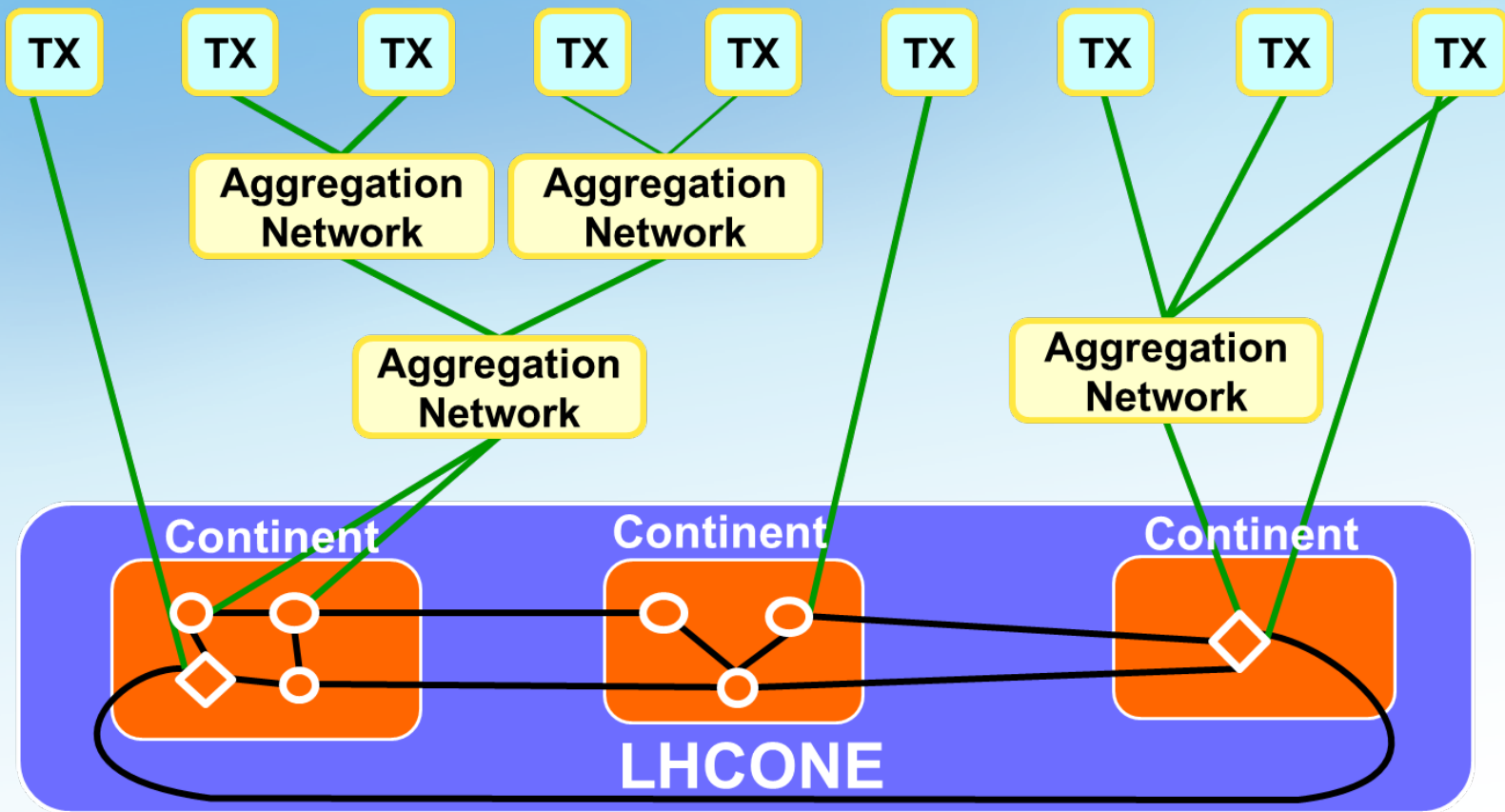




June 13th 2011 – LHC OPN / LHCONE Meeting
Eric Boyd, Internet2 Deputy Technology Officer

