



Internet2(R) Members Update October 2003

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◇ **Internet2 Fall 2003 Member Meeting**

The Fall 2003 Internet2 Member Meeting in Indianapolis, October 13-16, is rapidly approaching! An exciting array of sessions, speakers, and special events is planned. You will be receiving email messages highlighting details of the Meeting over the next week.

General information about the meeting is at: <http://events.internet2.edu/2003/fall-mm/>

For program details, see: <http://events.internet2.edu/2003/fall-mm/agenda.cfm>

◇ **International Update**

+ Qatar Research and Education Network Connects to Internet2's Abilene Network in New York City
The Qatar Foundation - a not-for-profit entity in Qatar - has funded an initial set of network connectivity for institutions of higher education in Qatar, including campuses of several US institutions (Cornell Medical School, Virginia Commonwealth, Texas A&M and Carnegie Mellon). The Qatar Foundation Network peers with Internet2's Abilene network by connecting via two 155 Mbps circuits to the MAN LAN international research and education exchange point in NYC site. MAN LAN is run cooperatively by Internet2, the Indiana University Global NOC, and NYSERNET as a Gigabit Ethernet exchange point and already interconnects networks such as Abilene, GEANT, HEANET, NYSERNET and SINET.

Internet2 is in the process of finalizing a Memorandum of Understanding with the Qatar Foundation that would represent the first international partnership between the Internet2 community and the research and education networking community of a country in the Persian Gulf region.

<http://www.qf.edu.qa/>

+ **New 10 Gbps Connection Between CERN and Chicago's StarLight Facility**

A new 10 gigabit per second (Gbps) connection has been established between CERN - the world's largest particle physics laboratory located in Geneva, Switzerland - and the StarLight international optical exchange facility in Chicago, Illinois. The new 10 Gbps link is part of the DataTAG project, funded by the National Science Foundation (NSF) and the Department of Energy in the United States, and the European Commission in Europe. The DataTAG is focused on advanced networking aspects of creating interoperable grid test beds between the United States and Europe. Internet2's Abilene network is already connected at 10 Gbps to the StarLight facility, providing the Internet2 community with access to the new 10 Gbps link to CERN. For more information, see:

<http://datatag.web.cern.ch/datatag/index.html>

◁ **Middleware Update**

+ NSF Award Extends Middleware Development Efforts

The National Science Foundation (NSF) awarded the Enterprise and Desktop Integration Technologies (EDIT) Consortium, led by Internet2's Ken Klingenstein, a second three-year grant as part of its ongoing NSF Middleware Initiative (NMI). EDIT will continue to develop, deploy, and support an integrated National Middleware Infrastructure to support scientific and engineering applications. The award is effective from September 2003 to August 2006.

<http://www.nsf.gov/od/lpa/news/03/pr0399.htm>

http://www.nsf.gov/od/lpa/news/03/fs03_nmi.htm

+ Tutorials on Federations and Shibboleth at the Internet2 Fall Member Meeting

NMI-EDIT will be offering two tutorials focused on Federations and on Shibboleth as supporting technology on Monday, October 13 at the Internet2 Fall Member Meeting: "Deploying a Collaboration Infrastructure Across State and Higher Education Federations" at 8:15 am followed at 1 pm by "Using Shibboleth to Support Credential Exchange."

+ Shibboleth

With the release of production-ready software, the Shibboleth pilot program has concluded. In addition to the formal pilot participants, additional universities, National Research and Education Networks (NRENs), and resource providers are testing and deploying Shibboleth software. All continue to provide the project team with valuable feedback and suggestions for improvement. Planning and development of Shibboleth version 2.0 is under way.

New adopters of Shibboleth include Sympa, the mailing list manager produced by Comite Reseau des Universites in France, which is actively working to Shibboleth-enable their product. Internet2 has also implemented a production use of Shibboleth for the upcoming Fall Member Meeting; a Shibboleth-protected page provides the email addresses of attendees for fellow registered attendees.

<http://events.internet2.edu/2003/fall-mm/roster.cfm?sort=name>

For more information about Shibboleth, see:

<http://www.shibboleth.internet2.edu/>

+ Public Key Infrastructure (PKI)

Plans for the future of the former CREN CA are being finalized by the EDUCAUSE/Internet2 Higher Education PKI -Technology Advisory Group (HEPKI-TAG). An announcement is expected shortly.

+ CourseID Project

The CourseID Project Team has drafted a data structure, data definitions, and several scenarios and use cases. The team is encouraging interested individuals to join them when they present these documents and seek feedback during an open discussion session on Monday morning, October 13 at the Internet2 Fall Member Meeting.

<http://middleware.internet2.edu/courseID/>

+ Integrated Infrastructure for Instant Messaging (I2IM) Working Group

The recently formed I2IM working group is researching the issues surrounding enterprise integration of IM services with respect to authentication and authorization, and exploring the feasibility of creating a national/international framework for instant messaging once enterprise issues are understood. Toward this end they are also looking at the applicability of leveraging technical methods like SAML/Shibboleth, and the policy frameworks coming from federations.

