## **NTAC Peering and Routing Working Group**

03/17/2020 Call Notes

- Agenda Bash
  - a. James Deaton: Zoom
- 2. Update on peering and I2PX (and other stuff too)
  - a. Jeff Bartig: majority of peering traffic is currently on the decline.
  - b. Jeff Bartig: Seeing traffic growing rapidly to home providers and video providers (Zoom, webex, etc)
  - c. Zoom peers via 3 separate 10Gs at datacenters. All are via lit 10G circuits between peering site and zoom datacenters. All running very hot currently, though are lower this week. NY neared 10G last week. Zoom appears to have transitioned much traffic to AWS. I2 is working on getting lit 100G circuits to new equinix-adjacent DC in New Jersey.
  - d. Home broadband providers traffic is greatly increasing especially Comcast and TW cable, which have tripled and quadrupled.
  - e. Farmer: UMN has tripled comcast peering traffic and online classes start tomorrow.
  - f. Discussion of tunneling traffic. Many are splitting tunnels now.
  - g. VPN capacity: UMN can handle 40K with 40G. Many others are scrambling to increase capacity via switching to active/active, utilizing FP9300s, etc.
  - h. Steve Wallace: anyone using vended cloud-based VPN that could discuss?
    - i. Apparently not.
  - i. UMN is deploying lab VPN boxes if necessary. Have been looking at virtual ASAs if necessary.
  - j. Tony Brock: OSU is deploying an RDP gateway. Clemson also deployed an RDP gateway using F5 APM. Dan S. will get details to share. Bother him directly if you need it sooner.
  - k. Jeff Bartig: still working on moving MS out of R&E.
  - I. Bill Owens: Zoom: had observed significant traffic to AWS. Wondering if they were seeing the right thing. Is Zoom changing their tuning?
    - i. Bartig: they likely are shifting to AWS. Have seen both audio and video coming from AWS.
  - m. Owens: is zoom interested in deploying resources to campuses? Anecdotal discussions indicated that this is doable but very hard to do short-term. I.e., Probably not mid-pandemic.
  - n. I2 has been really focused on COVID for last two weeks. Hopefully will be catching up soon.
  - o. Chris Wilkerson: Have been going through Packet RFI on design work on interconnect sites and how they might be assembled with building blocks from the four providers.
  - p. Dan Schmiedt: Clemson has also built an Asterisk SIP conference bridge. Bug him if you want configuration details.

- q. Farmer: will let us know what happens when classes start. Has been a strong push for asynchronous instruction. Content is in Canvas.
- r. James Deaton: We should ask folks from routeviews to update on how internet traffic will be/is shifting. Dave Teach, et al. Agreement from group. Linda and Dale will arrange/organize.
- 3. Network weather update trends and coming events
  - a. See above
- 4. I2 network update
  - a. See above
- 5. CII conversation
  - a. Tabling for now. Farmer is Ok with it having been over-run by events.
- 6. Hurricane Electric and IRR
- 7. Any other business?
- 8. Call ended at 4:51 EST (ish)