LHCONE – North American Components

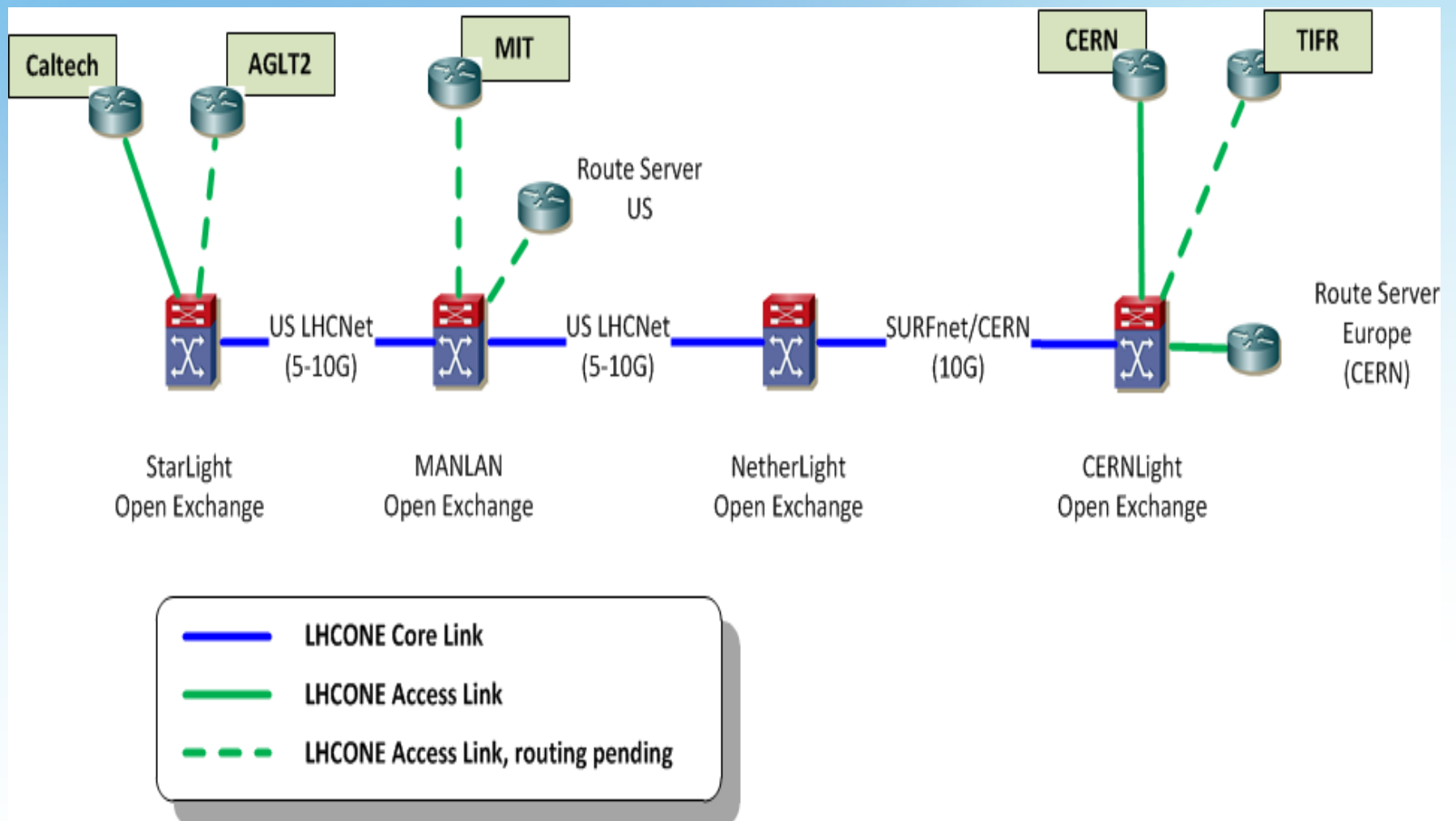
LHCONE High-level Architecture



