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

05/19/2020 Call Notes

- 1. Agenda Bash
  - a. See AOB
  - b. (discussion of FCC internet bandwidth under-reporting)
- 2. Update on peering and I2PX
  - a. Jeff Bartig- Focus has been on increasing capacity with broadband providers. Majority of Comcast augments completed. 100G to Comcast in San Jose, Seattle, Chicago, Ashburn. 3x 10G in Dallas. LA is next for 100G. Exploring possibility of new peering in Denver. Capacity with Charter/TW Cable. Augment Chicago, watching other places. Had meeting with Webex about increasing peering, but no progress so far. Request to add peering with Kentik willing to establish peering in Ashburn.
  - b. Karl Reuss- Any ask for peering with Verizon FIOS? No have not had success as do not meet peering requirements. Was noted that they tend to see us as "customers" not peers, like they would see other carriers.
  - c. Steve Wallace and Jeff have been working on IRR data and working with networks to get IRR data in good shape. Google will begin implanting filters bases on IRR data on July 1. Goal is to have as-set ready to go by mid-June.
  - d. Matt Valenzisi can mention webex issues to Cisco.
- 3. Network Weather Update Trends and coming events
  - a. Traffic continues to be low and summer-like.
- 4. I2 Network update
  - a. Jeff Bartig: Continuing work on NGI packet project and the vendors under consideration. Field trials likely in July. Updates likely on NTAC call.
  - b. Scott Taylor: team has been getting familiar with offerings and other changes that they would like to see as part of NGI.
- 5. AOB?
  - a. Google cache issue
    - i. Caches were being recalled because of lack of traffic because students are home as a result of COVID-19. Google realized their mistake.
    - ii. Bartig: have seen this occur with R&E networks over the summer as well. Jeff will discuss and get both Google and Akamai to look at R&E networks differently.
    - iii. Darrell N: underlying need is to look at larger pictures.
    - iv. Dave Diller: universities often have older hardware as they were early deployers. Automation at its finest.
  - b. Akamai cache issue
    - i. Bill Owens: Akamai realized the same mistake. But will be replacing hardware.
  - c. Darrell N: what changes are folks expecting with fall semester? How can we best prepare the networks?

- i. Bill Owens: Webex told one campus to expect 4mb/s per stream for each webex user. So, that campus is wanting increase connectivity to Webex.
- ii. Universities are planning for a semester in flux.
- iii. Many are planning to end semester at Thanksgiving, as time after thanksgiving is largely dead time. Some universities are starting earlier.
- iv. Farmer: will have to see if there is a state fair. Would overload neighborhood.
- v. Owens: some schools are expecting single-person suites.
- vi. Discussion of dining and other close social spaces.
- vii. James Deaton: heard of a school that for class sizes >40, they will stay online. Others in person.
- viii. Dan Schmiedt: Clemson is giving faculty the options of various class scenarios.
- ix. Farmer: moving call centers off-campus.
- x. Schmiedt: Noted tighter coupling of IT group with Academic and Administration parts of the university.
- xi. Farmer also seeing better comms occurring.
- xii. Farmer: also seeing site reliability reporting.
- xiii. Linda Roos: Noted that we will likely learn a lot in the coming semester.