

# Network Update for LONI Management Council

## LONI 2.0

- Optical Architecture: Implement Ethernet capability natively into the optical platform able to transmit a single 100G carrier within the same channel space of 10G over our existing Cisco layer 1 optical backbone.
- Router Architecture: Implement 10/40/100G Ethernet routing capability at the same time reducing the number of routers from 45 to 7 as well as offer trade-in value on the existing 45 Cisco routers.
- Events:
- Activities: On 3/25/14, LSU issued a PO for our next router solution to Juniper Networks.

## Network Accomplishments

- Higher-Ed Connections: Added NSULA and ULL Dorms to LONI.
- LCTCS Connections: Added an additional Slidell location for Delgado.
- Partners: Continue to work with DOTD on utilizing more of their fiber.
- Research Initiatives:
  - LSU - NSF CC-NIE (2012): Science DMZ equipment ordered on 3/25/14.
  - LSU - NSF CC-NIE (2013): Science DMZ equipment ordered on 3/25/14.
  - LA-SiGMA: We are 100% complete on the HD Room Videoconferencing installation and configuration.
  - LSU - NSF CC-IIE (2014): Collaborated with ITS and CCT to respond to the part 6 of the solicitation titled, "Regional Coordination and Partnership in Advanced Networking."
  - Tulane – NSF CC-NIE (2013): Once our Science DMZ is operational, we will be extending Tulane's DMZ via 10GE to LSU.
- Fiber Construction: None pending or underway.
- Dark Fiber Leases: We've submitted delegation authority request to Regents.
- SC14: Our first official planning meeting was on 3/19/14 with our next planning meeting scheduled for 6/17/14. The conference will be held on 16-21 November at the MCCNO. We expect to showcase 400G and/or 1000G over the LONI Network.
- General: We will be very, very busy for the rest of the year.

## Short-term Plans:

- MPLS WAN Design for SLCC
- MPLS WAN Design for LDCC
- MPLS WAN Design for DCC
- We are 80% complete toward adding a Google Cache to LONI
- Add MDOT to LONI
- Move LPB/KLTS to new WAN model
- Working to develop a solicitation language for a cable locate service covering the entire LONI fiber cable infrastructure statewide.
- We are scheduled to return to the Nicholls turn-up on 4/2/14.

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## Long-term Plans:

- LONI PoP at Venyu in Bossier City at CIC
- Add Dillard University to LONI
- Add RIPE Atlas measurement probes to all WAN locations
- Power redundancy at LONI PoP at LSU
- Move LSUS to new WAN model
- Move NSU Nursing in Shreveport to new WAN model
- Add IPv6 to LSUA
- Add WAN Vlan between LSUA and LCRP
- Add IPv6 to Northwestern
- Investigating the AT&T Cloud Services for the LONI Network
- Add DCC Sydney Collier to LONI