JET Meeting Minutes
June 20, 2017
National Science Foundation
Stafford I, Room 360

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Action Items (carry over)
- Jeff Smith to return for an additional briefing after EIS protest is resolved
- ESnet will give an update on its ESnet6 design and implementation at the July JET meeting

Proceedings
This meeting of the JET was chaired by Rich Carlson (DOE/SC) and Kevin Thompson (NSF).

JET Roundtables
- **Networks**

    NOAA: Mark Mutz
    NOAA is migrating the rest of NOAA to its TICAP infrastructure. Only the Silver Spring, MD and Boulder, CO locations remain. Once the firewall in Silver Spring is migrated, it will look into providing a connection to NASA through a TICAP.

    NRL: Linden Mercer
    Nothing new to report.

    3ROX: Michael Lambert
    National Energy Technology (NETL) labs in Pittsburgh South Hills, PA and Morgantown, WV are trying to increase connectivity and trying to get connected to ESnet. In the past, layer 8 issues may have prevented it, but they may have been resolved.

- o **Exchange Points**
  StarLight: Joe Mambretti
  Planning a new 100G link from new Montreal Open Exchange to StarLight with SURFnet, CANARIE and NORDUnet. It will be Implemented mid-August.

  SC17 preparation updates:
  - Working with the SCinet WAN team to send a Tb from StarLight to show floor.
  - Working with SCinet WAN team and Bill Fink and Linden Mercer to send 100G from D.C. to show floor and to StarLight from D.C.
  - Working with the Ethernet Alliance and SCinet to showcase 400G fabrics.
  - Investigating middle between 400G WAN channels and 400G on show floor.
  - Launched project with Corsa to provide capability for sliceable networking. Ideally, it will allow for individual channels to pass through Corsa and allow for management plane, control plane and data plane to control and data plane to pass off to individual tenants, not centralized authority.
  - Working with group doing measurements at 100G at mid layer DTNs and next gen DTNs, showcasing at SC 17.

  Non SC17 updates:
  - Having discussions with international partners - Canada, Korea, Singapore, Japan and Australia - with preparing major demos for GLIF for end of September in Sydney.
  - Making good progress of mechanics of doing interoperability among multiple domains. Using Jupyter, a scientific workflow management tool; applying to integration of network and science flows.
  - P4 work; ordered P4 switch. Meanwhile doing some programming in P4.

LSN Update: Joyce Lee
LSN is planning a follow on workshop on operationalizing the SDN on September 18-20 in Washington, D.C. KC Wang (Clemson) and Ronald Hutchins (UVA) are the workshop co-chairs.
http://ccit.clemson.edu/research/nsf-nitrd-sdn-workshop/

The Broad Band R&D is being established as a Group under the LSN IWG.

Overview of GENI: Heidi Dempsey - See slide presentation.
Planning and Transition Timeline (slides 9-12)
In 2017 the GPO will be handing over infrastructure to the Community-Driven Consortium and new project office. The Cyberinfrastructure Consortium was formed to advise on R&D in GENI and other networks that GENI peers with or interacts with. Tomorrow's Internet Project Office (TIPOFF) is a new NSF program that will operate & evolve GENI. Once awarded, the GENI O&E will be transitioning from BBN to a new organization that will run TIPOFF. BBN is working with NSF on a smooth transition.

There will not be an immediate impact as much of GENI's work has transitioned to university partners. Infrastructure and activities removed from BBN will be fully transferred to partners.

Future Directions for GENI (slides 4-6)

Active summer projects:
- SD Exchanges- key program:
  - Univ. of Utah education network, SOX regional network and schools connected to it, MAX and WIX exchanges and Amazon AWS platform available to define peering and use open flow controllers.
- Ongoing P4 projects.
- Deploying LTE wireless networks at 10 universities
  - Some were previously active (WiMAX); others are new, like Old Dominion University
  - In GENI, LTE sites connected in a multi-point view end so variations of infrastructure are operating at different sites. Rutgers and BBN are "guinea pigs" for standard install. Will send out more information to those interested.
- As Internet2's core network converts from AL2S to MPLS GENI needs to adapt since GENI supports layer 2 stitching between member sites where GENI infrastructure is installed. Many infrastructure updates and integration steps are necessary to keep in sync.

Meetings of Interest

July 9-13	PEARC17, New Orleans, LA
July 16-21	IETF99, Prague, Czech Republic
August 7-8	National Research Platform Workshop, Bozeman, Montana
August 26 – September 1	APAN44, Dalian, China
September 18-20	NSF-NITRD Workshop on Operationalizing SDN, Washington, D.C.
September 25-27	GLIF, Sydney, Australia
October 2-4	NANOG71, San Jose, CA
October 2-5	ESCC, NSF PIs, & Quilt, Albuquerque, NM
October 5-6	ARIN 40, San Jose, CA
October 15-18	Internet2 Technology Exchange, San Francisco, CA
October 23-26	CANS2017, Kunshan, China
November 12-17	SC17, Denver, CO
November 12-17	IETF100, Singapore
2018	
January, 21-24	PTC, Honolulu, HI
February 5-8	NANOG72, Atlanta, GA

Next JET Meetings:
July 18, 12-2 Eastern at NSF
August 15, 12-2 Eastern at NSF
September 19, 12-2 Eastern