JET Meeting Minutes
November 15, 2006

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Action Items

1. If you are interested in testing DNSSec deployment, e.g. exchanging keys and verifying signatures please contact James Cook at DREN.

2. JETnets should send a list of the performance measurement tools they are using to Matt Zekauskas before the next JET meeting (January16, 2007).

3. Paul Love will put the topic of standardizing returning traffic for sets of communities on the January JET agenda.

Proceedings

        This meeting of the JET was coordinated by Kevin Thompson of NSF and Paul Love of the National Coordination Office.

Network Roundtable

Abilene

Abilene is rolling out its new network, transitioning to new connectors and moving users onto NewNetwork. This Friday (Nov 17, 2006) the path between New York City to Washington, DC, to Chicago will be implemented at Level 3 on Infinera. Abilene is installing CM core directors now and will continue with the rest of the NewNetwork build-out. The New York City to Boston to Cleveland path will be implemented about March 1. Level 3 is providing interim waves on this path. Abilene has had requests from connectors to be switched to the new fabric. About June 12, 2007 Abilene will receive the last portion of the NewNetwork on the West coast. Nine routers in total will be implemented including one in Salt Lake City (instead of Denver). Other router sites are Los Angeles, Seattle, Houston, Kansas City, Atlanta, Miami, New York City, and Boston.

ESnet:

ESnet is largely the same as reported in October. A 10 G link is being implemented by NLR between Seattle and Chicago. ESnet is peering with Red Clara now. They are peering with AmPath at Atlantic Wave.

NREN

NASA Langley is now up on NREN with a shared 10 G connection. They are limited to 1G now. NREN is working on implementing a 10 G link to Marshall/Atlanta/Huntsville. The Level 3 moratorium on new connections is affecting their implementations.

SCINet

NLR has implemented multiple 10G waves. Atlantic Wave has connectivity to the SC06 floor. SCINet has implemented a couple of core routers with distribution routers on the show floor. There is 1 Gb wireless between the show floor and the local SC hotels. SCINet is using Cricket and CACTI to monitor the network performance.

TransPac

TransPac has no changes over the last month. They are updating their engineering plans, which are documented on the TransPac Web site.

StarLight

CzechNet is connecting to StarLight with an OC192 connection. DRAGON is expected to connect in January 2007. CinaGrid (largely Canada and California) will be implemented in January. The TeraFlow project of the Center for Data Mining has connected with 10 G. Gloriad has implemented a lambda configuration between Chicago and Amsterdam.

StarLight is supporting many demonstrations at SC06 including an optical multicast demonstration between Brno, Czechoslovakia, Amsterdam, and SC06 and a TeraFlow data mining project. The December Internet2 meeting in Chicago will be supported with 2 x 10G from StarLight to McCormack Place. StarLight and AWave are

working on connections from StarLight to MANLAN to McLean, Virginia to AWave. These connections are being used to build a contiguous ring.

NGIX-West
      NGIX-West experienced a fiber cut over the weekend. No progress has been made on connectivity to 1400 Kiefer.

Upcoming meetings of interest
Dec 4-7, Chicago: Internet2 Member Meeting: Connie Long from SLAC will be giving a tutorial on measurement on Monday, Dec 4.
Feb 11-15, Minneapolis: Joint Techs meeting
December 7-8, Chicago: Chinese American networking symposium
Dec 7-8, Chicago: Performance Measurement Workshop
Nov 28, Berkeley: DANTE/I2/ESnet meeting

Interdomain Coordination on DRAGON
      Tom Lehman talked about DRAGON coordination with other Internet domains on optical network transparency. DRAGON is primarily GMPLS and is working on standards for user access and services using GMPLS or Web services. They will likely implement a hybrid user interface with a GMPLS back end and a Web services front-end. Amsterdam has implemented a AAA front-end on the DRAGON software that enables charging models for services. They are establishing a policy for exchanges that will be discussed at a GEANT/Canarie/Dragon meeting in a couple of weeks. In general AAA agreements are more difficult to implement than interface scheduling. The University of Amsterdam has built an XML Web interface for exchanging link characteristics.
      Large data flows are a concern. If there are long-term large data flows it will pay to set up a dedicated pathway over the optical networks. If you have a time critical, high reliability, low latency and jitter application dynamic setup of dedicated circuits is an important capability.
      DRAGON is doing outreach to RONS to inform them of how to get ready to use interdomain, dynamic networking. The client side will use an Ethernet port. How will this be extended to the campus LAN? Standards bodies are beginning to work on formalizing services based on Ethernet services.

DNS Security
      Kevin Oberman discussed DNS security. FISMA has stated its intention to require DNSSec, one component of DNS Security and NIST has provided guidelines and a common-sense approach to implementing DNSSec in NIST SP 800-81. This is likely to be the basis for OMB requirement to implement DNSSec in late 2008 or early 2009. NIST SP 800-53-R1 points to DNSSec implementation. NIST is holding a hands-on workshop for government employees on DNSSec deployment. NIST has also invited Microsoft to write a Windows version of the DNSSec implementation documents. .
      DREN has implemented DNSSec over its network and is interested in others who have deployed DNSSec to test exchanging of keys, verifying signatures and other procedures.

AI: If you are interested in testing DNSSec deployment, e.g. exchanging keys and verifying signatures please contact James Cook at DREN.

Educause has deployed a DNSSec key.

Network Performance Measurement

Matt Zekauskas described the status of the JET performance measurement activity. He has built a data back-end. The performance measurement group is interested in measuring across the JETnet boundaries to test tools and develop best practices.

AI: JETnets should send a list of the performance measurement tools they are using to Matt Zekauskas before the next JET meeting (January16, 2007).

AI: Paul Love will put the topic of standardizing returning traffic for sets of communities on the January JET agenda.

Next JET Meetings

December 19, Canceled
January 16, 11-2, NSF, Room 1150