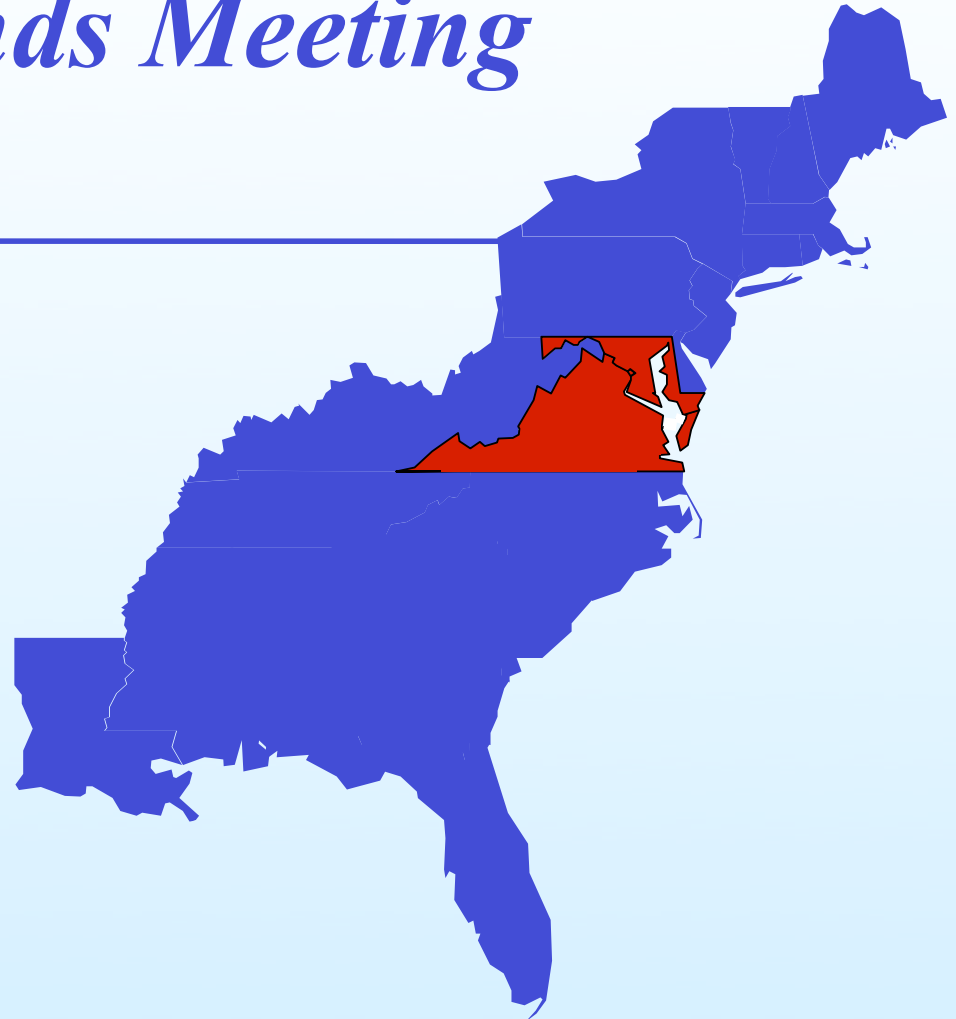


MAX All-Hands Meeting

Peter O'Neil
Executive Director
poneil@maxgigapop.net
June 24, 2009



Outline

- Business Highlights
- TransitRail & CPS
- Research Initiatives
- Stimulus Funding Impacts
- Looking Ahead

Operations

- MAX network infrastructure architected for robustness and resiliency at fiber, dwdm, switch, and router layers

