

## Draft JET Meeting Minutes

August 21, 2007

### I. Participants

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### Action Items

1. Contact Anne Richeson if you wish to attend the Qwest user's workshop September 10-11.

### Network Roundtable

#### DREN

DREN is adding new sites, including the Joint Mission Environment Test Capability (JMETC) program site. DREN is coordinating with the National Geophysical Space Agency and ITT on connectivity. They are looking for fiber in Albuquerque and Atlanta to transition to new capabilities. They plan to implement an OC48 link from Atlanta to Oak Ridge. The Seattle connection will remain through NLR.

#### Internet2Net

Wave equipments are all in place now for Internet2Net. They still need four or five connectors to transition from Qwest to complete their transition. They are ahead of schedule. The University of Nebraska is connecting through GPN at 10 G as part of the network deployment for the LHC experiments. They are experimenting with physicists communicating with FermiLab. They demonstrated 6-8 Gbps. Internet2Net implemented an additional link from Kansas City to support IP traffic.

The dynamic networking is supported by Ciena gear. The internal control of the Ciena equipments is going well and is operational. They are working with Geant and ESnet to implement interdomain control plane peerings. They expect to have the control plane peerings working by October 1. The Ciena gear is being connected to the three exchange points. There are already connections to ManLan. They have 10G to StarLight and OC192 to PacWave.

They currently have 2 x 10 G connections through ManLan to the GEANT router in Amsterdam and an additional link from NGIX-East to Paris to support LHC traffic. Additional support for LHC traffic includes 2 x 10 G links of the NSF IRNC to Europe. A Layer 3 link goes to Amsterdam and a Layer 1 link is available.

### **HOPI**

The basic software package that was running on HOPI is being run on the Ciena gear to support HOPI users.

### **NISN**

NISN is transitioning its peering to carrier hotels in San Jose, Dallas, Atlanta, Ashburn, Virginia, and Denver. The connection to Abilene and Goddard are being upgraded to 10 GE. PAIX is being upgraded to 10 GE. They will peer with PacWave, potentially through StarLight. A new Ames to Goddard link is being implemented to support NASA requirements. They are implementing Jumbo Frames across the core NISN network, due for completion this winter. NISN is receiving VoIP requirements. They are mapping them to their Layer 2 VPN.

### **NREN**

NREN is working on NIS for NASLan. Peering with Google was implemented at PacWave.

### **NGIX-East, MAX**

The MAX ordered and received DWDM boxes, an upgrade from Fujitsu, replacing their existing DWDM hardware at StarLight. They are being readied for deployment. They will provide flexibility in the MAX platform. They are implementing dedicated service to support NOAA from Denver to Silver Springs by the end of September using a 10 G link at Layer 2 over NLR.

### **ManLan**

ManLan is working on its testing procedures for their 10 G link across the Atlantic. They have identified several inconsistencies and anomalies associated with equipment differences. They experience packet loss at 1 G and there are real incompatibilities at 10 G. They will test for 2 months and the results of their testing will be posted on a public Web page, perhaps the NCO JET Web page.

### **Atlantic Wave**

Atlantic Wave is preparing to support SC07 in Reno. They have identified some applications.

## **StarLight**

The Phosphorous Testbed is interconnecting to testbeds in the U.S. Layer 2 and 3 connections have been implemented. A VLAN between Oxford University and UCSD has been implemented using 10 G circuits. A VLAN has been implemented from Moscow to Chicago to support collaborative Tile Display research. They will hold demonstrations in the fall, supporting the 50<sup>th</sup> anniversary of Sputnik. StarLight will support a UIC to LSU teleclass in the fall. A VLAN is being implemented from UIC to KISTI. The High Performance Digital Media (HPDM) net will be used for demonstration in Prague for the GLIF meeting. CineGrid will also be demonstrated.

## **Meetings of Interest**

September 10-11: Qwest users workshop in Littleton, Colorado

AI: Contact Anne Richeson if you wish to attend the Qwest user's workshop September 10-11.

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

October 8, San Diego, Internet2 meeting. Special Interest Group on emerging NRENs

October 8, San Diego, Internet2 meeting. SIG on south Asia

Internet2 Dynamic Services Workshops:

GLIF Meeting: September in Prague.

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

## **Optical Networking Testbed Workshop 4**

The ONT4 workshop will be held March 31-April 2 at FermiLab, outside Chicago. It will address Critical Challenges for optical networking over the next 7-8 years. It will address the state-of-the-art for 10G and all-photonics switching. The workshop will also explore transitioning annual ONT workshops to the GLIF community.

## **V6: James Cook**

James Cook of DREN is assembling information on IPv6 implementation among the Federal networks. He has requested that this information be posted on the NCO JET Web site. OMB has mandated that the Federal agencies implement IPv6 by June 2008.

## **Next JET Meetings**

September 18, 11:00-2:00, NSF, Room 1150

October 16, 11:00-2:00, NSF, Room 1150

Nov: At SC07