HFN, INC.
MINUTES OF A MEETING OF THE BOARD OF DIRECTORS
December 14th, 2021

A meeting of the Board of Directors (the "Board") of HFN, INC., a Washington corporation, was held on December 14th, 2021, at 5:00pm (Pacific Time) at Big Fish Grill.

Directors Present:

Allen Enebo, Charlie Herb, David Ngai and Larry Norton, Frank Pineau and Tim Underwood

Also Present Were:

Jeremy Fallt, HFN General Manager

Directors Absent:

Howard Kapustein

Call to Order

Jeremy Fallt called the meeting to order at 5:05pm (Pacific Time) and Tim Underwood recorded the minutes. A quorum of directors was present, and the meeting, having been duly convened, was ready to proceed with business.

Approval of Minutes

No minutes were approved at this meeting.

Managers' Report

Jeremy sent out reports for November via email.

Recent Network Issues

Jeremy updated the board on the recent network issue that was affecting wireless mesh systems for some users (about 40) on one of our VLANs. Jeremy and IsoFusion worked throughout the weekend to determine the root cause and tracked down the issue to a single user with some rogue networking gear that was sending out some sort of IPv6 broadcast traffic that was impacting incorrectly configured wireless mesh systems and, in some cases, correctly configured wireless mesh systems.

An example of an incorrectly configured wireless mesh system that was having problems is where the user has correctly plugged the WAN port of the base unit directly into the HFN Portal but has incorrectly plugged the LAN ports of the satellite units also into the HFN Portal. With this setup the rogue IPv6 broadcast traffic was causing the base and/or the satellite units to shut down.

An example of a correctly configured wireless mesh system that was having problems is some older versions of the NETGEAR Orbi Mesh Wifi system. In this case the only device plugged directly into the HFN Portal is the base unit. The satellites are plugged into the customer's internal LAN or communicate wirelessly back to the base unit. With this setup the rogue IPv6 broadcast traffic was causing the base unit to shut down.

This issue was very hard to track down since the network was behaving properly and the bad customer gear was only periodically sending out the bad broadcast traffic. The affected customer gear had to be rebooted each time it stopped working which also made it difficult to troubleshoot.

IsoFusion is looking into a way to automatically identify this rogue traffic in the future so the problematic gear can be blocked before causing problems.

After the board meeting Steve Milton from IsoFusion brainstormed that maybe we can setup top of rack Linux based routers for each stack (12 or 13 stacks total, each one would need 2 routers for redundancy) that would allow us to use a separate VLAN for each customer. This would provide each customer with routing and NAT that could be managed centrally without deploying additional gear to each customer. This would also better isolate users from each other and prevent issues like this from happening in the future.

Rebranding Project

Jeremy and Charlie updated the board on the rebranding project including the effort to bring IHCA along. While efforts are still underway, the IHCA is currently opting to not participate in the rebranding. The HFN board was concerned about this since the IHCA is a large part of the community and has the most visible branding around the neighborhood. While the HFN board likes the new branding, they feel it is counterproductive to proceed without IHCA participation. The HFN board was also concerned about the lack of a Memorandum of Understanding (MOU) on how HFN can make use of the new logo.

Based on that discussion the following motions were made:

- Larry Norton made a motion to **delay formal acceptance by HFN of the new branding until we have mutually agreeable MOU**. Frank Pineau seconded the motion, and all board members present were in favor.
- Allen Enebo made a motion to **recommend that Highlands Council delay the January 7th rebranding launch until a later date**. Larry Norton seconded the motion, and all board members present were in favor.
- Charlie Herb made a motion to **withdraw HFN from the January 7th rebranding launch and the January Connections article if Highlands Council does not want to delay the currently schedule launch**. David Ngai seconded the motion. Charlie Herb, David Ngai and Larry Norton, Frank Pineau and Tim Underwood were in favor of the motion. Allen Enebo was opposed.

Adjournment

There being no further business to come before the meeting, the meeting was adjourned at 6:24pm (Pacific Time)

Respectfully submitted,

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Tim Underwood, Recording Secretary