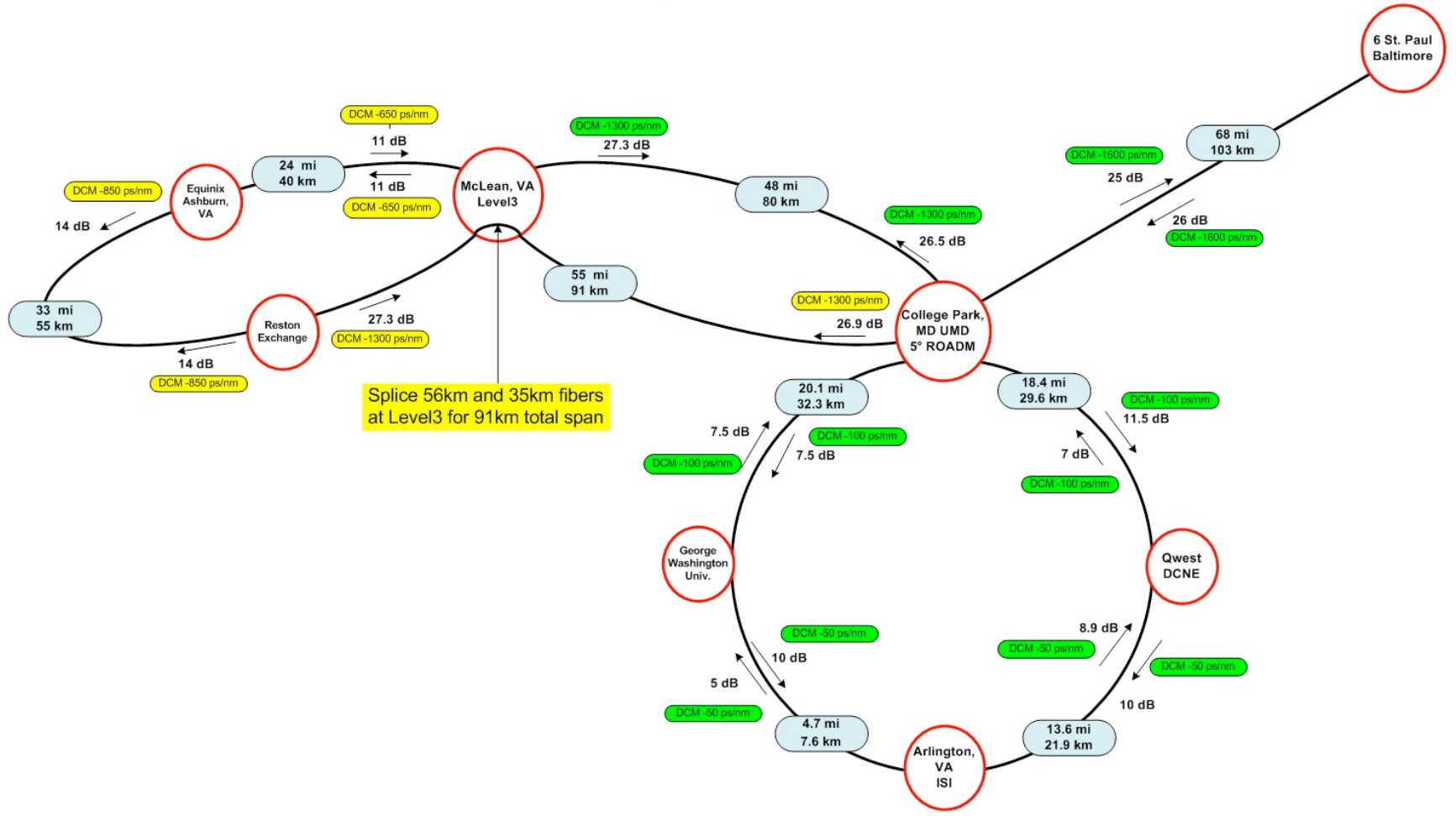
Operational Staffing

- Quang and Dave continue to support your switch and routing config change requests - no change
- IU GRNOC monitoring running in parallel to MAX engineering alerts and fast approaching flying solo for monitoring, perhaps 2 weeks away
- In their original proposal last fall, IU offered to also supply network engineers for a variety of assignments if needed - no identified need yet
- MAX has budget approval for 3 additional staff
- With Phase 3 complete, no major infrastructure change on horizon until we gain additional CLPK to Baltimore fiber pair
- Due to economy some looking to cost share engineers across campuses and labs, MAX would be interested if you are and this would include research staff too
- MAX planning to support 2 graduate students in the fall & spring

