

From: Richard Kahn <[REDACTED]>
To: "jeffrey E." <jeevacation@gmail.com>
Subject: NES Internet Summary from James
Date: Thu, 20 Sep 2018 19:36:00 +0000

Richard Kahn
HBRK Associates Inc.

[REDACTED]
New York, NY 10022
[REDACTED]
[REDACTED]
[REDACTED]

Begin forwarded message:

From: james | personal genius <[REDACTED]>
Subject: Re: Fwd: Re:
Date: September 20, 2018 at 2:51:40 PM EDT
To: Bella Klein <[REDACTED]>
Cc: Richard Kahn <[REDACTED]>, Merwin Dela cruz <[REDACTED]>

Summary:

JEE should see consistent speedtest results between 300-450 Mbps depending on the device he tests with and its location.

Notable:

I renamed the older/slower 2.4GHz network to New_71st (2.4G), keeping the faster network the previous name.

This should force all devices to talk to the high-speed wireless network at all time. Older devices that can't see the high speed network can join the (2.4G) version.

Detail:

All numbers are variable (thus the ranges), but reasonably consistent.

The modem is delivering 550 Mbps, but we can only see 450 of that through the Cisco router.

I believe the overhead is lost because the Cisco is splintering part of the connection off for the security system VLAN (it's walled off from the rest of the network). I've turned off every other feature that could be costing bandwidth.

The switch costs us another 1-2% of speed. That's better than expected. So through the switch we get 435-450 Mbps.

Ethernet to the back of the AirPort Extremes are almost all identical to the switch itself. There is some speed loss on the AirPort Extremes that are furthest away from the router, which is to be expected.

WiFi off the AirPort Extreme varies wildly based on the device you're measuring with, and the particular AirPort Extreme.

For instance, I get over 400Mbps off the base station in the security office on my MacBook Pro, but Merwin sees half that on his MacBook Air.

Likewise, in the dining room I see max of 350, whereas the boss' MacBook Pro gets over 400 consistently. The newer & pricier Macs obviously get better WiFi cards than the rest of us.

The 6th Floor Apple TV gets 400 consistently, and it's Ethernet to the AirPort Extreme there. The iMac Pro is WiFi to the same basestation and it gets 450.

iPhones' WiFi is speed capped to save battery, so they will almost never see above 300 Mbps.

Problem areas:

2nd floor library's Ethernet connection maxed out at 300 Mbps. Not sure why at the moment, but that means it's WiFi barely gets over 200.

This is probably caused by the length of the network cable run to this location. I can run a line test on it to see if there are any shorts in the cable, but I doubt this room will see much ultra-high speed traffic.

The third floor eero gets 350 via Ethernet, but 200 Mbps via WiFi. That's almost certainly because it's using one of its high speed radios to communicate to its other wireless nodes and there's just less bandwidth to talk to client devices.

I don't think we're going to get around this without having Ethernet lines into the back half of the third floor. (3 is master bed & bath, with the massage room in the back).

Thank you,

James Ce
your Personal Genius
 Certified Support Professional 10.6
<http://personalgenius.co>

On Sep 18, 2018, at 6:51 PM, Merwin Dela cruz <[REDACTED]> wrote:

Merwin Dela Cruz
[REDACTED]
[REDACTED]

Begin forwarded message:

From: Merwin Dela cruz <[REDACTED]>
Date: September 18, 2018 at 5:05:58 PM EDT
To: Bella Klein <[REDACTED]>
Subject: Re:

All set. This is what we are getting right off their modem/router.
All static IP addresses are also configured into the the modem.

James, will need to come by to make sure everything is ok.
<image1.jpeg>

Thanks

Merwin Dela Cruz
[REDACTED]
[REDACTED]

On Sep 18, 2018, at 3:36 PM, Bella Klein <[REDACTED]> wrote:

Hopefully IP address will not be lost

Thank you,

Bella

On Sep 18, 2018, at 3:26 PM, Merwin Dela cruz <[REDACTED]> wrote:

Bella,
Tech is here and signal is still reading less than 300 mbps.

He is replacing the modem to a combo and we are downgrading to 400mbps.

Thanks

Merwin Dela Cruz
[REDACTED]
[REDACTED]

On Sep 18, 2018, at 10:04 AM, Bella Klein <[REDACTED]> wrote:

ok, tech will be there at 1PM

Thank you,
Bella

[REDACTED]
Tel: [REDACTED]

On Sep 18, 2018, at 10:03 AM, james | personal genius <[REDACTED]> wrote:

Not available. The first install tech was sure the configuration could be made, he broke the speed. The second tech was sure it could NOT be made.

