



## **Internet2 (R) Members Update April 2004**

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The monthly member updates are archived at: <http://members.internet2.edu/memberupdates/>

### **◇ Spring 2004 Internet2 Member Meeting: 19-21 April**

If you are registered for the Spring 2004 Internet2 Member Meeting but have not yet reserved your hotel room, you should do so now! Internet2 has reserved a block of rooms; this block will be released after 2 April. For hotel reservation information, see:

<http://events.internet2.edu/2004/spring-mm/hoteltravel.html>

Scheduled opening plenary speakers include Douglas E. Van Houweling, President & CEO, Internet2; Sangtae Kim, Director, Division of Shared CyberInfrastructure, National Science Foundation; and Steven Papermaster, Member, President's Council of Advisors on Science & Technology and Chairman, PowerShift Ventures. The closing plenary speaker will be William Wulf, A&T Professor of Computer Science, University of Virginia, and President, National Academy of Engineering.

Be sure to bring your 802.11 (WiFi) capable laptop or web-enabled device to the Spring Meeting to take advantage of new features that have been added to the online agenda and meeting web pages. The Internet2 website will now allow attendees to complete online evaluations immediately following the sessions attended.

To register for the Spring Meeting go to:

<http://events.internet2.edu/2004/spring-mm/registrationintro.cfm>

### **◇ 2003 Internet2 Annual Report**

Highlighting some of the Internet2 community's significant accomplishments from last year, a printed copy of the recently completed 2003 Internet2 Annual Report will be mailed to the executive representative of each Internet2 member and International MoU Partner. Additional copies can be requested by sending email to [publications@internet2.edu](mailto:publications@internet2.edu) and a downloadable and printable version is available now at:

<http://www.internet2.edu/pubs/2003-AR.pdf>

#### ◁ **Internet2 Association Membership**

On 1 April, Internet2 introduced a new category of membership called Association Membership. Association Membership is intended for non-profit, higher education associations with national or international scope. Other non-profit, membership-based consortia with missions that focus on advanced technologies for research and education are also welcome to apply, and may be required to submit letters of support from current Internet2 Regular members.

<http://members.internet2.edu/association/>

#### ◁ **National Internet2 Day Recap**

A successful National Internet2 Day was held on 18 March and generated better awareness of Internet2 capabilities across the country. Over 40 Internet2 member organizations hosting over 900 attendees, held local events in conjunction with the national event to showcase the value of the investment their campuses have made in Internet2. For more about the event, and an archive of the netcast streams and slides, see:

<http://events.internet2.edu/2004/Internet2Day/>

#### ◁ **H.323 Videoconferencing Workshop**

On 22 April in Arlington, VA, the Internet2 Commons will hold a workshop for those interested in supporting H.323 multipoint videoconferencing. Videoconferencing experts from Internet2 member institutions will introduce a broad framework for understanding H.323 videoconferencing over advanced networks. The daylong training will cover topics such as H.323 basics, gateways and gatekeepers, the new H.350 directory standard, introduction to SIP, room set-up basics, tools and troubleshooting, hands-on equipment demonstrations, and more. Upon completing this training, each participant will be certified as a Site Coordinator for the Internet2 Commons. The registration fee is \$100.

<http://commons.internet2.edu/train/200404/>

#### ◁ **Megaconference Jr.**

Megaconference Jr., to be held on 6 May, is designed to give students in elementary and secondary schools around the world the opportunity to communicate, collaborate and contribute to each other's learning in real-time, using advanced multi-point videoconferencing technology. Internet2 members are encouraged to participate. All participants must have access to the Abilene Network or equivalent high-speed networks that link to Abilene in countries outside the United States, such as those of Internet2 International Partner organizations around the world. Between 20 and 50 schools are expected to participate interactively in the event from at least five countries, with many others viewing one-way streamed video. The event will run from 7 a.m. until 7 p.m. EST (UTC -5) making it possible for schools from many time zones to participate during their regular school hours. For more information, see:

<http://megaconferencejr.cciu.org/>

#### ◁ **VoIP Strategies & Implementation Conference**

The VoIP Strategies & Implementation Conference, hosted by East Carolina University and Internet2, will bring together telecommunications specialists, enterprise IT managers and telecommunications industry leaders to share experiences, learn about potential pitfalls and discuss successful implementation methods for moving VoIP into production. Session topics will include VoIP disaster recovery, implementing VoIP gateways & gatekeepers, and preparing a VoIP business plan. VoIP design and implementation case studies and best practices will also be presented. The conference takes place 12-13 May on the East Carolina University campus in Greenville, NC. The registration fee is \$125.