Business Highlights

- Phase 3 completed
 - FiberGate Fiber - McLean to Reston to Ashburn ring
 - Thanks to Howard Hughes Medical Institute for use of shared wave
 - Already have transport orders from Equinix to McLean
- 10G Upgrade with Internet2
- Rick Summerhill retired last Friday & Randy Frank announced as CTO
- Lots of coordination and support for NOAA, VA, NIH/NLM & NASA
- Initial exploratory meeting with ARL centered on use of DRAGON code
- Exploring 40G and 100G WAN testing with NASA
- Working to complete MAX NOC transition with IU GRNOC
- TransitRail and I2's CPS Consolidating Services
- Optiputer Project planning to install a node at Equinix and use CaveWave
- Start using noc@maxgigapop.net to reach IU and eng@maxgigapop.net to directly reach MAX engineers

Phase 3 Mid Atlantic Crossroads DWDM Network Fujitsu 7500 Platform



	DRAWING TITLE: MAX DWDM Network	CREATED BY: Matt Siniscal	UPDATED BY: MPS	Rev. 2.0	Comments: Qwest fiber is Lucent Allwave Level3 fiber ring is Corning SMF-28e, MD State fiber is Corning SMF-28
	PROJECT: DWDM Transport	CREATED: JUN 19, 2008	UPDATED: Sep 18, 2008	Page 1 of 2	

TransitRail & CPS Consolidation Framework

- Commodity vendors continue to reduce prices to Quilt
- MAX participants can all purchase commodity as AQB, Authorized Quilt Buyers
- Contact us with questions about particular vendors
- New Qwest pricing:
 - \$11 per meg per month
- New TransitRail pricing:
 - TransitRail vrf is \$4 per meg per month, and
 - TransitRail plus Cogent vrf \$6 per meg per month
 - pricing includes transport to and from Equinix

<cut to consolidation slides>

Research Initiatives

- Continuing support of I2's DCN development
- Nearing completion of GENI Spiral 1 after first year
- Planning meetings this week and next for year two
 - Chris and Jarda completing coding demo for tomorrow
 - GPO still evaluating proposals submitted in February
 - GENI Engineering Conference late July in Seattle
- FPGA Open Flow switch experimentation
 - Are others also experimenting with such devices?
- Participating with others on 100G RFI
- Several discussions underway with partners on new proposals

NSF Stimulus Funding

- NSF Academic Research Infrastructure Program NSF 09-562
 - *“Regardless of the administrative arrangement, academic regional optical research networks are regarded as separate institutions for the purpose of the ARI-R2 and are each eligible to submit an ARI-R2 proposal without prejudice to a host institution.”*
 - Letter of Intent (LoI) due to NSF this Friday June 26th
 - Full proposal due August 24th
 - Requesting funds to support 100G connections to I2, ESnet, and NGIX-East

NTIA Stimulus Funding

- Rules and guidelines not released yet, expected July 1 with only 45 day turnaround for proposals
- Engaged with a state planning effort seeking to use fiber and migrate to Ethernet based GE services
 - important initiative to help provide higher bandwidth across Maryland
 - MATP in Virginia actively planning to submit proposal
- Mark Luker recently left Educause for NTIA to help this program

NSF IRNC

- International Research Network Connections NSF 09-564
- Three award areas:
 - Production Network Environments
 - Experimental Networking Activities
 - Special Projects: security, monitoring, dynamic circuits
- Proposals due August 21, 2009

NSF CISE Cross Cutting Program

- NSF 09-558
- Focus on Data Intensive Computing, Security, & NetSE
- Also three flavors of proposals sought
 - Medium due August 30th: \$500K to \$1.2M up to 3 years
 - Large due November 28th: \$1.2M to \$3M up to 5 years
 - Small due December 17th: up to \$500K up to 3 years

Looking Ahead

- MAX must be out of 8400 December 31
- Moving to M-Square Research Park complicated
 - State of MD is partner in M-Square and has debt ceiling
 - MAX can sign bounded sublease with Virginia Tech as long as Board sufficiently confident MAX can incorporate as a non-profit within 12 months of moving there, and then seek 501c3 status
 - Seeking fall back space option but need fiber and power/cooling for lab equipment
- Board engaged in this process and having meeting tomorrow