

JET Meeting Minutes

September 21, 2010

I. Participants

Guy Almes	TAMU
John Baird	DREN
Joe Breen	Un Utah
Grover Browning	NLR
Joe Burescia	ESnet
Rich Carlson	DOE
KC Claffey	CAIDA
Vince Dattoria	DOE/SC
Andy Germain	NASA/GSFC
Dave Hartzell	NASA
Julio Ibarra	AmPath
Kevin Jones	NASA
Kevin Kranitz	NASA
Hugh LaMaster	NREN
Paul Love	NCO
Joe Metzger	ESnet
Grant Miller	NCO
Mark Mutz	NOAA
Don Preuss	NIH/NLM
Chris Robb	Internet2
Brent Sweeney	Internet2
Brian Tierney	ESnet
Alan Verlo	StarLight

Action Items

1. For support from StarLight at SC10, send requests to [<710engineers@startup.net>](mailto:710engineers@startup.net).
2. Please contact Jim Williams: william@indiana.edu if you are interested in the India National Networking Workshop

Proceedings

This meeting of the JET was coordinated by Vince Dattoria of DOE and Paul Love of the NCO.

Roundtable

AmPath: Julio Ibarra

AmPath is supporting a demonstration on a remote electron microscope on a path from Eindhoven, Netherlands to Rio de Janeiro, Brazil. The demonstration took place today (September 21) over a dataflow testbed led by Vanderbilt University.

AmPath is preparing for SC10 where it will be supporting a Cal Tech to Brazil demonstration as part of the bandwidth challenge. The Red Clara/RNP perfSONAR testbed is up and in use.

DREN: John Baird

The DREN procurement for its next gen basic network services is proceeding. DREN has extensive experience in deploying DNSSec, IPv6 and other technologies and will share its experience with other networks.

ESnet: Joe Burescia

ESnet has received the responses to its RFP on 100 G transport services.

Internet2Net: No report

NISN: No Report

NLR: Grover Browning

NLR is considering bringing on-line additional sparing pools to reduce transit times. NLR experienced only one outage over the last year (on a July 4 weekend) that affected all circuits along one path. Most outages were fiber cuts from Level 3 and middle of the night mystery outages. MTBF for transponders was as predicted.

NOAA: Mark Mutz

NOAA just completed its core network build-out. They are working on edge connectivity circuits and equipments.

NREN: Dave Hartzell

NASA is implementing an additional Nexus 7000 switch in Chicago in support of open cloud computing.

StarLight: Alan Verlo

StarLight worked with NLR on a distributed choir demonstration half of the choir was in Israel, the other half at UC Irvine, the conductor at UCSD. Israel has a circuit to NY, then connects to FrameNet in NY to StarLight, then C-Wave from StarLight to UCSD and UCI. The group is rehearsing now and is planning a performance at the CineGrid workshop in December. StarLight is also:

- working on several demos for the GLIF conference coming up in a few weeks.
- working with Ciena in Ottawa on a tech demonstration for Oct.
- working with NASA GSFC on a tech demonstration for SC'10.
- starting to plan for SC'10.

AI: For support from StarLight at SC10, send requests to [<710engineers@startup.net>](mailto:710engineers@startup.net).

MANLAN

Nothing new to report

TransPac and ACE: Brent Sweeney

TransPac just received responses to its RFP for transport services. They have a goal of implementing the new services at the beginning of the year. They are looking for 40 G and 100 G service if it is available and affordable.

TransPac is holding perfSONAR workshops in Asia. They are working with DYCE. There is an India national networking workshop planned.

AI: Please contact Jim Williams: william@indiana.edu if you are interested in the India National Networking Workshop

Ace: Ace has just started the RFP process for circuits in Europe.

IPv6 Report: John Baird, DREN

DREN has implemented IPv6 dual stack in its backbone. Use of IPv6 is limited and endsites need to implement IPv6 also. DREN peers over IPv6 with other JET members including ESnet, Internet2net, NLR, and NREN. They also peer with other networks including AARnet, Canarie, Los Nettos, TWAREN. They will, if requested, connect to the IRNC networks and ACE.

The IPv4 address pool will be exhausted imminently (9-15 months in Asia, 2-4 years in the U.S.)

DREN surveyed network providers internationally on their deployment of IPv6. Of the respondents 214 in the U.S. have deployed. Other country deployments include:

- Australia: 89
- Germany: 81
- UK: 74
- Netherlands: 71
- Russia: 68

Over 84% of respondents indicated they have or want to have IPv6 allocation or assignment. The biggest impediments to deployment were identified to be cost and staff availability/knowledge.

LSN Taskings for FY11

At their September planning session LSN members discussed focus topics for FY12. These topics included:

1. Continue JET focus on perfSONAR development and implementation
 - a. Hold a perfSONAR workshop in FY11
 - b. Continue perfSONAR testbed as a pilot project to include additional participants and measurements
 - c. Hold BOFs on perfSONAR at Joint Techs meetings to accelerate the development, implamentation and use of perfSONAR
2. Continue the MAGIC focus on cloud computing, addressing the issues of:
 - a. Coordinating and cooperating with commercial providers such as Google and AOL

- b. Identifying best practices and issues going forward
 - c. Address security in clouds
 - d. Identify the networking implications from Layer 0 to Layer 3 of cloud computing
- 3. Provide coordinated access to networking testbeds
 - a. Coordinate cooperation among DOE, NSF (GENIE) and other science network testbeds
 - b. Continuing discussion between Thomas Ndousse (DOE/SC), Victor Frost (NSF) and other network testbed managers
 - 4. Provide cooperation on addressing network complexity
 - a. Arrange a seminar series on network complexity

Meetings of interest

October 12 CCIRN Meeting, Geneva

October 13-15 GLIF Meeting, Geneva, Switzerland

November 10 IPv6 meeting in Washington DC, Contact John Baird
<baird@hpcmo.hpc.mil>

November 13-19 SC10, New Orleans, LA

January 30-February 3 2011 ESCC/Internet2 Techs Workshop, Clemson, SC

February 3-4 2011 ESCC, Clemson, SC

February 3-4 2011 Network Performance Workshop, Clemson, SC

February 3-5 2011 IPv6 Workshop, Celmsn, SC

January-February 2013 Techs in Paradise

Next JET Meetings

October 19, 11:00-2:00, NSF, Room TBA

November 17, 9:00-12:00 (CST), Ernest N Morial Convention Center, New Orleans, LA, Room TBA