<http://middleware.internet2.edu/i2im/>

◁ **End-to-End Performance Initiative (E2Epi) Update**

+ E2E piPEs (End-to-End Performance Improvement Performance Environment System)

Warren Matthews (Georgia Tech) and Raj Swaminathan (Syntel Corporation) have joined the existing E2E piPEs team as short-term contractors. The team is working on short-term Iperf deployment, an Iperf scheduler re-write (to facilitate on-demand tests), and trace route deployment. They are expanding the scope of the web-based display of data and integrating data with NLANR's Advisor and the MonALISA

project (HENP). More information can be found at:
http://e2epi.internet2.edu/E2EpiPEs/e2epipe_index.html

+ H.323 Beacon

The H.323 Beacon software has been released via Sourceforge in an effort to get community feedback on its value and to prioritize future development activities. Prasad Calyam is working with a Polycom representative on a case study of user experiences. For more information, see:
<http://www.itecoho.org/beacon/>

+ National Science Foundation (NSF) Grants

A workshop, scheduled December 11-12 at SDSC, will bring together experts in the area of measurement, networking, and E2E performance issues to develop a Roadmap for the topic area. An NSF grant awarded to Matt Zekauskas will fund this workshop.

+ Campus Network Infrastructure Guide (CNIG)

Michel Davidoff of the California State University system (CSU) provided the team with a draft case study on the centralized infrastructure upgrade at all 23 CSU campuses that began in 1996. When the case study is complete, it will be posted online under Policy Guidelines, along with another case study (Caltech) that is still in early development stages. <http://e2epi.internet2.edu/CNIGuide/CNIGuide-CFP.html>

+ National Library of Medicine (NLM) Pilot Study

The first draft of the Final Report was submitted to NLM on September 10; a session, reporting the results, is scheduled at the Fall Member Meeting.

<> **Applications Update**

+ New World Symphony Technology Grant

The National Science Foundation (NSF) has awarded the Miami Beach-based New World Symphony (NWS) a technology grant of \$102,200. The grant will support NWS' pioneering research and experimentation with high performance network connections in music education and interactive music collaboration via Internet2 networks. This tremendous increase in bandwidth will open up new opportunities for NWS's innovative Distance Learning Program that connects world-class artist-teachers at over 200 Internet2 connected universities around the U.S and other institutions abroad with NWS Fellows. <http://www.nws.org>

+ Meeting Attendees Invited to Participate in Integrated Communications Demo

The Internet2 Presence and Integrated Communications (PIC) Working Group will present a "first light" experiment in integrated communications featuring rich presence, automated location services, SIP.edu addressing, voice over WiFi, instant messaging, and more. All attendees of the Fall 2003 Internet2 Member Meeting are invited to participate in this interactive demo. Shortly before the Member Meeting, meeting registrants will receive an email from the PIC Working Group outlining the details on how to participate. <http://events.internet2.edu/2003/fall-mm/demos.html#pic>

+ Internet2 Commons Activities at the Fall Member Meeting

The Internet2 Commons will serve many roles at the Fall 2003 Internet2 Member Meeting, from allowing track session speakers to present from remote locations via multipoint videoconferencing to hands-on demonstrations of MCU-based H.323 videoconferencing, now available to members on a subscription basis. The Commons demonstration will feature live visits with Site Coordinators throughout the Internet2 membership who use the Commons service and interaction with the Internet-To-Go remote satellite trailer demo. Several track sessions at the Fall Member Meeting will highlight Commons-related activities, including a NEES Update session describing how participants in earthquake engineering research are using the Commons to facilitate communication and coordination across 16 project sites and a Lewis and Clark re-enactment using live H.323 videoconferencing to bring the expedition to classrooms everywhere. These Member Meeting activities offer a great opportunity to see first-hand the benefits of face-to-face videoconferencing through the shared resources of the Internet2 Commons Videoconferencing Service via H.323.

<http://commons.internet2.edu/train/200310/>

<http://events.internet2.edu/2003/fall-mm/demos.html#commons>

+ **The Medium and the Message: Tomorrow's Technology and Today's Health Education Needs**
The Internet has transformed the education landscape in terms of both content and delivery for learners at all ages. On Tuesday, 14 October 2003 from 6:00 - 9:00 pm, the Ruth Lilly Health Education Center, in partnership with Indiana University School of Informatics, is hosting a reception that provides the opportunity for attendees to interact with a variety of institutions and communities on solutions that address the evolution of teaching and learning environments for education on a global level. Discover how Internet2 and its members have created programs and technology to address these challenges. This event will present an excellent opportunity to meet Internet2 participants from the Internet2 K20 Initiative, State Education Group Participants (SEGP's), International Partners, and the Health Sciences.
<http://www.healtheducationcenter.org/Events/>

