Internet2 Peering & Routing Working Group
Notes from 4p EDT 5/18/2021 call

1. Agenda Bash
   a. Spoofer – James Deation
2. Update on peering and I2PX
   a. Have mostly been focused on developing routing policy for NGI. New peering with Charter in San Jose. Have been working on a 100G connection in LA with Time Warner Cable/Charter. Working with Box for additional capacity in Chicago. Will be sending info on moving box out of R&E table when this is complete.
3. Network Weather Update – Trends and Coming Events
   a. End of Semester. Farmer: will be interesting to see if things trend down or level off. Many in the community are expecting a ramp-up due to staff returning to work on campus, actually having summer school, etc. Question is what will the new normal look like. May be hard to tell what that will be.
4. Internet2 network update
   a. Chris W is not here. Joe Bender: Have completed most work on optical. 400G testing is coming along nicely. Usual minor hiccups but everything looking very good.
5. Any other business?
   a. James Deaton: Spoofer: any thoughts on Steve Wallace's post on NTAC?
      i. Farmer: is there a build that can run on a server?
      ii. Deaton: A. Gallo had been building a containerized version which inspired developers (Thanks to Andrew for this)
      iii. https://hub.docker.com/r/kenkeys/spoofer (containerized version)
      iv. https://www.caida.org/projects/spoofer/
      v. https://api.spoofer.caida.org
      vi. Makes it easily deployable on switches, perfsonar nodes, etc.
      vii. Lambert: there is a scheduler as well.
      viii. Harden: this saves a lot of work to verify that uRPF works.
      ix. Farmer: folks should include this on tests of post-upgrade tests.
      x. Steve Wallace: agents who reported pass/fail spoofer results = 1.5% of R&E community.
      xi. Deaton: will work to get more use from MANRS group.
      xii. uRPF can be very fragile, so testing is necessary. Especially with multi-chassis LAG, etc.
      xiii. Farmer: have uRFP running in border infrastrucuture in loose mode – belt and suspenders to border filters.
      xiv. Ventsi Gotov: is there a tool that showed info on when uRPF kicked in. Was a presentation by a on an NTAC call by Front Range Gigapop.
         1. https://www.youtube.com/watch?v=JNm07jOdkus
      xv. Deaton: wants Steve to report a significant increase in spoofer run statistics.

           xvi.   Wallace: ROAs, Source Address Validation, etc are all important.
          xvii.   Farmer: should we make a list of things we should do as we return to campus. What are the "New Normals" we want to create: let's be more intentional about things like this. Farmer will probe the NTAC list to solicit a checklist of things that we can do when we return to campus.

   b. Steve Wallace: there is a recent blog post about how ROAs are important. Commodity uptake of RPKI is 10x that of the R&E community. Likely because most folks out there are single-homed and ISP-managed.

            i.   Farmer: what are expectations of our community?
           ii.   Wallace: we have an opportunity to formalize community expectations.
         iii.   Wallace: institutions should share their experience with others and help.

6. Adjourn