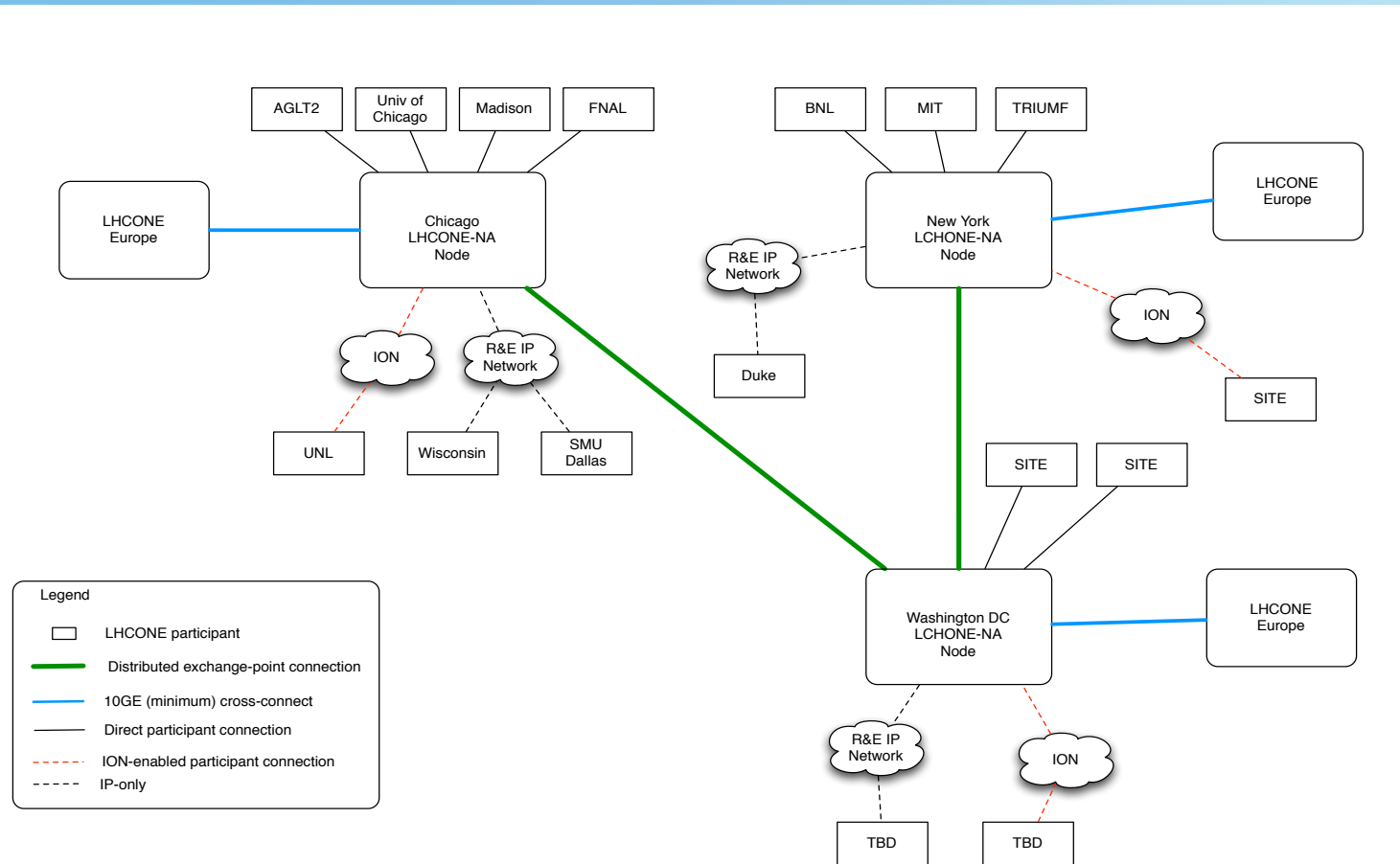
○ Single node Exchange Point ◇ Distributed Exchange Point