◁ **Internet2 K20 Initiative Update**

+ **New Sponsored Educational Group Participants (SEGP) States**
In the last few months the K20 Initiative has been growing. Recently welcomed, as SEGP states were, Texas, Kansas, Connecticut, Massachusetts, and Alabama. For more information on these new SEGPs please visit the K20 website at:
<http://k20.internet2.edu/segp/currentparticipants.html>

◁ **Joint Techs Meeting Recap**

The 12th Joint Techs Workshop took place August 3-7 at the University of Kansas. Foci included optical networking, continuing the network build out, security, network transports, and network measurement. Summary: <http://eng.internet2.edu/joint-techs-aug-2003.html>
Presentations: <http://ncne.nlanr.net/training/techs/2003/0803/agenda.html>

◁ **100Mbps to 100 Homes Research Project**

The National Science Foundation (NSF) has awarded \$7.5 million through its Information Technology Research (ITR) Program to support research into the design, implementation, and management challenges of providing economical, robust, secure, and scaleable very high performance networking capabilities. The project, called "100 Megabits to 100 Million Homes," includes researchers from Carnegie Mellon University; Fraser Research, Inc.; Rice University; the University of California at Berkeley; Stanford University; Internet2; the Pittsburgh Supercomputing Center; and ATT Research.

◁ **New Internet2 Members**

- + **University Members**
 - Arkansas State University, <http://www.astate.edu>
 - Claremont Colleges, <http://www.cgu.edu>
- + **Corporate Members**
 - Global Crossing, <http://www.globalcrossing.com>
- + **Affiliate Members**
 - Food and Drug Administration, <http://www.fda.gov>

◁ **Future Internet2 Events**

+ **Internet2 Multicast Hands-On Workshop**
Logistics and registration will be announced soon for the Internet2 Multicast Hands-On Workshop. This workshop will be hosted by the San Diego Supercomputing Center, December 2-4, 2003. After attending this workshop, an attendee will be able to engineer multicast networks within his/her campus or gigaPoP, explain multicast engineering concepts to peers, and, in some cases, help teach or facilitate future multicast workshops. Note: Participation is limited to 20 students.

+ **Joint Techs Workshop/Techs in Paradise (TIP) 2004 Meetings**

Plan now to attend the Winter Joint Techs meeting, January 25-28, 2004. The Joint Techs meeting is one of several meetings planned for Techs in Paradise 2004 in Honolulu, Hawaii. The location is the East-West Center on the University of Hawaii campus. An Internet2 IPv6 Workshop is scheduled for all day on Saturday, January 24 and Sunday, January 25. The ESnet Coordinating Committee (ESCC) will meet on January 28-29, and the Asian-Pacific Advanced Network (APAN) meeting will take place January 28-30.

Tutorials and Birds-of-a-Feather (BoF) sessions will also be held. Several Engineering Working Groups are planning to meet as well. Registration is now available at:
<https://services.internet2.edu/tip2004/index.jsp>

For additional details on the Techs Workshop as well as information on and links to the other meetings, see <http://www.hawaii.edu/tip2004/>

<> **Internet2 Days**

Hold an Internet2 Day for your Internet2 member organization. Technical support for live demonstrations and informational materials are available. For more information contact Marianne Smith <melser@internet2.edu> or see:
<http://apps.internet2.edu/Internet2-Days.html>

<> **Showcase and Spotlight Opportunities - Projects and People**

A Showcase on the Internet2 Web site is a great way to highlight the milestones, events, collaborations and efforts that are a result of your work in the advanced networking community. You are also encouraged to submit a profile of anyone in the Internet2 community whose efforts merit notice. Include a brief description (less than 100 words), all appropriate links and images, and contact information. If you have suggestions about projects, people or news that might be featured, please contact Adam Csillag <acsillag@internet2.edu>.

<> **Internet2 Related Events**

+ Online Calendar

For a complete listing of events for and of interest to the Internet2 community, see the online Internet2 Calendar. Be sure the Internet2-related event you are holding or know about is listed at:
<http://events.internet2.edu/calendar/main.php>

If you are holding an event of any kind related to Internet2, we will be glad to assist members with resources such as printed publications, equipment or speakers. Please contact Marianne Smith for more information <melser@internet2.edu>.

+ NANOG 29
19-21 October 2003
Chicago, IL
<http://www.nanog.org/>

+ EDUCAUSE 2003
4-7 November 2003
Anaheim, CA
<http://www.educause.edu/conference/annual/2003/>

+ SC2003
15-21 November 2003
Phoenix, AZ
<http://www.sc-conference.org/sc2003/index.html>

Radiological Society of North America (RSNA)
30 November - 5 December 2003
Chicago, IL
<http://www.rsna.org/rsna/index.html>