<http://www.ecu.edu/si/internet2/voip.htm>

#### ◁ **Joint Techs Workshops**

+ Winter Joint Techs Recap

The 13th Joint Techs Workshop, part of TIP2004, took place 25-28 January at the University of Hawaii. APAN, TransPAC, ESCC, NCNE, and Internet2 co-organized the workshop. Workshop topics included regional optical networking, security, network measurement, new ways to make use of globally distributed computing resources, and developments in advanced networking in Asia and the Pacific.

Summary: <http://eng.internet2.edu/joint-techs-jan-2004.html>

Presentations: <http://www.ncne.org/training/techs/2004/0125/agenda.html>

TIP2004: <http://www.hawaii.edu/tip2004/>

#### + Summer Joint Techs Workshop

The Summer Joint Techs Workshop will be held in Columbus, OH, 18-22 July and will be hosted by the Ohio Valley Internet2 Consortium. Watch the Internet2 online calendar of events for further details about this meeting.

<http://events.internet2.edu/calendar/main.php>

#### ◁ International Update

##### + International Activities at the Spring 2004 Internet2 Member Meeting

On April 22, following the Spring 2004 Internet2 member meeting, Internet2 will host a special International Workshop "Extending the Reach of Advanced Networking." The aim of this workshop is to bring together international partners, members of the Internet2 community, and individuals from various development, funding, and science agencies in the Washington, DC area and elsewhere. During the workshop, we hope to discuss opportunities for collaboration and to highlight research and education networking community initiatives that are addressing the challenges of deploying advanced networking to places where it is still needed. The workshop requires separate registration and participation is limited to 100 participants.

[http://international.internet2.edu/intl\\_connect/workshop.html](http://international.internet2.edu/intl_connect/workshop.html)

Agendas and more information on all international activities taking place during the Spring Member Meeting, are now available at: <http://international.internet2.edu/resources/events/2004/SpringMMintl.html>

##### + International Workshops

A series of workshops took place during March, involving members of Internet2's End-to-End Performance Initiative and the international community. These workshops included:

- GGF10 (Berlin): Eric Boyd, Internet2 Software Development Technical Manager, was named co-chair of the GGF Network Measurement Working Group (NMWG). The NMWG worked on test/result request/report schemas, both of which the End-to-End Performance Initiative Performance Environment System (E2E piPEs) is relying on to interoperate with other measurement frameworks.

<http://www.ggf.org/> and <http://www-didc.lbl.gov/NMWG/>

- GNEW 2004 (Geneva): The group discussed the future of network infrastructure and performance measurement. Eric Boyd presented a piPEs overview; working with colleagues in GEANT and on the MonALISA project, the piPEs team created a trio of measurement demos: partial path analysis from Los Angeles to CERN, interoperability with GEANT, and active monitoring of the HOPI-demo "lightpath".

<http://datatag.web.cern.ch/datatag/gnew2004/>

- Transatlantic Performance Monitoring Workshop 2004 (Geneva): Internet2, DANTE, and EGEE co-sponsored this workshop, designed to: raise awareness of ongoing performance measurement efforts in Europe and the US, explore working together towards interoperability, and discuss sharing source code. Eric Boyd and Nicolas Simar, DANTE expect to organize another workshop later this year.

[http://people.internet2.edu/~eboyd/transatlantic\\_workshop.html](http://people.internet2.edu/~eboyd/transatlantic_workshop.html)

#### ◁ Middleware Update

##### + Shibboleth

The United Kingdom Joint Information Systems Committee (JISC) Call for Projects in Core Middleware has named Shibboleth as one of its areas of emphasis. This reflects the impact Shibboleth is having on current and future IT architectures across the research and education community, internationally as well as in the US. Further examples of this include broad Shibboleth implementations among the R&E sectors in Switzerland, Canada, Finland, and Australia, among others.

