

## JET Meeting Minutes

February 19, 2008

### I. Participants

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### Action Items

1. DREN will request that their NOC report the IPv6 faults they find.
2. Paul Love will put I2 international routes policy as an agenda item on the April JET agenda.
3. Anyone interested in high-bandwidth interconnects for the West Coast should contact the PNW GigaPoP, Jan Eveleth ([Eveleth@cac.washington.edu](mailto:Eveleth@cac.washington.edu)).
4. Grant Miller and Paul Love to produce the next version of the TIC white paper and circulate for final comments.
5. Dan Magorian will forward the USGS description of its experience with implementing TIC-type capabilities.

## **Proceedings**

This meeting of the JET was presided over by Kevin Thompson of the NSF and Paul Love of the NCO.

The JET acknowledged the election of Vince Dattoria of DOE as CoChair of the JET.

## **Network Roundtable**

### **DREN**

DREN is holding a conference in San Diego the second week of August. DREN is implementing a new OC12 between Hawaii and Hayward, CA. As they move IPv6 from their test network to their production network they are finding many additional faults. They are setting up IPv6 peerings over the next month.

AI: DREN will request that their NOC report the IPv6 faults they find.

### **ESnet**

ESnet is completing the replacement of local loops provided by Qwest with alternative cheaper links. They are debugging their Juniper 960s.

### **Internet2**

Internet2 is setting up a Dynamic Circuit Network (DCN) link to the University of New Mexico. The Pacific Northwest GigaPoP has added DCN via a backhaul to Salt Lake City. The CPS network has not changed lately.

Internet2 is reconsidering its policy on providing international routes to Fednets now that they are not restricted by Qwest policies. They are considering if they should advertise foreign routes.

AI: Paul Love will put I2 international routes policy as an agenda item on the April JET agenda.

### **NISN**

NISN is transitioning peerings to carrier hotels.

### **NLM/NIH**

NLM/NIH is considering how to conform to the TIC requirements.

### **National LambdaRail (NLR)**

The NLR dynamic vLAN service that was demonstrated at the Joint Techs Meeting in Hawaii is going into production. NLR has installed a CISCO telepresence node in Kansas City and announced that the Framenet node in Boston is operational.

### **NOAA**

NOAA is developing improved connectivity among the NOAA research sites. They are considering the impact of TIC requirements on their plans.

## **NREN**

NREN is implementing a research connection from Goddard Space Flight Center to Marshall Space Flight Center to provide science and engineering support.

## **TransPac**

TransPac has extended its agreement with KDDI to provide services to support US to Japan links. The perfSONAR node in Los Angeles is being extended to Japan.

## **Exchange Points**

### **Pacific Northwest GigaPoP**

Pacific Wave is providing bilateral peerings. Pacific Wave has some co-location services if anyone is interested. They are exploring GLIF-type services on the West Coast.

AI: Anyone interested in high-bandwidth interconnects for the West Coast should contact the PNW GigaPoP, Jan Eveleth (Eveleth@cac.washington.edu).

Pacific Wave is supporting IPv6. They have implemented 10 G service between Chicago and Seattle. The PNW GigaPoP is connected to the DCN service at Salt Lake City. The Pacific Wave backbone has completed its upgrade. It has two new points of Presence, in Spokane and Richland. Commodity peering service is available. 120,000 routes are available on TransitRail.

## **NASA Ames**

No change

## **StarLight**

vLAN configurations are in progress to support the LHC traffic to Brazil. StarLight has implemented service from Korea to Norway to support medical services. StarLight has implemented connectivity to the ESnet infrastructure through MANLAN.

## **MAN LAN**

The service trial between Fermi and GEANT has now migrated to the ESnet infrastructure via MAN LAN. SINET is a new connector at MAN LAN. SINET and GEANT are exploring peering at MAN LAN. Layer 1 and 2 services are now transparent to users.

## **College Park**

The NGIX-East at College Park is continuing its DWDM buildout using Fujitsu equipment. In early summer they will have a unified DWDM service. They are implementing fiber buildouts from the Baltimore area.

## **AWave**

They are connecting to Brazil to support LHC data flows. The link from Miami to Brazil uses a 1 G circuit.

### **Meetings of Interest**

February 25 week, Atlanta: NLR All-Hands meeting

April 6-7, ARIN meeting in Denver to discuss IPv4 policies.

March 3-4, Washington, DC: Second GENI engineering workshop. See [www.geni.net](http://www.geni.net)

July 20-23 Joint Techs, Lincoln, Nebraska

July 21 or 22 JET Meeting, Lincoln Nebraska

August, 2<sup>nd</sup> week: DREN Networkers Conference, San Diego

### **Trusted Internet Connections**

The JET members discussed the draft white paper on JET concerns with the TIC. The discussion identified that:

- Reduction of Federal internet connections will increase aggregate bandwidths. Are there limits to the bandwidths the Einstein boxes can support?
- The JET should address the white paper to Karen Evans and Randy Vickers
- The JET should seek a continuing dialog with TIC developers to assure JET concerns are brought to the awareness of the TIC requirements developers.
- The white paper should be couched in positive terms
- The white paper should provide additional prose and descriptions of technologies/terms such as multicast and IPv6
- Federal agencies are requesting that contractor operated labs be defined outside the Federal demark to avoid the large costs required to monitor them
- Tail circuits and backhaul circuits should be defined outside the Federal demark to avoid the large costs required to reconfigure them.
- Federal agency to Federal agency Internet transactions do not need to go through a TIC – only a DMZ
- The white paper should include URLs of the Federal network Websites

AI: Grant Miller and Paul Love to produce the next vesion of the TIC white paper and circulate for final comments.

AI: Dan Magorian will forward the USGS description of its experience with implementing TIC-type capabilities.

### **Future JET Meetings**

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

April 15, 11:00-2:00, NSF, Room 1150