LHCONE Prototype

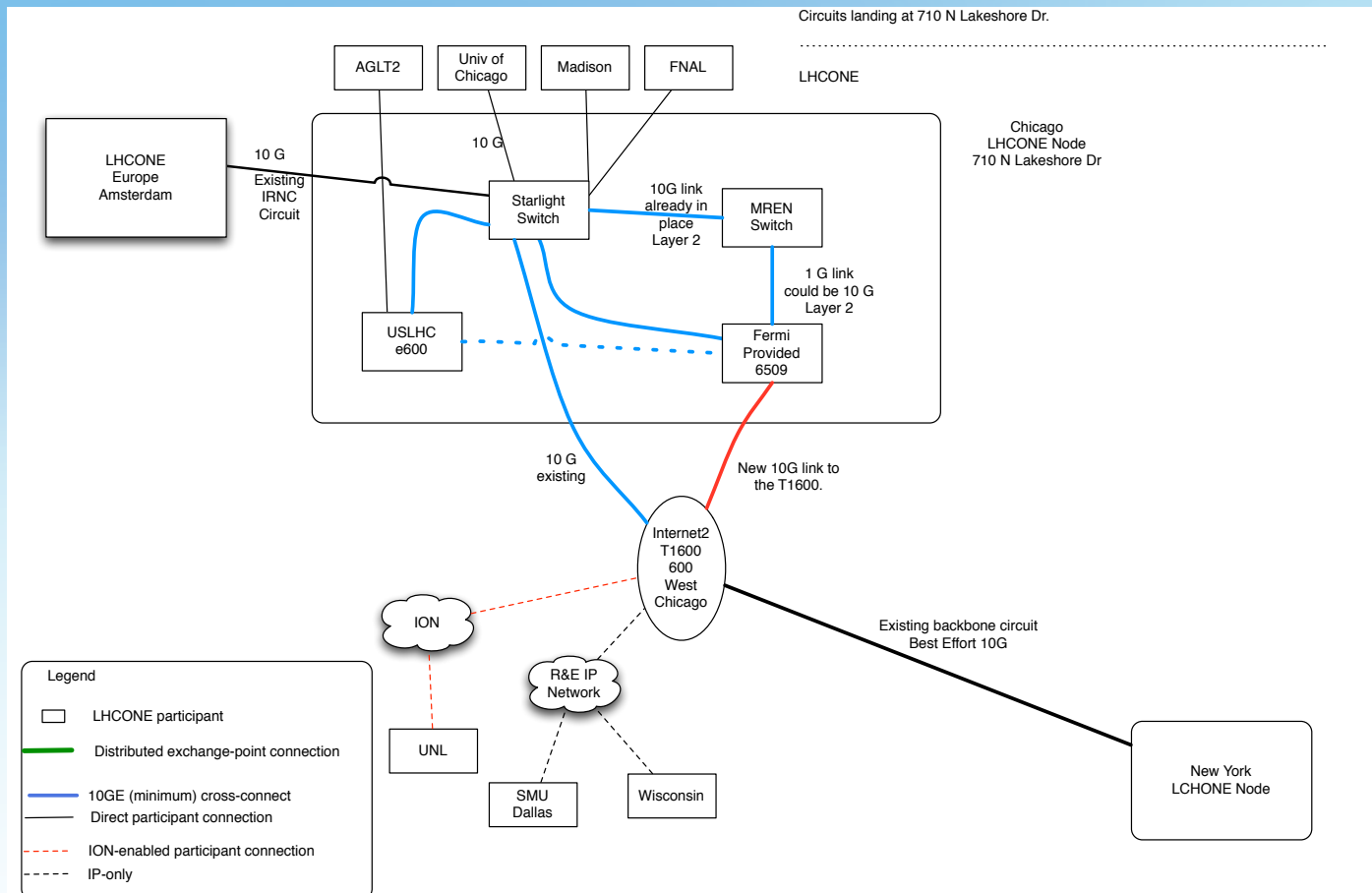
- The planned prototype includes three nodes in North America:
 - Chicago (Starlight)
 - New York (MAN LAN)
 - Washington DC (MacLean)
- For the prototype, these nodes will be interconnected via the existing Internet2 IP Network by a combination of VPLS and L2 VPN overlays on the existing backbone circuits.
 - Internet2's IP network generally has 9 Gbps of available capacity on the direct interconnect between Chicago and New York so a potential implementation would have roughly 9 Gbps of available best-effort traffic at the outset.
 - After the roll-out of the prototype, there is also the potential to provide a dedicated backbone circuit to provide 10G of capacity (in addition to or in lieu of the 9 G of best effort traffic), if there is demand and funding after the prototype is rolled out.



