

Forum:[Hack Forums](#)

Thread: [Site Notifications and Web-Push](#)

Omniscient - October 10, 2026, 1:57 pm

? Hack Forums Notify System Rebuilt

A major rebuild of the HF notification system is now live.

The old notification system had been around for a long time and had accumulated a lot of legacy behavior, old frontend code, and outdated assumptions about how browsers handle realtime notifications.

Over the past several days I rebuilt a large portion of the system so that notifications are faster, cleaner, more reliable, and easier to expand in the future.

This ended up being a much bigger project than it first appeared. ?

? What Changed

The new system now has multiple layers working together:

- Realtime onsite notifications
- Browser push notifications
- Native Windows / mobile notifications
- Improved notification popup
- Individual read tracking
- Unread notifications sorted first
- Notification preferences
- Better support for future notification types
- More reliable background processing

The visible part may look relatively simple, but there is quite a bit happening behind the scenes.

? Realtime Onsite Notifications

When you're logged into HF and have the site open, new notifications can now appear in realtime without constantly refreshing the page.

There is no aggressive browser polling involved.

Instead, HF receives a lightweight realtime signal when something changes, and the browser then retrieves the authoritative notification data from the site.

This keeps the system responsive without having every browser repeatedly hammer the server asking:

"Any notifications yet?"

every few seconds. ?

? Browser Push Notifications

One of the biggest additions is proper browser push support.

If enabled in your notification settings, HF can now send native browser/OS notifications even when you're not actively looking at the site.

For example:

- ? New Private Message
- ? Someone quoted your post
- ? Someone mentioned you
- ? Someone replied to your thread

On Windows these appear through the normal Windows notification system.

On supported mobile browsers they can also appear as regular device notifications.

Each device/browser has its own subscription, so you can independently enable push notifications on your desktop, laptop, phone, etc.

? Current Notification Types

The current system supports:

- Private Messages
- Mentions
- Quoted replies
- Replies to your threads

The system was also rebuilt so that new notification types can be added by other HF plugins without having to rewrite the notification system itself.

That was an important part of the redesign.

For example, future plugins could potentially add notifications for things such as:

- Awards
- Marketplace activity
- Account events
- Custom plugin alerts
- Other HF features

Those can plug into the same notification framework.

? New Notification Settings

The old standalone notification preference page has effectively been replaced by a much cleaner settings popup directly inside the notification panel.

You can configure which types of notifications you want and whether browser push is enabled.

The notification popup itself also received several UI improvements:

- ? Mark notifications read
- ? Notification settings
- ? Close

Unread notifications are now automatically displayed before read notifications, which makes the list much easier to scan.

? Read / Unread Behavior

Clicking a notification now marks that specific notification as read.

When the notification list reloads, unread items remain at the top while read items move below them.

The unread badge also stays synchronized with the actual notification state.

This sounds simple, but getting the browser navigation, read state, realtime updates, and popup state all behaving consistently required quite a bit of work.

? Reliability Improvements

A lot of this rebuild wasn't visible frontend work.

There was also substantial backend work involving:

- Notification event storage
- Delivery queues
- Browser subscriptions
- Background workers
- Realtime socket handling
- Service workers
- Retry handling
- Expired subscription cleanup
- Process monitoring
- Automatic startup after server reboots
- Browser and OS notification behavior

One especially annoying issue involved a long-running background process using a timestamp value that was perfectly fine during normal web requests but became stale when the process stayed alive for hours.

That caused queued push notifications to sit until the worker restarted.

That took some digging to identify, but it's now fixed. ?

? Browser / OS Integration

One thing worth mentioning is that browser push notifications are ultimately controlled by both your browser and operating system.

For example, on Windows:

HF permission

- > Browser permission
- > Windows notification permission

all need to allow notifications.

So if you enable Browser Push on HF but never see a notification, make sure notifications are also enabled for your browser in Windows.

? Multiple Devices

Push subscriptions are device-specific.

Enabling browser push on your desktop does not automatically enable it on your phone.

If you want HF notifications on multiple devices, enable Browser Push from HF on each browser/device you want to receive them on.

? Testing & Development

This rebuild involved a lot of testing across:

- PHP
- JavaScript
- WebSockets
- Service Workers
- Browser Push APIs
- Database queues
- Firefox
- Windows notifications
- Background PHP workers
- Process management
- Cloudflare
- Nginx

There were plenty of little issues along the way.

