

Forum:[Hack Forums](#)

Thread: [\[Community Alert\] Danger of Installing Userscripts and Browser Extensions](#)

Steve - May 28, 2018, 7:44 pm

Hi all,

I'm making this thread to serve as a reminder to the community (especially newer or less technically inclined users) that, although userscripts can be useful and a great way to learn about/practice coding, they can also be used maliciously to manipulate those who have installed them.

Userscripts and Extensions are very popular on Hack Forums, but members should be aware just how much control you are giving the author of the script over your account. When you install a userscript or extension, the script can perform nearly any process that the user has access to. These could be functions for giving reputation, sending PMs, making posts/threads, etc. These events can target any member the author wants and can be triggered by something as simple as a page request.

When installing a userscript I strongly advise you personally look through the code for anything malicious. If you can't read the code, then find someone trustworthy who can check it for you. You also should disable auto-updates for your scripts, so that the the author cannot push malicious code without you noticing.

I've prepared a small proof of concept script called MyRAT to test some basic functions a userscript can do. Below I've posted the userscript code. This is code that you could see in any basic userscript. I will explain what each of the functions does, but I will not be posting the code that sets up and handles the malicious server/functions, of course.

[MyRAT Userscript Source](#)

MyRAT opens a socket connection with a server that allows real-time communication between the client and the malicious server. There are 3 functions in the userscript. The names of the functions give away that this is probably not a script that someone would want, but keep in mind that the author can give the functions misleading names in order to hide malicious code. Here are what these functions do:

- 1) changeUsertitle changes the users usertitle to any usertitle defined by the userscript.
- 2) sendPM makes the userscript user send a PM to any member with any subject and message.
- 3) giveRep makes the userscript user give any member any rep within the userscript user's power.

You can imagine how functions like these can maliciously be used - especially when there are hundreds of users who have the userscript installed.

Suppose you install a large userscript with dozens of features. The author of the script could easily bury malicious code within any of the functions and do pretty much anything with your account, because when you install a userscript you give the script the ability to do an action defined by author at a time defined by the author.

I've also prepared a graphic to help understand the flow of data in the order given by the arrows:
Spoiler [\(Click to View\)](#)

Userscripts can add extra desirable, customizable features for users, but they come with their fair share of risks. Poorly coded userscripts can break normal site functions, and malicious userscripts can manipulate your account. I hope that all members proceed with caution when installing userscripts.

Xerotic - May 28, 2018, 7:44 pm

Very informational thread, Steve. Great job on always trying to keep HF safe.

Pronouncer - May 28, 2018, 7:46 pm

Very nice to see this, was a interesting read

Almonds - May 28, 2018, 7:46 pm

Well done, Steve.

Indeed something to keep in mind.

Crystallize. - May 28, 2018, 7:48 pm

You never cease to amaze me haha.Good job man writing this up.?

Woods - May 28, 2018, 7:49 pm

Thanks for the post man, one of the few concerns I have for using user scripts.

Bluffer - May 28, 2018, 8:28 pm

Great thread Steve, I'm glad you care about the community enough to bring this to attention.

Lately I've been getting a lot of 405 errors and I remember reading quite some time ago that if you have too many tabs open on HF or you are sending too many requests, this might happen. I've never changed my browsing habits on HF but only recently have started getting these pages which aren't much of an issue to me since all it takes is a quick refresh and everything is fine.

Adam's HFX userscript is the only one I have, it has all the great features one requires that Omni and Xerotic don't have the time to code into vanilla HF. I hope it has no malicious code in it but don't have the knowledge to check. I trust that there are so many users who use it that somebody would've found some malicious code by now if it existed.

Crystallize. - May 28, 2018, 8:33 pm

(May 28, 2018 08:28 PM)?luffer Wrote: [\[CITE\]](#) Great thread Steve, I'm glad you care about the community enough to bring this to attention.

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Bluffer - May 28, 2018, 8:40 pm

(May 28, 2018 08:33 PM)Crystallize. Wrote: [\[CITE\]](#) Those warnings are normal if you do more than

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I know they can be but its strange how I never got them before and I've always done the same thing... multiple tabs. Hell sometimes I have HF open on two different monitors, I dont even know why.

Xerotic - May 28, 2018, 8:47 pm

(May 28, 2018 08:40 PM)?luffer Wrote: [\[CITE\]](#) I know they can be but its strange how I never got them before and I've always done the same thing... multiple tabs. Hell sometimes I have HF open on two different monitors, I dont even know why.

Consider the following...

You use the feature in xadamxk's script that hides your online location. That works by sending a page request every single time you visit an HF page to <https://hackforums.net/misc.php>

So every page you load on HF you are actually sending TWO page requests. Increasing server load and triggering firewall defenses because of the multiple rapid requests.

