

Forum:[Hack Forums](#)

Thread: [Server Move Sept 21st Update](#)

Omniscient - September 21, 2026, 2:42 pm

HF Server Migration Progress Update

I wanted to give everyone an update on the backend work happening for Hack Forums.

A significant amount of infrastructure work has now been completed on the new server. The goal has been to modernize the environment, improve performance, clean up years of accumulated configuration, and make sure HF has a solid base moving forward.

New Server Environment

The new server is running on modern enterprise hardware with substantially more resources than HF currently requires. This gives us plenty of overhead for the forum, database, background services, and future projects.

The operating system has been upgraded to a current Debian release, and the entire hosting stack has been rebuilt rather than simply copying the old server configuration blindly.

Web Server Stack

The web stack has been rebuilt using:

- Nginx
- Apache
- PHP-FPM
- MariaDB

Nginx continues to sit in front of Apache, which gives us flexibility for caching, connection handling, WebSockets, rate limiting, and other traffic controls.

A number of the old HF-specific Nginx and Apache rules have also been reviewed and migrated where they still make sense.

PHP Upgrade

The current production environment is still based on an older PHP setup, while the new server is running PHP 8.x.

The new PHP environment has been configured with the extensions HF requires, including image processing, database support, compression, internationalization, sockets, caching-related modules, and other dependencies.

PHP-FPM has also been tuned with more sensible modern limits instead of carrying over some very old settings that were originally configured when HF traffic was significantly higher.

Database Improvements

MariaDB has received a fairly extensive tuning pass.

This includes improvements to:

InnoDB memory allocation

Table caching

Connection handling

Temporary tables

File limits

Database logging

Disk I/O behavior

Slow query monitoring

The database service is also restricted to local access rather than being exposed unnecessarily.

The large HF database will be migrated and tested before the final cutover.

Firewall and Security

The new server firewall is configured with a default-deny policy.

Only required services are permitted, with additional protections provided by Fail2ban and upstream DDoS mitigation.

Various server services have been reviewed to make sure they are either restricted, disabled, or protected appropriately.

I have also migrated several existing HF-specific traffic protections and rate-limiting rules that have accumulated over the years.

Cloudflare Integration

HF will continue to use Cloudflare in front of the site.

The new server has been configured to correctly recognize visitor IP addresses through Cloudflare, and the existing automated protection system that can enable Cloudflare's Under Attack Mode based on server conditions has been migrated as well.

That system runs automatically and includes its own logging and log rotation.

Network and Kernel Tuning

Some of the lower-level Linux networking settings used by HF have also been reviewed and migrated.

This includes connection tracking limits and timeout settings intended for a busy public web server.

These settings help prevent stale network connections from consuming resources unnecessarily.

SSH and Administration

Server administration has been tightened up and moved to key-based SSH authentication.

Administrative tools, shell settings, scripts, and maintenance utilities have also been reviewed and cleaned up during the migration.

A private outbound tunnel used by certain HF services has also been rebuilt on the new system.

Logging and Maintenance

Cron jobs, log rotation rules, system services, and miscellaneous maintenance scripts have all been reviewed.

Several old customizations that could easily have been forgotten during a migration were rediscovered and carried over.

This has been one of the more important parts of the process because HF has accumulated many years of custom server-side behavior.

What Is Still Left?

The main remaining infrastructure project is the NodeJS-based Convo/notification system.

That portion is being handled separately because the existing Node environment is quite old and needs to be modernized rather than simply copied over.

The PHP side of HF is also undergoing a separate compatibility project so the forum code can run properly under modern PHP.

Nothing will be switched to production until the new environment has been fully tested.

Overall Status

At this point, most of the core server migration work is complete.

The remaining work is primarily:

- Migrating and testing the production database

- Completing PHP compatibility work

- Modernizing the NodeJS/Convo system

- Final application testing

- Final production cutover

There is no need for members to do anything.

This migration is being done carefully and with rollback options available throughout the process.

The objective is not just to move HF to another machine, but to clean up the infrastructure and put the site on a stronger foundation for the years ahead.