Some examples:

- notifications being queued but not delivered
- browser subscriptions becoming stale
- service worker conflicts
- popup controls being tied to legacy code
- read-state timing during navigation
- realtime socket reconnect behavior
- background workers not staying active
- caching making JavaScript changes appear broken
- OS notifications being disabled even when Firefox permissions were enabled

In total, I've probably spent around 10 hours specifically on the new onsite + browser push notification system so far.

That does not include the separate Telegram notification system.

? Why Rebuild It?

The goal wasn't just to make the current notifications work better.

The bigger goal was to create a notification framework HF can build on going forward.

Instead of every plugin inventing its own notification method, future HF features can use a common system for:

- storing notifications
- displaying them
- tracking read state
- realtime alerts
- browser push
- user preferences

That should make future development much cleaner.

? Report Problems

If you notice anything strange with notifications, please post about it.

Useful reports would include things like:

- notifications not appearing
- duplicate notifications
- incorrect unread counts
- browser push not arriving
- wrong notification links
- notices not being marked read
- mobile-specific problems

Please include your browser/device if the problem involves browser push.

? HF Notify is now considerably more modern than it was a few days ago.

There are still a few small cleanup items left, but the major rebuild is working.

jcole - October 10, 2026, 1:59 pm

This looks fantastic from a user perspective. Really liking the new changes you have been making lately. Feels like buying a new vehicle with all the bells and whistles versus the old reliable.

spiral - October 10, 2026, 3:18 pm

Weird bug I noticed on mobile (safari) if I click on notifications then off it makes all the site text bold and quite large until refresh. Not sure if that's the same for anyone else?

Omniscient - October 10, 2026, 3:19 pm

(Oct 10, 2026 03:18 PM)spiral Wrote: [\[CITE\]](#) Weird bug I noticed on mobile (safari) if I click on notifications then off it makes all the site text bold and quite large until refresh. Not sure if that's the same for anyone else?

Safari really gay. :)

But screenshot it for us.

Scrub - October 10, 2026, 3:20 pm

(Oct 10, 2026 03:18 PM)spiral Wrote: [\[CITE\]](#) Weird bug I noticed on mobile (safari) if I click on notifications then off it makes all the site text bold and quite large until refresh. Not sure if that's the same for anyone else?
I had the same issue

Omniscient - October 10, 2026, 3:21 pm

(Oct 10, 2026 03:20 PM)Scrub Wrote: [\[CITE\]](#) I had the same issue

HAD or HAVE?

Just make sure to refresh as I did about 20 versions of the files in the past 24 hours.

spiral - October 10, 2026, 3:22 pm

(Oct 10, 2026 03:19 PM)Omniscient Wrote: [\[CITE\]](#) Safari really gay. :)

But screenshot it for us.
Before and after clicking on notifications.

? loading encrypted image...? loading encrypted image...? loading encrypted image...? loading encrypted image...

Omniscient - October 10, 2026, 3:25 pm

[spiral](#)

I guess I'll add it to my list of things to look at. I don't have an apple phone at the moment.

Raijin - October 10, 2026, 6:44 pm

Glad notifications are back again!

Motusora - October 10, 2026, 6:46 pm

what's this checkmark for ?
it's not clickable.
? loading encrypted image...

Scrub - October 10, 2026, 6:59 pm

(Oct 10, 2026 06:46 PM)Motusora Wrote: [\[CITE\]](#) what's this checkmark for ?
it's not clickable.
? loading encrypted image...
[Motusora](#) you don't get to know

Motusora - October 10, 2026, 7:01 pm

(Oct 10, 2026 06:59 PM)Scrub Wrote: [\[CITE\]](#) [Motusora](#) you don't get to know
ah okay i get it now .
it doesn't have any effect when i click it before ?

Scrub - October 10, 2026, 7:03 pm

(Oct 10, 2026 07:01 PM)Motusora Wrote: [\[CITE\]](#) ah okay i get it now .
it doesn't have any effect when i click it before ?
Gotta wait for that noti lmao

Omniscient - October 10, 2026, 8:21 pm

(Oct 10, 2026 06:46 PM)Motusora Wrote: [\[CITE\]](#) what's this checkmark for ?
it's not clickable.
? loading encrypted image...
Should Mark all Read.
I'll see about adding a tooltip for it.