[http://www.jisc.ac.uk/index.cfm?name=c01\\_04](http://www.jisc.ac.uk/index.cfm?name=c01_04)

Shibboleth version 1.2 will be released in April. The InQueue Federation continues to grow and now has approximately 40 campus members. Pennsylvania State University students registering for Napster 2.0 Premium Service are successfully using Shibboleth 1.1.

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

+ NSF Middleware Initiative (NMI)

- NMI EDUCAUSE Call for Proposal: Extending the Reach

EDUCAUSE is seeking affiliated groups of campuses or organizations to submit proposals to offer outreach services to promote the adoption of: enterprise directories, authentication, and authorization. The proposal submission deadline is 3 May.

<http://www.nmi-edit.org/participation/index.html>

- Register for the Shibboleth Tutorial

NMI-EDIT will be offering a Shibboleth tutorial entitled "Shibboleth: Moving Your Campus to Production" on 19 April prior to the Spring 2004 Internet2 Member Meeting in Arlington, VA. Seating for this tutorial is very limited, so sign up early. Registration closes on 5 April. The session is free and open to all. <http://www.nmi-edit.org/news/registration.html>

+ CAMP Shibboleth and Advanced CAMP Workshops

Save the date for the two middleware CAMP workshops coming up in late June and early July. The CAMP Shibboleth Implementation Workshop, taking place 28-30 June, will feature technical and management topics associated with deploying the software. Participants at the Advanced CAMP Authority Architectures Workshop, taking place 30 June- 2 July, will learn how to support on-campus application and off-campus resource-sharing authority requirements. Both workshops take place in Broomfield, CO. For information about the CAMP Shibboleth, refer to:

<http://www.educause.edu/conference/nmi/2004/camp042/>

For information on Advanced CAMP, refer to:

<http://www.educause.edu/conference/nmi/2004/camp043/>

+ Public Key Infrastructure

- The 3rd Annual PKI R&D Workshop

The 3rd Annual PKI R&D Workshop is taking place, 12-14 April at NIST in Gaithersburg, MD. The program features a broad variety of perspectives, results and new ideas on the use of Public Key technology for security decision making, not just traditional "PKI". The agenda will feature talks and panel sessions on the dynamic delegation of rights, application-specific PKI designs, document signatures, certificate path discovery, experience papers, and discussions on where to go from here.

Speakers include Peter Gutmann, Carlisle Adams, Stefan Brands, Ken Klingenstein, John Linn, Tim Polk, Von Welch and many other experts. The intimate workshop atmosphere provides ample opportunities to interact with others working on the issues you're facing, including Work-In-Progress and Birds-of-a-Feather sessions.

<http://middleware.internet2.edu/pki04/>

- Article on PKI in March/April EDUCAUSE Review

For those interested in making a case for Public Key Infrastructure, refer to the article "PKI: A Technology Whose Time Has Come in Higher Education" in the March/April 2004 edition of EDUCAUSE Review.

<http://www.educause.edu/ir/library/pdf/erm0427.pdf>

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

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

E2E piPEs demonstrated interoperability with other tools at four workshops this past month (see the "Workshops" section below). The E2E piPEs team met on 23 March to discuss goals for 2004, including rollouts of OWAMP and BWCTL to CENIC, NC-State, and OSU. A revised E2E piPEs overview document, which is being distributed at Spring Member Meeting, is available online:

<http://e2epi.internet2.edu/E2EpiPEs/overview.html>

+ OWAMP/BWCTL (One-Way Active Measurement Protocol/Bandwidth Control)

At the Spring 2004 Internet2 Member Meeting, a Tools Tutorial session on 19 April includes a presentation on using BWCTL. An overview document for BWCTL, which is being distributed at the Spring 2004 Member Meeting, is available online:

<http://e2epi.internet2.edu/bwctl/overview.html>

+ Network Diagnostic Tool (NDT)

Rich Carlson, developer of the NDT, is working to integrate the tool into piPEs and add to NDT's functionality. A large portion of this work will become the basis for the Analysis Engine portion of the piPEs framework.

<http://miranda.ctd.anl.gov:7123/>

+ Workshops

- During the month of March, the piPEs team was involved in four international conferences (GGF10, GNEW 2004, Transatlantic Performance Monitoring Workshop 2004, and the CANARIE-GEANT-Internet2 Lightpath Workshop); please see the International section for specific information.

