

## **JET Meeting Minutes**

April 17, 2012

### **I. Participants**

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### **Action Items**

1. Grant Miller will post the perPERSONAR naming recommendation to the JET Wiki Web site and send a message to the JET members pointing to it.
2. JJ Jamison will arrange for a briefing on QFabric to the July JET meeting at Stanford University and for a discussion of QFabric at the November, SC12 JET meeting in Salt Lake City.
3. If you need advanced bandwidth from StarLight for SC12, submit a preproposal to StarLight.

### **Proceedings**

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

### **JETnet Roundtable**

#### **ESnet: Joe Metzger**

ESnet is interviewing candidates for the Division Director position at ESnet. The hope is to fill the opening by mid-late Summer. ESnet has accepted the Level3 dark fiber nationwide footprint that is now available for testbed purposes. ESnet is working with JPL on a quantum cryptography application over this dark fiber network. The dark fiber footprint largely parallels the Internet2 footprint. ESnet is meeting with CENIC to coordinate strategy. ESnet is deploying Phase 2 of the ANI network wherein the 100 G ANI footprint will reach most of the PoPs. They are working on service and funding models for testing the ANI network.

#### **GLORIAD: Predrag Radulovic**

GLORIAD is working with NORDUnet to support a demonstration next week.

**Internet2: Dale Finkelson**

Internet2 is working on additions to its CPRS capacity on its old network. Phase 2 deployment of the new network is completed and they are proceeding with Phase 3. The optical footprint will be completed by this summer.

Internet2 is still exploring cooperation with Northern Tier.

**NOAA: Paul Love**

NOAA is working on connectivity to their new research center on Ford Island. N-Wave is implementing aggregation routers at several sites.

**NIH/NLM: Mike Gill**

They're reaching the limit of their 10G connection to the MAX.

**NASA Networking: Mark Foster**

NASA/Ames is reorganizing of its Kiefer Road site to extend dark fiber from JPL to Ames in support of testing quantum encryption.

**Exchange Points**

**StarLight: Alan Verlo**

GEANT has implemented a new 10 G connection in support of LHCONE. They are implementing a lightpath from Amsterdam to California in support of a genomics program. Tata of India is bringing in a 1 G connection to StarLight from Amsterdam. SCinet preproposals are at the end of April

AI: If you need advanced bandwidth from StarLight for SC12, submit a preproposal to StarLight.

StarLight is supporting demonstrations for a NATO meeting next month and an orthopedic training session next month.

**WIX: Dale Finkelson**

WIX is operating well. Two ACE/GEANT links are using the WIX.

**MAN LAN: Dale Finkelson**

MAN LAN is installing a 3<sup>rd</sup> 10 G link from GEANT. It will be added to the bonded 20 G link from GEANT to New York to provide 30 G. The GEANT T1600 goes directly through a Brocade switch to provide WAN PHY.

The Ubuntu Alliance is implementing a 1 G path through the Internet2/Indiana University circuit through New York with a port on MAN LAN then through London to Africa. MAN LAN is working with LHCONE to put in-place a multipoint architecture.

**LSN Update: Grant Miller**

The JET recommendation for perfSONAR naming of IPv4 and IPv6 tools was presented to the LSN and the LSN approved of the recommendation.

AI: Grant Miller will post the JET perfSONAR naming recommendation to the JET Wiki Web site and send a message to the JET members pointing to it.

US Ignite is receiving some funding this year from NSF. They are working with GENI to enable applications over existing links.

### **Testbed Cooperation: Kevin Mills**

Kevin Mills of NIST is studying large scale behavior of distributed systems, such as clouds and extended networks to identify how to predict their behavior. He provided a 4-page paper on his research that is posted to the JET Wiki site at:

<https://connect.nitrd.gov/nconitrdwiki/index.php/JET>

The methods he used assess global behaviors under a wide range of conditions, enable significant understanding of overall system dynamics, and yield insightful comparisons of competing control regimes. On the other hand, such methods do not provide information about potential for rare combinations of events to drive system dynamics into global failure regimes, leading to catastrophic collapse. His ongoing research will address: (1) design-time methods that enable system architects to identify and evaluate global failure scenarios that could lead to system collapse and (2) run-time methods that alert system operators about incipient transition to global failure regimes, and subsequent collapse.

He is looking for people/networks interested in looking at their system designs to identify potential failure modes. Do you have models of your systems? He is looking for opportunities to cooperate with projects.

### **Meetings of Interest:**

April 22-25	ARIN, Vancouver, BC
April 23-25	Internet2 Spring Member Meeting, Arlington, VA
May 22-23	N-Wave Stakeholders, Boulder, CO
June 18-22	DREN Annual Conference, New Orleans, LA
July 15-18	ESCC/Internet2 Joint Techs Workshop, Palo Alto, CA
July 18-19	ESCC, Palo Alto, CA
October 1-4	Internet2 Fall Member Meeting, Philadelphia, PA
October 11-12	GLIF meeting, Chicago, IL
November 10-16	SC12, Salt Lake City, UT
Week of January 13th, 2013	Techs in Paradise (APAN, Jt Techs, ESCC, etc), Honolulu, HI

### **Next JET Meetings**

May 15, 11:00-2:00, NSF, Room II-415

June 19, 11:00-2:00, NSF, Room II-415