

JET Meeting Minutes

October 16, 2012

I. Participants

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Action Items

1. Internet 2 will send JET members the map of their new network.

Proceedings

This meeting of the JET was chaired by Kevin Thompson of the NSF and Vince Dattoria of DOE/SC.

CORONET Program: Linden Mercer

The DARPA CORONET Program developed capabilities to set up dynamic paths between service providers. They identified the minimum information that needs to be passed between the providers so you can find a path, do path computations, and know you have a complete path in-place. This may provide valuable inputs into defining similar needs for Software Defined Networking (SDN) peering between different networks.

Network Roundtable

Internet2: Chris Robb

Internet2 completed the Ciena portion of its optical build, except for the Northern Tier links. Internet2 will be migrating wavelengths over to the new network this week, with additional migrations over the next three weeks. They will move the jumpers at the end of the transition to move users onto the new capability.

The Brocade MLX32s for the AL2S network are currently in-place. The new network will have the same footprint as the existing network. Seattle will be configured by the end of the year. OneNet has connected and IU has been connected for a while. This network will be connected to ESnet, WIX, and MAN LAN at 100 Gbps. Discussions are underway to also connect Pacific Wave and StarLight. Cleveland, Tulsa, El Paso, and Denver will be upgraded.

AI: Internet2 will send JET members the map of their new network.

ESnet: Vince Dattoria

ESnet is v6 compliant. The DOE laboratories are not Federal entities but most of them are implementing v6 because they interface to international users.

NOAA: Dave Hartzell

NOAA is working on an additional buildout to Asheville, and is working on TIC implementation for it. NOAA is discussing a multiagency shared TIC in Hawaii with other potential participants throughout the islands. N-Wave is IPv6 ready but there are no real users yet. NOAA's Boulder lab's public face is v6 enabled.

U. of Utah: Joe Breen

U Utah is completing the metro fiber connectivity for SC12 SCinet.

U. of Alaska: Shawn Armstrong

Nothing new to report.

ACE: Brent Sweeney

ACE is working on implementing two new Trans-Atlantic links. The Chicago to Amsterdam link is being retendered and reconfigured. A Frankfurt to Washington, DC link is being deployed. NetherLight is putting OpenFlow switches on this path to support interdomain OpenFlow testing.

TransPac: Brent Sweeney

TransPac is working with APAN and JGN on dynamic circuits for SC12 and for demonstrations at TIP in January

Exchange Points

MAN LAN & WIX: Dale Finkelson

DANTE is changing two circuits from SONET to LAN Phy on a Brocade switch at MAN LAN. MAN LAN has the equipment to build an OSCARS instance in Washington and New York City. It will be implemented over the next month. They want to implement Open NSI in Washington. A new NSI implementation patch for OSCARS will be available in time for SC12 where they will test it to Washington, DC or New York City.

MAN LAN will be working on automated GOLE switches.

StarLight: Alan Verlo

GEANT is implementing a new circuit to StarLight at OC192 WAN Phy. StarLight supported the Chicago GLIF meeting for approximately 15 international demonstrations. A 100Gbps exchange switch is being installed and connections are being implemented. It will be available for SC12. They are working with the GENI and LHCONE communities.

Ames NGIX: Bobby Cates

The Ames NGIX is implementing new Level3 routes to provide diverse fiber routing. The NASA production network (NICS) set up external IPv6 peering in September. NASA has implemented the IPv6 services except for email. The NASA networks will be rearchitected to align with security needs and TIC requirements. Public facing servers will be implemented in a couple of months.

Ames has public facing IPv6. Most of the NASA public face is through Goddard.

Incentives for IPv6 Services

NSF has provided opportunities for funding to upgrade to IPv6 services. The CC-NIE solicitation included a clause for IPv6 upgrade. DoE does not have a single, central program to encourage their labs to implement.

LSN Tasking to the JET

The LSN was enthusiastic about the three-year focus topic proposal of the JET for Big Data. Year 1 of the proposal calls for defining the project, identifying locations/participants, defining terms, metrics, and scoping the project. Year 2 of the project identifies users and locations for implementing perfSONAR measurement tools. Year 3 entails testing Big Data transfers and reporting out the results. Discussion identified that the timescale for the project might be compressed. We should see if we can do some initial tests in the first year.

How do we proceed with this task? We should identify leads and potential participants

AI: Grant Miller will solicit participants in the JET Big Data focus topic and urge them to meet initially to start planning before the next JET meeting.

CC-NIE Awards: Kevin Thompson

NSF Office of Cyberinfrastructure issued a solicitation for upgrading campus cyberinfrastructure based on the recommendations of an NSF advisory board. Proposals were due by May 30. Proposals were asked to address data-driven campus infrastructure, upgrades to campus infrastructure to upgrade internal data flows, rearchitecting campus infrastructure for large data flows (e.g., science DMZ), efficiency of networking, mobile networking, and campus connections to regional PoPs. In another task proposals were asked to address network integration with new and developing technology resulting from research and prototypes. It included transitioning prototypes of SDN to implement science networks.

They received 89 proposals and made 39 awards, some collaborative, to 34 institutions in 23 states. Total funding was \$21M with Co-Funding from NSF/CISE. For a full description, see NSF FastLane under CC-NIE. There will likely be another CC-

INE solicitation in FY13. The upcoming TIP2013 meeting in January will have a panel on the CC-NIE solicitation.

Meetings of Interest:

October 23-25	GENI Meeting, Houston, Texas
November 10-16	SC12, Salt Lake City, UT
January 10-11, 2013	HIC, Honolulu, HI
January 12	MPLS Workshop, Honolulu, HI
January 12	OpenFlow Workshop, Honolulu, HI
January 13-16	TIP2013 (joint APAN, ESnet & Internet2), Honolulu, HI < www.hawaii.edu/tip2013 > & < http://events.internet2.edu/2013/tip/ >
January 17-18	ESCC, Honolulu, HI
January 17-18	IPv6 Workshop, Honolulu, HI
January 17-18	Network Performance Workshop, Honolulu, HI
March 19-21	GENI Meeting, Salt Lake City, Utah
April 21-24	Internet2 Member Meeting, Arlington, VA

Next JET Meetings

November 14, 8:30-10:30 SC12 Room 250AB
December 18: Only if needed
January 15, 7:45-10:15: TIP2013 conference hotel, Sheraton Princess Kaiulani, after the conference reception