Draft JET Meeting Minutes July 17, 2007

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Action Items

1. If you are interested in hosting a Dynamic Service Workshop, contact Rick Summerhill at rrsum@internet2.edu

- 2. If you are interested in participating in the JET Performance Measurement of network links, contact Matt Zekauskas at rrsum@internet2.edu or James Cook at jrcook@hpcmo.hpc.mil
- 3. The JET Performance Measurement Group will discuss the Internet2 performance measurement cooperation at the November JET meeting at SC07.

Proceedings

This meeting of the JET was chaired by Paul Love of the NCO.

Network Roundtable

DREN

The DREN user's conference is being held next week in Boston. The DREN link to Johns Hopkins University is undergoing Acceptance Testing tomorrow.

ESnet

See the ESnet presentation for the Joint Techs Meeting. ESnet is coast-to-coast as of today!

http://events.internet2.edu/2007/jt-batavia/sessionDetails.cfm?session=3318&event=272

Internet2

See the Internet2 briefing for the Joint Techs meeting. Internet2 has completed its Layer 1 network. They are continuing the migration of users from Abilene to the Level3 network. All circuits are expected to be transitioned by the end of September. http://events.internet2.edu/2007/jt-batavia/sessionDetails.cfm?session=3320&event=272

NLR

See the NLR presentation at the Joint Techs meeting. NLR continues to extend its framenet and packetnet services.

http://events.internet2.edu/2007/jt-batavia/sessionDetails.cfm?session=3319&event=272

UltraScienceNet

UltraScienceNet is continuing to do cross domain testing with HOPI and DRAGON.

HOPI

HOPI is implementing dynamic circuit services with Internet2. They are installing some Cienna switches. They are progressing on control plane interoperability with GEANT and the U.S. testbeds. They expect interoperability by the end of October.

NGIX-West

NASA Ames is retiring the FIX-West subnet

StarLight

StarLight is finishing a VLAN for Moscow and MoscowLight. StarLight supported demonstrations for HollandLight including digital imaging with a stream equivalent to 4 x HD. They will also support demonstrations at the GLIF meeting and SC07 in Reno.

MANLAN

MANLAN is doing interoperability testing between Europe and the U.S. using Nortel and Alcatel equipments to identify problems and fix them. They will be testing 10 GE LANPhy and OC192.

Northern Tier

Northern Tier is implementing its Western and Eastern ends. They have implemented Spokane to Kansas City and Chicago to Minneapolis. They anticipate the remaining path to be completed in 2008.

Southern Crossroads

Google is joining them.

OSCnet

OSCnet and the Pittsburgh Supercomputer Center (PSC) are linking. OSCnet is building fiber to PSC and they are implementing cross-connects.

Meetings of Interest

DREN User's Meeting: Boston, next week

October 8-11: Internet2 Member's meeting in San Diego

Internt2 Dynamic Services Workshops:

AI: If you are interested in hosting a Dynamic Service Workshop, contact Rick

 $Summerhill\ at\ rrsum@internet2.edu$

GLIF Meeting: September in Prague.

Customer Enabled Fiber Meeting: In association with the GLIF meeting, September, Prague.

Interagency Task Force on Advanced Networking (ITFAN)

On January 31, 2007, Dr. Marburger of OSTP tasked the Federal agencies with a capability and interest in advanced networking research to produce a Federal Plan for Advanced Networking Research and Development. An interim report by the Federal agencies was produced and delivered to Dr. Marburger on May 15. A final report will be developed by seeking comments from the research and commercial communities on their perspectives of the needs for advanced networking research. A Web site is being developed and will be implemented by July 31, 2007 at:

www.nitrd.gov/advancednetworkingplan. The Web site will provide materials from the interim report for review by researchers and will solicit comments and suggestions

from the reviewers. Comments are due by September 15, 2007 to enable the authors and agencies to produce a draft for review by the Federal agencies, OSTP and OMB for general release.

V6: James Cook

The Federal CIO Council estimates that 30% of the Federal agencies will meet the OMB mandate to implement IPv6 next year. Another 50-65% will need to work hard to implement IPv6. The remainder of the Federal agencies will not meet the requirement for IPv6. Agencies are required to report the percentage of their budgets being spent on IPv6 compliance. It is likely to be less than 1% of the budget for each agency because the equipment costs are low and operational expenses will be minimal until IPv6 is used more extensively.

Optical Networking Testbed Workshop 4 (ONT4)

Funding for ONT4 has been identified by DOE and NSF. The Planning Committee for the workshop will be meeting in early August at FermiLab to identify the purpose, date, and location for the workshop. Comments identified that the workshop might address approaches to federation of optical networks, planning for follow-on testbeds, and support for LHC and Pedascale facilities.

JET Performance Measurement Activity

The JET performance measurement activity has focused on identifying specific peerings, particularly between Internet2 and DREN, taking performance measurements over those links, identifying measurement measures, identifying problems and solutions, and providing recommendations to the JET participants. To date measurements have been carried out by Phil Dykstra, Matt Zekauskas, Bill Fink, and James Cook. They measured latency and throughput. Paths included NGIX through Pacific Wave, NGIX-East, and StarLight. Nuttcp was used for measuring throughput. MTU mismatches, routing anomalies, and firewall issues were identified. Most of the effort was required to fix the anomalies and mismatches not allowing adequate time for testing. They now need to concentrate on testing and taking measurements.

AI: If you are interested in participating in the JET Performance Measurement of network links, contact Matt Zekauskas at rrsum@internet2.edu or James Cook at jrcook@hpcmo.hpc.mil.

Internet 2 has a base platform across their Infinera gear, the IP network and HOPI. The provider, Level 3, has given them access to the Layer 1 Infineras. They are looking for alarms and identifying if those alarms correspond to the alarms forwarded by Level 3. They will be using a PerfSonar framework. For the Cienna network, they will be using Cienna monitoring tools including EMon, topology information and DICE framework. GEANT, Internet2, Canarie, and ESnet are working on the DICE framework, PerfSonar and PS Pearl Script. The working group is unifying descriptions of topologies and measurements.

AI: The JET Performance Measurement Group will discuss the Internet2 performance

measurement cooperation at the November JET meeting at SC07.

Next JET Meetings

August 21, 11:00-2:00, NSF, Room 1150 September 18, 11:00-2:00, NSF, Room 1150 October 16, 11:00-2:00, NSF, Room 1150