DerJager - May 28, 2018, 8:48 pm

(May 28, 2018 08:40 PM)?luffer Wrote: [\[CITE\]](#) I know they can be but its strange how I never got them before and I've always done the same thing... multiple tabs. Hell sometimes I have HF open on two different monitors, I dont even know why.

same, i have 8 tabs open rn of just random shit. i dont understand why people find the need to install scripts/extensions such as the ones mentioned

Bluffer - May 28, 2018, 8:52 pm

(May 28, 2018 08:48 PM)DerJager Wrote: [\[CITE\]](#) some, i have 8 tabs open rn of just random shit. i dont understand why people find the need to install scripts/extensions such as the ones mentioned I've been super active on HF a few years now. The only one I find completely necessary is HFX and it's developed by a very trusted member so I don't think there's any risk in it.

Before, the "cite" feature was practically my only use for it, now I like everything.

Eagle 95 - May 28, 2018, 11:07 pm

Thanks for alerting the members about it mister. :)

CYB3RM4N - May 28, 2018, 11:10 pm

?luffer datelineT='1527565970' Wrote: [\[CITE\]](#) I've been super active on HF a few years now. The only one I find completely necessary is HFX and it's developed by a very trusted member so I don't think there's any risk in it.

Before, the "cite" feature was practically my only use for it, now I like everything.

The "Quick PM" function is also super useful.

Esteban - May 29, 2018, 5:36 pm

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thank you, i just far away from installing xadamkxs user script.

Meow - May 29, 2018, 5:38 pm

I can see a lot of members realized how dangerous scripts are when Adam pulled that joke a few months ago.

Nice thread anyway ?

Meow - May 29, 2018, 6:34 pm

(May 29, 2018 06:31 PM)xadamxk Wrote: [\[CITE\]](#) butt-hurt monkeys
Awesome way to describe HF members, wow. Coming from a mentor.

TB12 - May 29, 2018, 7:12 pm

I really think user scripts should not be allowed to be distributed. Most of them don't have a huge use and it would eliminate all risk.

TB12 - May 29, 2018, 7:37 pm

(May 29, 2018 07:34 PM)xadamxk Wrote: [\[CITE\]](#) With that mindset, deals should be banned to eliminate the risk of scammers ?

Did you read my post? Deals have huge use to the forum unlike user scripts. Learn to read rather than get triggered because I suggested something you like to be taken away

Hydra - May 29, 2018, 8:47 pm

(May 29, 2018 07:37 PM)TB12 Wrote: [\[CITE\]](#) Did you read my post? Deals have huge use to the forum unlike user scripts. Learn to read rather than get triggered because I suggested something you like to be taken away

Userscripts have a use otherwise there would be no interest at all.

HFX has a very useful benefit to members of HF. Flat Darkness has a strong benefit as well.

We can't and shouldn't baby people on the internet, especially being a tech forum. Deals are risky, proceed with caution. Extensions and Userscripts are risky, proceed with caution. Being on HF is risky, proceed with caution. Being on the internet is risky, proceed with caution. Crossing the road is risky, proceed with caution. Life has its dangers. All we can and should do is alert/advise members of HF like Steve did. People get scammed constantly - there's thankfully yet to be a large malicious attack using userscripts/extensions and I hope one never happens.

Juffar - May 30, 2018, 12:51 pm

Thanks for this. I've seen lots of other users on other forums getting their password and shit stolen because they used some infected userscript.

MaxoKream - May 30, 2018, 1:29 pm

Well done, very informative thread!

Neodraxis - May 30, 2018, 1:53 pm

Thank you for the alert. I will keep this in mind.

FamousHater - May 30, 2018, 2:00 pm

good warning even tho pretty sure most users here use adam's script as it covers most if not all issues hf members had.

Mrs. Robot - May 30, 2018, 2:20 pm

Very informative definitely one to bare in mind

Elitas - May 30, 2018, 3:24 pm

(May 29, 2018 06:40 PM)xadamxk Wrote: [\[CITE\]](#) I've had 3 users comb through it bc they didn't trust to use it before installing it.

But extensions update automatically by default so it's not like it matters ?

TLDR: If you want to be secure, turn auto updates off.

If you want updates, don't.

1/5 of my user base has them turned off.

Damn you Steve.

Breaking my evil plans yet again.

Go make more accounts to vouch for yourself m8 lol

This. I edited parts of HFX which I didn't like and turned off updates. I'm running an older version all the time but it's all I really need.

Xerotic - June 2, 2018, 12:01 pm

Also...

For those who use any userscripts that make background requests ('hide online location', 'show ban reason on profile', etc) you could potentially get yourself blocked due to HF's increased security this week.

Elitas - June 2, 2018, 2:48 pm

(Jun 2, 2018 01:58 PM)xadamxk Wrote: [\[CITE\]](#) I forgot to tell you, but we finally got the citation copied to clipboard automatically.

Added that like a month ago.

Thanks.

I'll push out a notice to users so they are aware of this.

You did tell me! I merged it to my own branch and still need to audit it all when I get time but I have been running it.

EDIT: Actually nvm, I am running it now I must have checked it already.