

JET Meeting Minutes
March 19, 2013

I. Participants

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Jim Williams	Indiana U	williams@indiana.edu

Action Items

Proceedings

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

Roundtable

ACE: Jim Williams

ACE has switched providers for the link between Chicago and Amsterdam. They are adding a 3rd link between Frankfurt and Washington that is planned to be operational next week. There is exploration of an experimental 100G connectivity between Europe and the U.S. A recent RFP for it identified a desired date of July 1 delivery.

ESnet: Eli Dart

ESnet has implemented their 100 G backbone network. They are now implementing the 100 G bandwidth to end sites on ESnet and they will use that bandwidth for production networking. They are working on improving the perfSONAR infrastructure.

Internet2: Chris Robb

Internet2 has installed an AL2S node in Seattle. Five of their routers have been upgraded to 100G capable MX960s. They have concluded a round of architecture discussions with their user community seeking to develop a strategy for Layer3 connectivity over the Layer2 network.

NIH/NLM: Mike Gill & Don Preuss

NIH/NLM is working on a 100G connection for the future. Architecture, timing and purchasing are all to be determined. NLM is working on 100G demonstrations of genomic data with Bob Grossman of the University of Chicago.

NASA: Bill Fink

NASA/GSFC is pursuing a 100G link to Internet2 for science networking. This link is not intended for production networking.

TransPAC: Jim Williams

TransPAC has concluded an agreement with ORIENTplus to mutually provide backup. The signing ceremony took place in London 3 weeks ago. TransPAC is enabling OpenFlow between Japan and the U.S. The equipment is installed and service is being implemented. An OpenFlow capability has been implemented between Chicago and Amsterdam with deployment of a Chicago OpenFlow switch. Conceptually, OpenFlow could be demonstrated from Tokyo to Chicago to Amsterdam and beyond.

Like Internet2 at MAN LAN, TransPAC will be upgrading its IDC from OSCARS 0.5.4 to .6; they will wait for this upgrade until April at JGN's request--after their demonstrations for GEC and others are over.

Alaska: Shawn Armstrong

All quiet.

Exchange Points

Pacific NW GigaPoP (PNWGP): Jonah Keough

The Pacific NW GigaPoP is working on issues on a 100G Seattle/Sunnyvale/LA link. PNWG and AARnet are working on a 40G upgrade to Seattle with the needed equipment on order.

StarLight: Joe Mambretti

The international OpenFlow testbed has been operational for 2 years. They are doing multiple demonstrations. A GENI meeting now ongoing is showcasing international provisioning for international networks including Japan, Germany, Singapore, Brazil, and others.

GENI is working on rack deployments to complete 30 sites this year including: U of Kansas, SOX, Clemson, Princeton, NYU and many others. The international backbone to connect these sites is being deployed. International extensions will provide an international OpenFlow infrastructure.

A multi 100G wave facility is being worked on. A new chassis is being developed. StarLight is working with ANI to bring this capability to StarLight.

StarLight is deploying InstaGENI and also ExaGENI racks. ExaGENI is also being deployed at Berkeley.

The Korean network has 2 operational racks at StarLight now. The PNWGP has implemented 100G from Seattle to Chicago. Racks and power have been installed for ESnet to implement ANI. StarLight will facilitate the demonstration of Big Data transfers in cooperation with Sloan Digital Sky Survey modeling between John Hopkins, and Oak Ridge (Jaguar computational facility). StarLight is also facilitating demonstration of genomics data between NIH/NLM facilities and the University of Chicago (Bob Grossman).

Big Data Tasking to the JET: Eli Dart

The JET Big Data Testbed (JBDD) team developed a fifth scenario for big data transfers to include Remote I/O that is already being used effectively by some collaborations. The JBDD team is developing demonstrations of the Sloan Digital Sky Survey data modeling and movement between John Hopkins, StarLight and Oak Ridge (Jaguar) computational facility and with demonstration of genomics data movements (in coordination with Bob Grossman of the U. of Chicago and Joe Mambretti).

African Networking: Don Riley

The rollout of African networking is continuing under the Connect Project. Uganda has 10G backbone and is working to boost their external connectivity to 1G. The next CANS Symposium is being planned for the first week in September.

NOAA Shared TIC in Hawaii: Dave Hartzell

NOAA is considering a shared TIC facility in Hawaii at its new research center on Ford Island. It would be used by NOAA, the multiple tenant agencies in the center or others agencies in the islands. It could provide access to multiple agencies, U. of Hawaii, the Hawaiian Internet Consortium, and other parties.

Meetings of Interest:

March 19-21	GENI Engineering Conference (GEC16), Salt Lake City, UT
April 21-24	Internet2 Member Meeting, Arlington, VA
April 21-24	ARIN, Bridgetown, Barbados
June 3-5	NANOG, New Orleans, LA
June 3-6	TNC, Maastricht, Holland
June 24-26	US Ignite Application Summit, Chicago
July 15-16	ESCC, Berkeley, CA
July 17-19	Big Data Fast and Frugal Meeting, LBL
July 21-23	GEC17, Madison, WI
August 19-23	APAN, Daejong, Korea
September 9-11	CANS, Chengdu, China
October 7-9	NANOG, Phoenix, AZ
November 17-22	SC13, Denver, CO

Next JET Meetings:

April 16: 11:00-2:00, NSF, Room II-415

May 21: 11:00-2:00, NSF, Room II-415