CL1B - October 11, 2026, 5:30 am

Please fix the alignment of the buttons... really not a fan of this AI slop approach if it means throw away the foundation of web dev and it's a bad look. Especially from the more intermediate/professionals. Also think you can benefit from something like a test list where you have points that you require to check before announcing/pushing something. So you don't get hit with this and that doesn't work on mobile or on this or that, it's consistent with every update from the past month and that's not a good thing.

Really happy notifications are back though.

Scrub - October 11, 2026, 6:01 am

(Oct 11, 2026 05:30 AM)CL1B Wrote: [\[CITE\]](#) Please fix the alignment of the buttons... really not a fan of this AI slop approach if it means throw away the foundation of web dev and it's a bad look. Especially from the more intermediate/professionals. Also think you can benefit from something like a test list where you have points that you require to check before announcing/pushing something. So you don't get hit with this and that doesn't work on mobile or on this or that, it's consistent with every update from the past month and that's not a good thing.

Really happy notifications are back though.
I can see you getting closed soon.

CL1B - October 11, 2026, 6:09 am

(Oct 11, 2026 06:01 AM)Scrub Wrote: [\[CITE\]](#) I can see you getting closed soon.
No need to project this onto me, feedback is essential for developers and mine is super relevant in context of this thread.

One may not realize buttons aren't aligning on different screens and one may realize a checklist before deployment is actually useful (and common).

Plus, this is what a forum is about. Discussing, problem solving and anything in that trend. I rarely use this forum like you, and more like described. This is why my feedback in the past years still all have the same tone, they are constructive.. not negative or disrespectful. It makes sense why you would project this though, given your history.

Scrub - October 11, 2026, 6:10 am

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There's a difference between feedback and criticism and then downputting everything someone is doing.

I've seen several closed for less than this.

Only a matter of time before you're out the way too.

CL1B - October 11, 2026, 6:20 am

(Oct 11, 2026 06:10 AM)Scrub Wrote: [\[CITE\]](#) There's a difference between feedback and criticism and then downputting everything someone is doing.

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Since english isn't my native, I had GPT check if you were right.

But it turns out, it's definitely a you problem. See in my day to day I'm perceived as direct and even intimidating sometimes,
due to this I carefully pick my words. As i did with my feedback.

So learn to recognize this and stop projecting unless I'm breaking any rules.

? loading encrypted image...

Can recommend using GPT before replying to prevent looking-a-fool ?

Scrub - October 11, 2026, 6:28 am

(Oct 11, 2026 06:20 AM)CL1B Wrote: [\[CITE\]](#) Since english isn't my native, I had GPT check if you were right.

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So learn to recognize this and stop projecting unless I'm breaking any rules.

? loading encrypted image...

Can recommend using GPT before replying to prevent looking-a-fool ?

You already look like a retard on almost everything you post. I don't need gpt for that. There's a reason the owner of the site doesn't trust you. ?

CL1B - October 11, 2026, 6:32 am

[Scrub](#) Ofcourse my account looks like retard output; Since day 1 I post about dev, hacking and other things that relate to hacking.

You post anything but things related to hacking on a forum called HackForums (for a long time 2).

The irony. Stop cluttering this thread now kiddo. Come in with the feedback or get lost.

Au Jus Demon - October 11, 2026, 8:56 am

With the new notification system in place, would it be possible to add a notifications endpoint to the HF API v2?

Omniscient - October 11, 2026, 9:01 am

(Oct 11, 2026 08:56 AM)Au Jus Demon Wrote: [\[CITE\]](#) With the new notification system in place, would it be possible to add a notifications endpoint to the HF API v2?

I'm going to rebuild the API. Won't be this month but it has to also be done. It's hardly functional and full of bugs. It needs a complete rebuild. I'll consider new options when I'm ready to do the development.

But I do want to ask, why would use the API for notifications and not just the actual site? Can I ask how you'd use it? Help me understand the utility of such an option.

xadamxk - October 11, 2026, 9:09 am

(Oct 11, 2026 09:01 AM)Omniscient Wrote: [\[CITE\]](#) I'm going to rebuild the API. Won't be this month but it has to also be done. It's hardly functional and full of bugs. It needs a complete rebuild. I'll consider new options when I'm ready to do the development.

But I do want to ask, why would use the API for notifications and not just the actual site? Can I ask how you'd use it? Help me understand the utility of such an option.

More API functionality the better I say! Glad to hear you plan for the API rebuild - excited to see what changes you can make!

Au Jus Demon - October 11, 2026, 9:15 am

(Oct 11, 2026 09:01 AM)Omniscient Wrote: [\[CITE\]](#) I'm going to rebuild the API. Won't be this month but it has to also be done. It's hardly functional and full of bugs. It needs a complete rebuild. I'll consider new options when I'm ready to do the development.