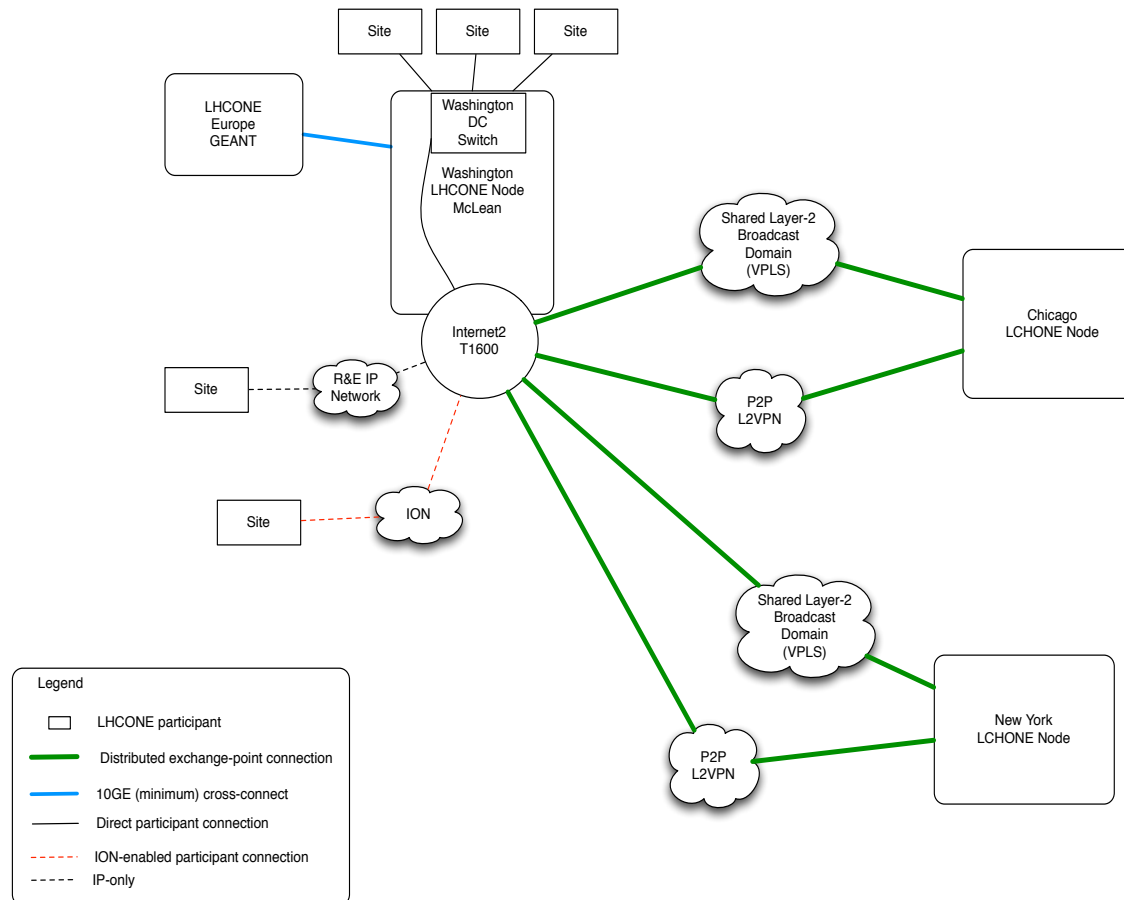
LHCONE-NA: NORTH AMERICAN COMPONENTS



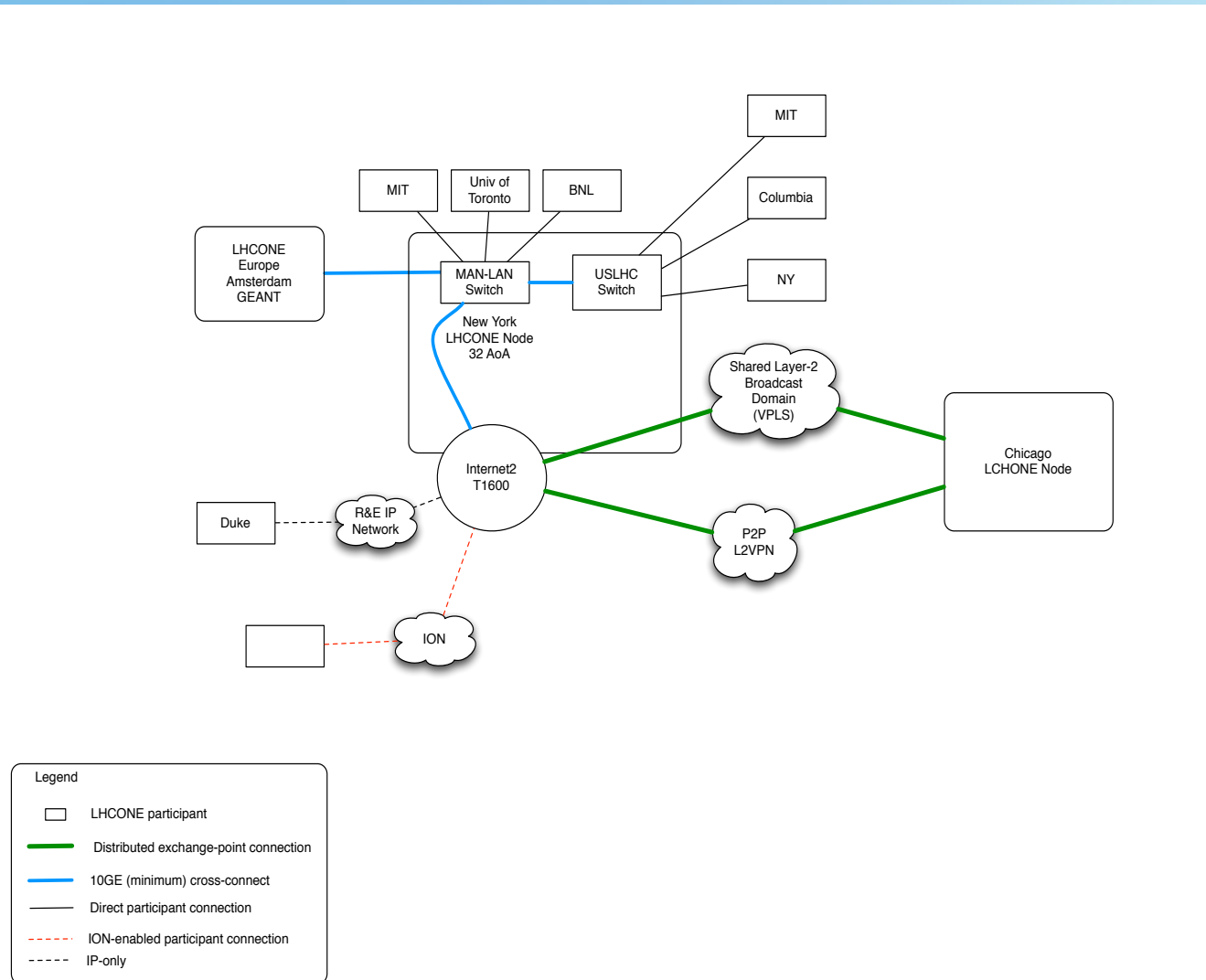
LHCONE-NA: CHICAGO

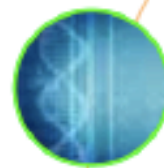


