesome, such as a player joined the channel and is debating joining the game. I will try to find his private source that I have to see what they were.

"How did you detect DC in SSGM 2?"

It was a combination of the player loading game event.. if there was only one event, it was a direct connect.

Also onbodydamage would be nice, as thne old headshot code was messed up and we couldnt detect shots properly.

Subject: Re: Hooking

Posted by iRANian on Sat, 10 Sep 2011 01:26:50 GMT

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If I remember correctly that's the LoadingEHook.

Subject: Re: Hooking

Posted by StealthEye on Sat, 10 Sep 2011 22:58:09 GMT

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The connection acceptance filter runs before a player really joins. You can use it to detect when a client is joining the game. RequestSerial and SerialHook became obsolete. Radio hook is implemented as far as I know, as is a chat hook.

So the things remaining are:

- OnDamage
- OnPing (what does this do exactly?)
- OnSuicide
- OnDownloadStart
- direct connect (I still have no idea how this should be done properly without hooking wolapi, which may be a lot of work.)

The on body damage thing cannot be done; the server does not have that information.

I think these are low priority though; we will focus on fixing bugs first.

Subject: Re: Hooking

Posted by halo2pac on Sat, 10 Sep 2011 23:16:43 GMT

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If the onbodydamage cannot be hooked then how does the client know you been shot in the head or leg? And damage armor accordingly.

Subject: Re: Hooking

## Posted by StealthEye on Sat, 10 Sep 2011 23:51:21 GMT

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It doesn't. Before TT, only the damager knew about this information. With TT, the server actually gets informed about this. So the hook would be possible for TT players only, but it is questionable whether it is useful if it is only known for TT clients. The server and other clients locally simulate the game and approximate if it would be a miss, body, neck, or headshot. This is also why you can visually get hit but lose no health, or vice versa.

Subject: Re: Hooking

Posted by halo2pac on Sun, 11 Sep 2011 07:40:47 GMT

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StealthEye wrote on Sat, 10 September 2011 19:51This is also why you can visually get hit but lose no health, or vice versa.

That's kinda stupid.

Subject: Re: Hooking

Posted by EvilWhiteDragon on Sun, 11 Sep 2011 11:42:51 GMT

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You found out about this just now? Renegade has been like this since the first release.

Subject: Re: Hooking

Posted by halo2pac on Sun, 11 Sep 2011 18:18:17 GMT

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Yes, I was never told. Kind of like the SSGM TCP logging... idk if it was intentional or not but the delivery method looks exactly like what I made 1 year prior. FDSComm. all my events are labeled with numbers such as 001, 002.

I will be upgrading this for 4.0 some day soon, so if you haven't seen it you will.

Subject: Re: Hooking

Posted by Jerad2142 on Sun, 11 Sep 2011 19:28:32 GMT

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halo2pac wrote on Sun, 11 September 2011 01:40StealthEye wrote on Sat, 10 September 2011 19:51This is also why you can visually get hit but lose no health, or vice versa.

That's kinda stupid.

Shooter's computer detects and does the damage, otherwise it'd be a real pain in the ass to kill people.

Basically it would give your target Ping+Ping delay time to move(a ping of 100 is equal to a second, which would mean they have 2 seconds to move).

IE: You unload a whole clip where a person is, but on the server they're over 10m and by the time your update gets to the server they've moved another 10m, so you miss. Hell, under those conditions even instant hit weapons like the sniper rifle would miss if the server did the detection.

Yes, this way does make it easier for people to cheat, but Westwood would have had to have made a much better on-line system if they wanted players to be able to kill each other otherwise.

Subject: Re: Hooking

Posted by EvilWhiteDragon on Sun, 11 Sep 2011 20:22:25 GMT

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Actually you can "fix" this by putting "uselagreduction=0" in the server.ini afaik. But trust me, you DO NOT WANT this.

Subject: Re: Hooking

Posted by Jerad2142 on Mon, 12 Sep 2011 00:04:57 GMT

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EvilWhiteDragon wrote on Sun, 11 September 2011 14:22Actually you can "fix" this by putting "uselagreduction=0" in the server.ini afaik. But trust me, you DO NOT WANT this. I'd assume that'd just make the clients not slide smoothly into their spots, but the damage detection would still be done client side correct?

Subject: Re: Hooking

Posted by halo2pac on Mon, 12 Sep 2011 02:14:13 GMT

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I have another hook like idea..

Idk if it is already implemented, but a Yes/No dialog box, and an htmlviewer that you can call to show ingame. (that ignores javascript, of course to prevent viruses.)

Subject: Re: Hooking

Posted by EvilWhiteDragon on Mon, 12 Sep 2011 06:53:57 GMT

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Jerad Gray wrote on Mon, 12 September 2011 02:04EvilWhiteDragon wrote on Sun, 11

September 2011 14:22Actually you can "fix" this by putting "uselagreduction=0" in the server.ini afaik. But trust me, you DO NOT WANT this.

I'd assume that'd just make the clients not slide smoothly into their spots, but the damage detection would still be done client side correct?

No that would move all damage detection serverside, not just for buildings but also for players. Will cause EPIC lag though. Well, not lag, but you're likely to not damage anything anyway...

Subject: Re: Hooking

Posted by StealthEye on Mon, 12 Sep 2011 11:31:46 GMT

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Indeed; uselagreduction moves damage calculation to the server. There is no setting to disable latency interpolation (what you are taking about) as far as I am aware, and it would be even more unplayable than when you disable uselagreduction.

Subject: Re: Hooking

Posted by sla.ro(master) on Mon, 12 Sep 2011 14:30:21 GMT

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halo2pac wrote on Mon, 12 September 2011 05:14I have another hook like idea.. Idk if it is already implemented, but a Yes/No dialog box, and an htmlviewer that you can call to show ingame. (that ignores javascript, of course to prevent viruses.)

htmlviewer is good idea, Counter-Strike/Half-Life has it in CS, server sends the html code to client and client views it. i think is possible to have this with IE API

Subject: Re: Hooking

Posted by StealthEye on Mon, 12 Sep 2011 15:22:35 GMT

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It's likely a lot of work and out of scope for 4.0.

Subject: Re: Hooking

Posted by iRANian on Sun, 18 Sep 2011 14:34:14 GMT

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Could a suicide hook like the one from jnz' Hooks.dll be added? Also would it be possible to allow kill messages to be disabled server-side? I know there's a client-side option in tt.ini. Could logic be added to only disable the vehicle flip kill logic on flying vehicles? At the moment this logic in tt.ini is applied to all vehicles.

Dage 6 of 7 Congreted from Command and Congress Departed Official Forums

Subject: Re: Hooking

Posted by jonwil on Mon, 19 Sep 2011 00:20:40 GMT

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Those are also things that we probably wont be doing for 4.0, we have enough to fix as it is.

Subject: Re: Hooking

Posted by halo2pac on Mon, 19 Sep 2011 01:11:54 GMT

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Well the refill hook doesnt work, so that should be a focus.