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It was a bigger issue when I was handling my own Telegram alerts, but even with the native alerts it would still be useful overall. It would reduce the need to repeatedly poll several endpoints just to find out whether something changed, allowing us to update only the relevant systems and reduce unnecessary API requests.

Omniscient - October 11, 2026, 9:37 am

(Oct 11, 2026 09:15 AM)Au Jus Demon Wrote: [\[CITE\]](#) It was a bigger issue when I was handling my own Telegram alerts, but even with the native alerts it would still be useful overall. It would reduce the need to repeatedly poll several endpoints just to find out whether something changed, allowing us to update only the relevant systems and reduce unnecessary API requests.

What you're asking is that I setup a webhook endpoint. Because an API endpoint for notifications you still have to poll.

Do you want an endpoint to retrieve your HF notifications, or do you want HF to push an event to your application when something changes?

CL1B - October 11, 2026, 9:39 am

What would be more efficient is webhooks, they are easier to manage from HF's end only needing somewhere to relay notifications to instead of wasting 2 request + people vibecode a lot and don't respect resources like that so most likely would end in a lot of edge case rules being added or too much trial and error with rate limits etc. While WH just wants a destination and a basic set of rules like repeat once, repeat twice. Very cheap, very low maintenance and easy code.

Devs would simply listen for webhooks and do whatever, this is how many payment gateways work but also events like notifications in big social apps.

Internal API (not the public) should put the event in motion until WH relays it and after that it's out or gets repeated etc.

[Au Jus Demon](#) [xadamxk](#) [Omniscient](#)

Au Jus Demon - October 11, 2026, 9:40 am

(Oct 11, 2026 09:37 AM)Omniscient Wrote: [\[CITE\]](#) What you're asking is that I setup a webhook endpoint. Because an API endpoint for notifications you still have to poll.

Do you want an endpoint to retrieve your HF notifications, or do you want HF to push an event to your application when something changes?

The second one. I was calling it a notifications endpoint, but a webhook is what I actually meant. The useful part would be HF pushing an event when something changes so applications can update without polling.

CL1B - October 11, 2026, 9:40 am

(Oct 11, 2026 09:37 AM)Omniscient Wrote: [\[CITE\]](#) What you're asking is that I setup a webhook endpoint. Because an API endpoint for notifications you still have to poll.

Do you want an endpoint to retrieve your HF notifications, or do you want HF to push an event to your application when something changes?

Ah timing, you beat me 2 it

Omniscient - October 11, 2026, 9:49 am

(Oct 11, 2026 09:40 AM)Au Jus Demon Wrote: [\[CITE\]](#) The second one. I was calling it a notifications endpoint, but a webhook is what I actually meant. The useful part would be HF pushing an event when something changes so applications can update without polling.

So that's not really an API. You do want a webhook. It's not on my Roadmap but there is some sense to adding this. I'm just not convinced it's worth the development if only a few people use it.

HerrWinston - October 11, 2026, 10:19 am

[Omniscient](#) I have to say, I am really glad you share so much of the way with us, feedback rounds general updates on what your working on and pushing through and asking questions for feedback, its really nice to read into all the threads you make.

Just wanted to point out its not unnoticed. ^^

DemonAsylum - October 11, 2026, 10:45 am

(Oct 11, 2026 10:19 AM)HerrWinston Wrote: [\[CITE\]](#) [Omniscient](#) I have to say, I am really glad you share so much of the way with us, feedback rounds general updates on what your working on and pushing through and asking questions for feedback, its really nice to read into all the threads you make.

Just wanted to point out its not unnoticed. ^^

Couldn't agree more. Keeping us in the loop on plans and progress, asking for feedback about multiple things along the way, and generally just providing a lot of transparency are all incredibly appreciated. I'm very glad that is the approach he's been taking with it all and I hope it only continues to stay that way.

Jamika - October 13, 2026, 9:45 am

Finally, the notifications are working normally! And the design is MILES better than the old version. You absolutely deserve a huge round of applause, my friend! ?

Omniscient - October 13, 2026, 9:52 am

(16 hours ago)Jamika Wrote: [\[CITE\]](#) Finally, the notifications are working normally! And the design is

MILES better than the old version. You absolutely deserve a huge round of applause, my friend! ?
Thanks. Hopefully can get Convo up to the same standard.