I don't have anything to add.

Thank you,

James Ce
your Personal Genius
 Certified Support Professional 10.6
<http://personalgenius.co>

On Sep 18, 2018, at 9:13 AM, Bella Klein <[REDACTED]> wrote:

Merwin and I on the phone with tech support and he is positive that configuration can be made. James, trying to conference you in...

Thank you,
Bella

[REDACTED]
Tel: [REDACTED]

On Sep 17, 2018, at 6:39 PM, james | personal genius <[REDACTED]> wrote:

Bella,

When you order, can you ask them to include the static IP on the order? That will make everything much easier on install.

Thank you,

James Ce
your Personal Genius
 Certified Support Professional 10.6
<http://personalgenius.co>

On Sep 17, 2018, at 6:36 PM, Richard Kahn <[REDACTED]> wrote:

thank you for summary
i asked jee and he said 400 bps
bella please call Spectrum tomorrow
thanks

Richard Kahn
HBRK Associates Inc.

[REDACTED]

New York, NY 10022

[REDACTED]

[REDACTED]

[REDACTED]

On Sep 17, 2018, at 5:49 PM, james | personal genius <[REDACTED]> wrote:

I just spoke with the tech (and his dispatch / support) and finally have an explanation of the problem — it's clear that very few people at Spectrum understand how this new service works and it has taken quite a while to get answers.

Their gigabit service requires their two-box (separate modem and router) hardware solution and does not allow us to bridge their router and use our firewall/router solution.

What that means for us is that we either:

1. have to run the service in double-NAT, which will disable external access to the security cameras and possibly the HVAC (the HVAC being the bigger problem), or
2. we have to remove our firewall and (*assuming I can configure their router to do the advanced routing—I won't know for sure until I try*) run our network, which will expose access to the security system to anyone that can join the WiFi network.

The only other choice is to downgrade to their 400 Mbps service that will allow us to use their old hardware (single box combo modem & router like we had previously).

Obviously none of these options are great. Please let me know what [REDACTED] like to do.

Thank you,

James Ce

[your own Personal Genius](#)

☐ Certified Support Professional 10.6

<http://personalgenius.co>

On Sep 17, 2018, at 10:43 AM, Merwin Dela cruz <[REDACTED]> wrote:

We have a tech scheduled to come today between 1-2 pm to fix the router.

Thanks

Merwin Dela Cruz

On Sep 14, 2018, at 10:15 AM, james | personal genius <[REDACTED]> wrote:

Honestly Spectrum seemed to have no clue what they were doing with this new service.

The install tech seems to think it can be done remotely, but [REDACTED] almost certain they're going to want to swap out their modem and router again.

Merwin has the install tech's contact info to follow up as soon as Mr. Epstein is traveling again.

Once Spectrum can get us back to 940+ at their router, [REDACTED] going to need to go back and test the WiFi speeds on all the floors. It varies wildly from floor to floor at the moment. I'll need to figure out how much of that variance is wiring, and how much I can fix with configuration changes.

Thank you,

James Ce

your Personal Genius

□ Certified Support Professional 10.6

<http://personalgenius.co>

On Sep 14, 2018, at 9:12 AM, Richard Kahn <[REDACTED]> wrote:

do we need spectrum to come back to house or can it be resolved remotely?
please advise

Richard Kahn

HBRK Associates Inc.

[REDACTED]
New York, NY 10022

On Sep 13, 2018, at 6:11 PM, james | personal genius <[REDACTED]> wrote:

The new service is up and working at better speeds than we were getting, with the static IP needed for the security cameras.

We were getting the new 1GB speed before they made changes for the static IP; but they broke something and now we're seeing around 500/40. Spectrum still needs to resolve that, but we ran out of time getting everything back up and running before the boss arrives.

Thank you,

James Ce
your Personal Genius
 Certified Support Professional 10.6
<http://personalgenius.co>

On Sep 13, 2018, at 3:56 PM, Richard Kahn <[REDACTED]> wrote:

is internet working with new speeds?
please advise
thank you

Richard Kahn
HBRK Associates Inc.
[REDACTED]
New York, NY 10022
[REDACTED]
[REDACTED]
[REDACTED]