-Materials related to the Performance Measurement Architecture (PMA) Workshop (held in San Diego, CA during December 2003) are now available.

<http://e2epi.internet2.edu/WK03/index.html>

+ E2Epi Sessions at the Spring 2004 Internet2 Member Meeting

The E2Epi is hosting six sessions at the Spring 2004 Internet2 Member Meeting.

<http://e2epi.internet2.edu/SMM04/index.html>

◁ **Applications Update**

+ Applications Demos at the Broadband Summit Attendees at the Spring 2004 Internet2 Member Meeting will be able to view Internet2 applications demos on Tuesday, 20 April from 5:00-7:00 pm, during the Broadband Summit 2004 meeting at the Ronald Reagan International Trade Center, in Washington, DC.

This is a separate event for which Internet2 is a sponsor. Admission to the Exhibit Hall is free.

<http://bbsummit.web.aplus.net/>

+ RSNA 2004 Call for Demos

The Radiological Society of North America (RSNA) is collaborating with the Internet2 Health Sciences Initiative, the National Library of Medicine (NLM) and the Metropolitan Research and Education Network (MREN) to create a set of tutorials and demonstrations of high-performance networking technology and its future applications in the healthcare arena. The annual meeting of the Radiological Society of North America (RSNA) will take place in Chicago from 28 November to 3 December. The Internet2/NLM booth will be part of the infoRAD exhibit space at RSNA. The infoRAD area is designed to showcase the most innovative technology solutions in an interactive, educational environment. We are looking for applications that use advanced networks to solve problems in healthcare to participate in these demos. Submissions are due no later than 7 May.

<http://apps.internet2.edu/rsna.html>

◁ **K20 Initiative Update**

Through a resource sharing arrangement with the State of Maryland, the University System of Maryland (USM) has received a 2.5 Gigabit-per-second wavelength between Baltimore and Washington D.C. This optical circuit will extend Abilene connectivity and commodity Internet services to the primary and SEGP affiliates of the University of Maryland Academic Telecommunications System (UMATS) and the Mid Atlantic Crossroads (MAX). The purpose of this connection is to extend the ability of the Baltimore Education & Research Network (BERnet) to support educational and research institutions and their affiliates in the Baltimore area. This collaboration will help develop and support a major advanced networking presence in the city of Baltimore.

<http://k20.internet2.edu/segp/index.html>

◁ **New Internet2 Members**

+ Corporate Members

VoEx, Inc - <http://www.voex.com>

Movaz Networks – <http://www.movaz.com>

Steelcase, Inc. – <http://www.steelcase.com>

Napster – <http://www.napster.com>

Compuware Corporation – <http://www.compuware.com>

+ Regular Members  
Mayo Clinic College of Medicine - <http://www.mayo.edu/>

◁ **Future Internet2 Events**

- + Spring 2004 Internet2 Member Meeting: Arlington, VA, 19-21 April
- + H.323 Videoconferencing Workshop, Arlington, VA, 22 April
- + VoIP Strategies & Implementation Conference, Greenville, NC 12-13 May
- + Summer Joint Techs Workshop, Columbus, OH, 18-22 July - hosted by the Ohio Valley Internet2 Consortium
- + Fall 2004 Internet2 Member Meeting: Austin, TX, 27-30 September

◁ **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>.

+ Missouri Life Sciences Week 2004

5-9 April

Columbia, MO

<http://lifesciencesweek.missouri.edu/>

+ NERCOMP Workshop: Increasing the Use of Internet2: An Owner's Manual

8 April

Worcester, MA

<http://www.nercomp.org/sigs/0304/040408Internet2/Internet2Sched.html>

+ Broadband Summit 2004

19-20 April

Washington, DC

<http://bbsummit.web.aplus.net/>

+ Megaconference Junior

6 May

Virtual Event

<http://megaconferencejr.cciu.org/>

+ Networld+Interop  
9-13 May  
Las Vegas, NV  
<http://www.interop.com/>

+ FDA Science Forum  
18-19 May  
Washington, DC  
<http://vm.cfsan.fda.gov/~frf/sxsfin04.html>

+ EDUCAUSE – Policy Conference  
19-20 May  
Washington, DC  
<http://www.educause.edu/conference/policy/2004/>