FYI: I had AI make this post for me based on the chat I had running. It's mostly accurate.

Enjoy and thank you for being patient. We're almost there.

Transporter007 - September 21, 2026, 3:03 pm

Nice. I am using HF on cell phone after a long time and it looks interesting too.

Chrome - September 21, 2026, 3:08 pm

Seems like a lot of work has gone into this server move. Will we see any changes from a user end or is it mostly performance improvements?

Omniscient - September 21, 2026, 3:12 pm

(Sep 21, 2026 03:03 PM)Transporter007 Wrote: [\[CITE\]](#) Nice. I am using HF on cell phone after a long time and it looks interesting too.

Once we go Agentic on our backend a ton of things are going to open up for us.

I'm pretty excited about it actually. We're so close to the finish line. This is where I begin to sprint and finally get this done.

I've wanted to move servers for at least 3 years. The timing with AI couldn't be better because AI does make the work much easier than hand editing 1500 PHP files.

I don't think HF is going to experience any actual downtime (besides DNS resolving) at all. Convo is probably going to be broken but I'm hopeful that I can get it working within a couple days, maybe even quicker.

The socket upgrade is going to be a big deal, we'll no longer have to be on a port 2096, we can proxy through Nginx to 443. This means Cloudflare Security will be easier to resolve as the Captcha Bot Check don't work on the current 2096. So that's one huge plus imho.

Next is we'll upgrade our NodeJS stack, which means I can start using modern NPMs for things like voice chat in Convo.

Changes to UIX is more likely too using agents to code it out quicker. I've wanted to redesign the mobile menu and how it functions. I want to go with a slideout menu for HF on Desktop too.

Then there is the HF Games....can build a new Hack Game.

The Roadmap is going to go into turbo mode once we're new server.

Scrub - September 21, 2026, 3:19 pm

Nice work, OG.

InspectorGadget - September 21, 2026, 5:20 pm

Good work man, I bet AI has made this process easier than it would have been fully manually.

Omniscient - September 22, 2026, 8:14 am

(Sep 21, 2026 05:20 PM)InspectorGadget Wrote: [\[CITE\]](#) Good work man, I bet AI has made this process easier than it would have been fully manually.

I've done it all manually before, a couple times even. At least the full server setup. But having AI is very helpful and does make it not only faster but gives me the latest conf changes.

I just give it specs of new server, old servers confs, and let it spit it new confs. Of course I go through it all and make adjustments still. AI doesn't always get it right. But the more I use AI for HF, the more it does know how HF and myself works. I think we all experience that with our agents.

Trapstar S - September 22, 2026, 8:22 am

Great work. Proud member of this forum for a decade now!

InspectorGadget - September 22, 2026, 9:42 am

(Sep 22, 2026 08:14 AM)Omniscient Wrote: [\[CITE\]](#) I've done it all manually before, a couple times

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Yeah I don't doubt, basically the same impact AI has for me, I'm not going to let it do everything, but it's nice to task it with some grunt work, leaving me to think about and do the stuff that actually needs a human input.

Respect - *September 22, 2026, 11:12 am*

(Sep 21, 2026 03:12 PM)Omniscient Wrote: [\[CITE\]](#) Then there is the HF Games....can build a new Hack Game.

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Very excited for updates to Hack Game! It has alot of potential

Terry A. Davis - *September 22, 2026, 10:34 pm*

(Sep 22, 2026 11:12 AM)Respect Wrote: [\[CITE\]](#) Very excited for updates to Hack Game! It has alot of potential

I don't want to move past 1337 xp but I very much agree.

Raijin - *September 26, 2026, 12:21 pm*

Wow this is very interesting to read the inner workings of your setup.

Jamika - *September 28, 2026, 12:41 am*

Is the site expected to be down for a long time during the migration? And roughly how long will it take?

Omniscient - *September 28, 2026, 5:05 pm*

(Sep 28, 2026 12:41 AM)Jamika Wrote: [\[CITE\]](#) Is the site expected to be down for a long time during the migration? And roughly how long will it take?

About 2 hours is the estimated downtime but it's all going to really depend on how fast your DNS updates.