LHCONE-NA: WASHINGTON DC



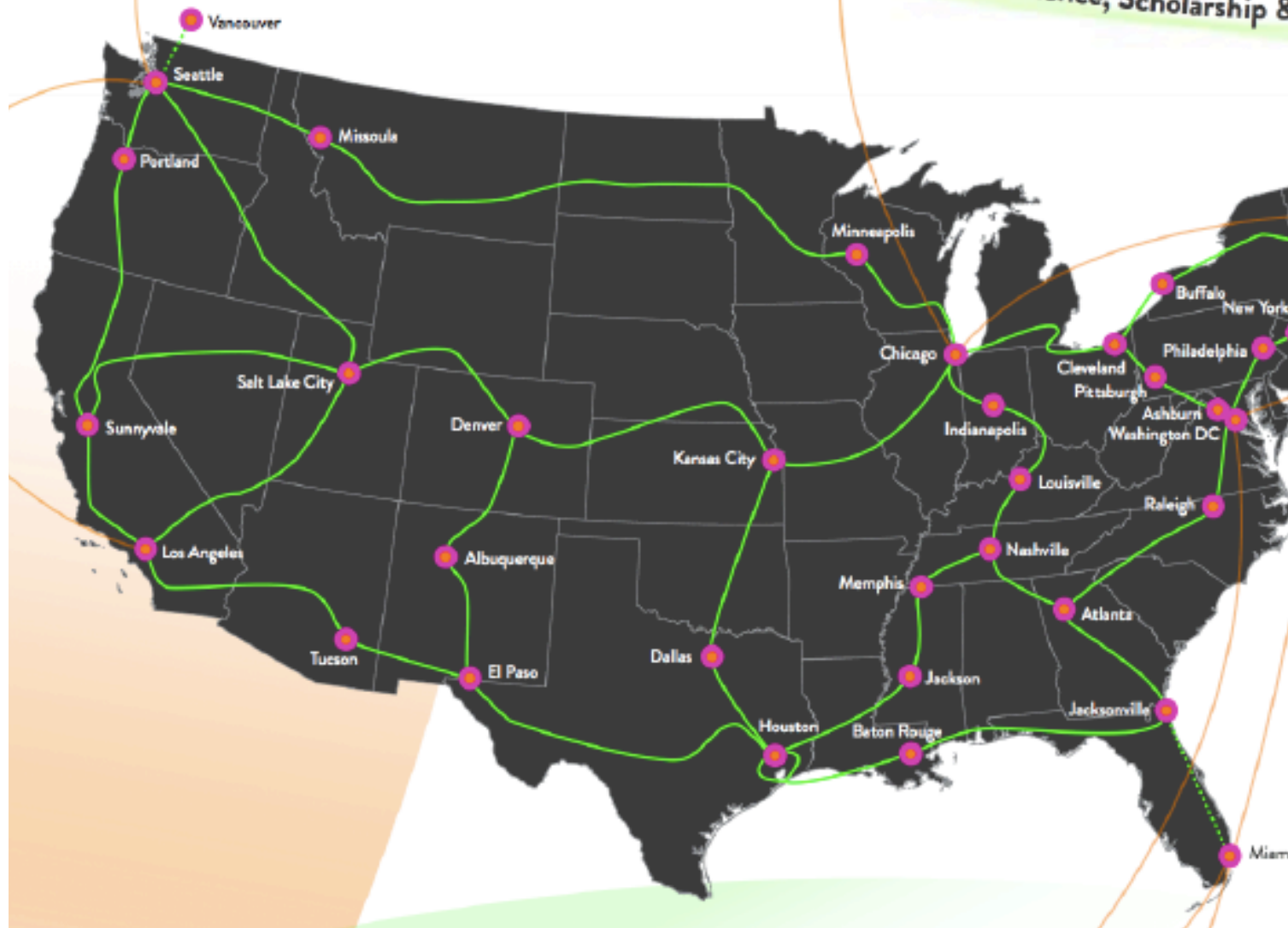
LHCONE-NA: NEW YORK CITY





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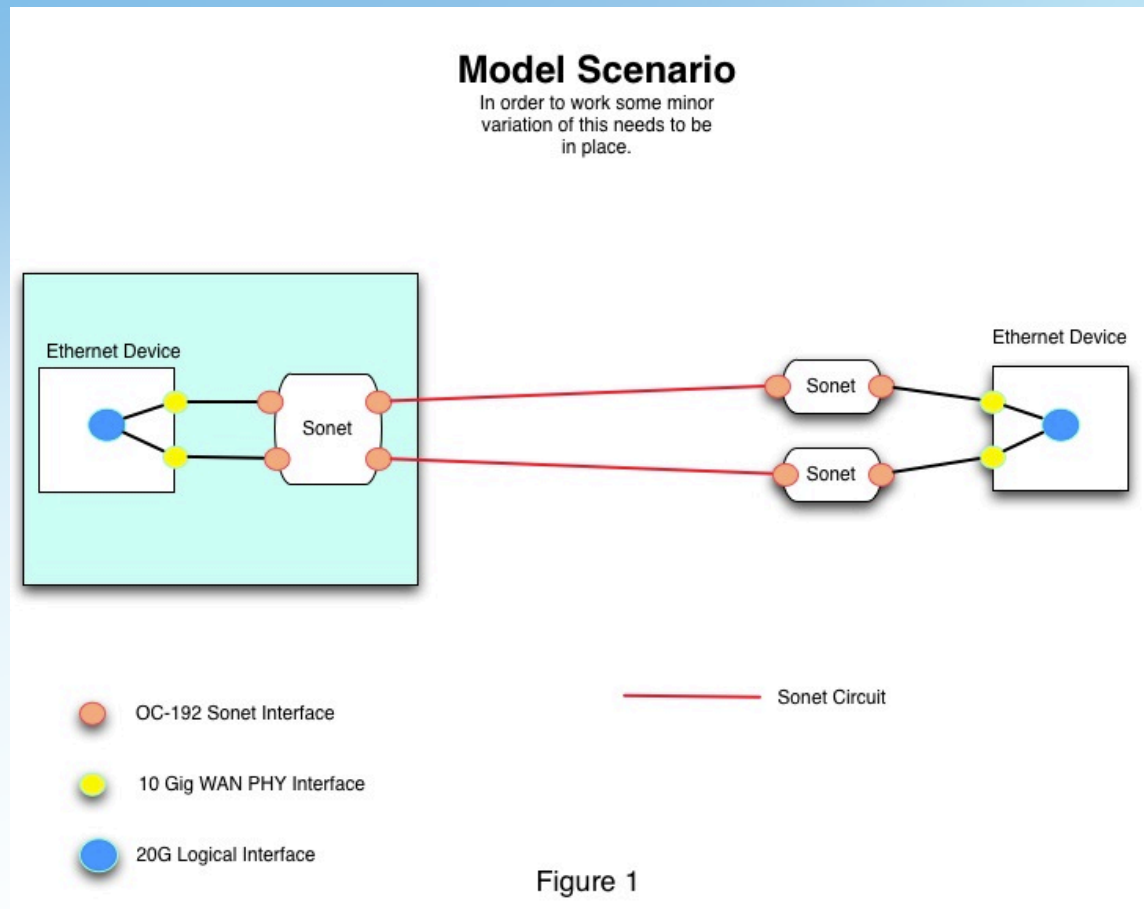
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LHCONE: NORTH AMERICAN / TRANSATLANTIC INTEGRATION





NDDI & OS³E

June 2nd 2011, NTAC Update

Matt Davy, InCNTRE Director and Indiana University Chief Network Architect

Eric Boyd, Internet2 Deputy Technology Officer

For more information, visit <http://www.internet2.edu/nddi>