

The agreement between CENIC and Internet2 to consolidate TransitRail and CPS has been executed. We are now working up the transition plan to be brought to the peering working group.

It is our intent to accomplish the majority of the transition activities during the summer timeframe, if scheduling permits.

The four major tasks, each with a number of detailed activities below them, are:

1. Targeting transition of the TR service desk from PNWGP to the Internet2 NOC by June 30 to coincide with the ending term of the current PNWGP agreement.
2. Building the consolidated TR/CPS backbone to match the drawings distributed during the earlier discussions (and attached to this message).
3. Building pseudo-wires between exchange point routers and existing CPS participants over spring and early summer for future use.
4. Increasing traffic exchange between the existing TR and CPS infrastructure.
5. Various exchange point activities in support of consolidation (e.g. adding exchange point router in New York, etc.)

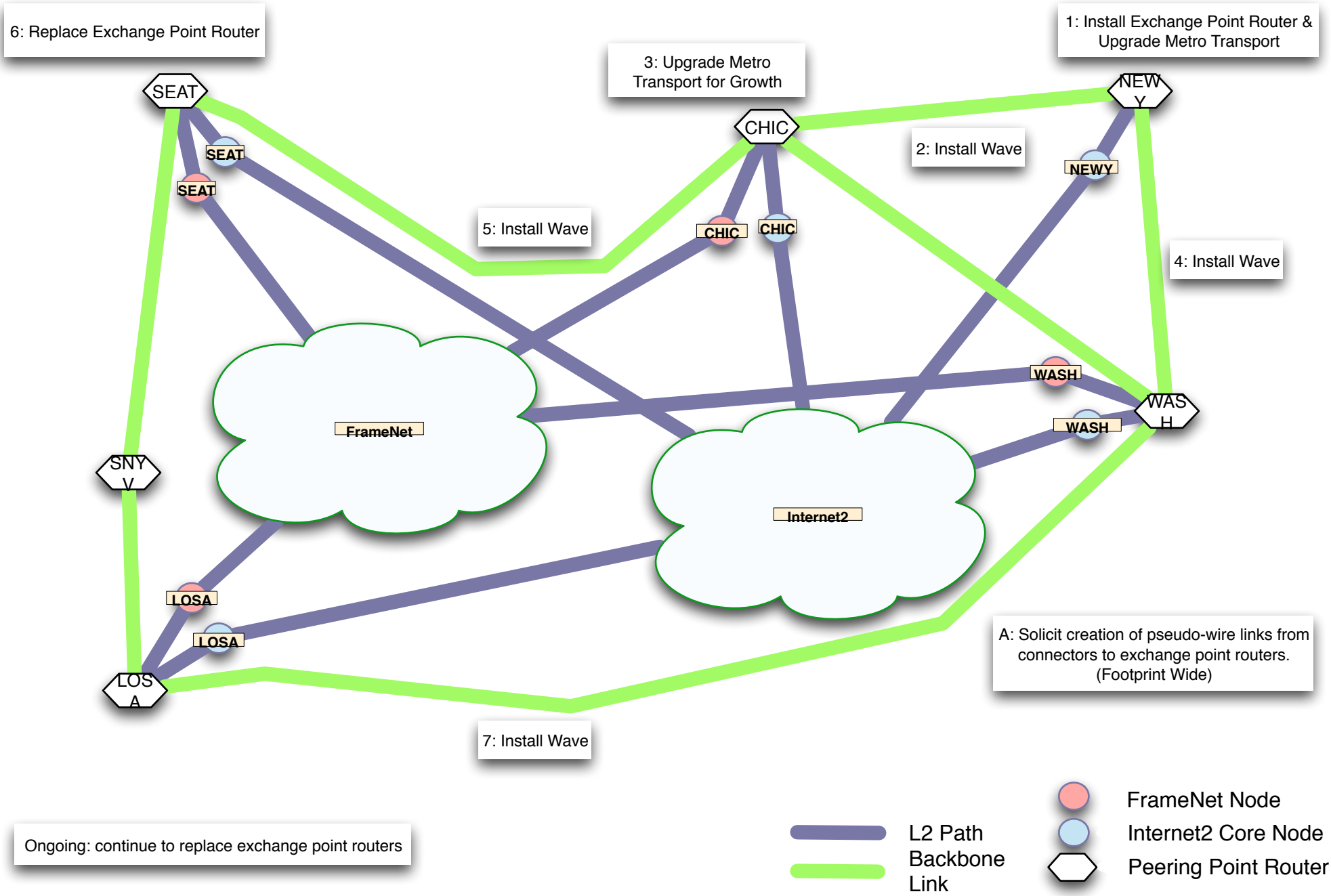
We look forward to working with the Peering Working Group on the planning for each of these activities and moving towards the consolidated TransitRail/Commodity Peering Service.

-- Dave Reese

# CPS/TR Architecture

## Initially Planned Enhancements

19-Apr-2010



# Additional Exchange of Routes

2010-Apr-19

The network footprints now have physical interconnects built in 4 locations: Chicago, Los Angeles, Seattle, and Virginia/Washington DC. These have allowed the TR and CPS networks to share routes and quickly increase benefit to participants.

We'd like to discuss broadening this exchange of these routes within the next-month and seek feedback.

Proposing the below set of AS11164(legacy-TransitRail) and CPS(AS11537) peers to be exchanged to enhance the connectivity provided to participants. A handful of the networks involved in this use IP anycast and most early-exit; where there is overlap reaching these peer networks via both ASN the exchange as proposed will capture marginally more traffic from those networks. This additional set of routes should enable 1-3 Gbps of new traffic and represent a relatively small percentage change(<10%) of traffic received by a given regional/campus network via either service.

AS11164/TransitRail -> AS11537/CPS (~20k additional prefixes):

- Bitgravity CDN (AS40009)
- Hanaro Telecom (AS9318)
- HiNet (AS9680)
- ICANN public infrastructure (AS20144, AS26299)
- Internode (AS4739)
- Japan Telecom (AS4725)
- Korea Telecom (AS4766)
- New Zealand Telecom (AS4648)
- Panther Express / CDNetworks (AS36408)
- Packet Clearing House (AS3856)
- REACH (AS4637)
- UltraDNS (AS12008)
- TW Telecom (AS4323)
- Verisign public infrastructure (ASNs per-region)

AS11537/CPS -> AS11164/TransitRail (~40k additional prefixes):

- Additional Global Crossing (3549)

Engineers will monitor the sets of routes and adjust appropriately to avoid congestion of peer-facing links.

Networks will generally not need to make any configuration changes, though any networks that have enacted prefix limits on session with TransitRail or CPS may need to increase their limits; suggested limits today would be 250k or higher. The existing 6550x:<ASN> or 6500x:<ASN> BGP community controls will continue to operate as expected on both networks.

If you would like to avoid this enhancement for your network please tag 65500:11537 and 65000:11164 on your announcements toward TransitRail or CPS respectfully and if desired filter routes with the respective (11537 or 11164) in the as-path. This will allow you to

continue to take advantage of your directly homed service, but your routes will not be passed on to the remote service.