



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

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

### ◇ **Internet2 2003 Year in Review**

In a recent letter to the Internet2 membership, Dr. Douglas Van Houweling, President & CEO of Internet2, takes a look back at accomplishments of the Internet2 community over the past year. Internet2 members have invested in high-performance campus and regional networks, deployed technologies such as multicast and IPv6, and supported the implementation of middleware and the development of new network applications. Highlights from the past year include, the completed Abilene backbone network upgrade to 10 gigabit per second links, the release of Shibboleth 1.0, and expanded efforts in security. Other highlights and the letter to members can be found at:

<http://www.internet2.edu/about/update-200401.html>

### ◇ **Internet2 Workshops in January 2004**

The Joint Techs Workshop will be held 25-28 January 2004 as part of the Techs in Paradise (TIP) meeting, 22-31 January. All sessions will be held at the East-West Center at the University of Hawaii, Honolulu. Internet2 will be hosting or co-hosting several other side meetings and sessions in conjunction with the Joint Techs Workshop including an IPv6 Workshop, an Internet2 Commons Videoconferencing Workshop (with APRUNet), and a VoIP Summit (with APAN). Several Internet2 Working Groups and BOFs will also be meeting in conjunction with Techs in Paradise, including the High-Energy and Nuclear Physics Working Group, the Routing Working Group, and the Astronomy BOF. In addition, the Internet2/EDUCAUSE Security Task Force will be hosting a Middleware/Security BOF. Register now at: <https://services.internet2.edu/tip2004/index.jsp>.

For details on the Workshop, netcast times, and for information on and links to the other meetings (some of which require separate registration), see:

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

### + **Internet2/New World Symphony Performance and Master Class Production Workshop**

Internet2 and the New World Symphony are hosting a hands-on audio/video production workshop, 14-15 January 2004 at the New World Symphony campus in Miami Beach, FL. The emphasis will be on real-time experience connecting with remote sites over Internet2 networks, setting up live situations involving

incoming and outgoing video and audio, dealing with a multi-camera shoot, placing lighting and projectors, and troubleshooting and operating codecs. This workshop will explore, in depth, the elements needed to do everything from simple one-on-one interactions to larger scale stage productions via Internet2 networks. There is a registration fee of \$125 for the 2-day workshop. See: <http://events.internet2.edu/2004/NWS-workshop/>

#### ◁ **Call for Proposals: Spring 2004 Internet2 Member Meeting**

The Call for Proposals deadline for the Spring 2004 Member Meeting, scheduled for 19-21 April 2004 in Arlington, VA has been extended to Friday, January 16, 2004. The Spring member meeting traditionally highlights Internet2's partnerships among academia, industry, government and the international community. The Program Committee is seeking proposals that focus on collaborations with and among federal agencies, between the corporate community and higher education, and with international organizations. Key areas of focus include cyberinfrastructure initiatives, cooperative funding arrangements among federal agencies, global e-science collaborations, security on high-performance networks, as well as presentations of advanced applications underway on member campuses, deployment of middleware capabilities, and advancements in the K/20 community. More information on the Call for Proposals and a proposal submission form can be found at: <http://events.internet2.edu/2004/spring-mm/call-for-proposals.cfm>

#### ◁ **Internet2 Members Featured in Syllabus**

Several Internet2 members are featured in the January 2004 issue of Syllabus magazine, a publication read by more than 50,000 higher education faculty and IT professionals who use technology to support their teaching and learning. The January edition of Syllabus, a special issue on campus networking, features bylined articles and case studies from Internet2 members including Brian Voss of Indiana University, Christianne Orto of the Manhattan School of Music, Erik Hofer and Tom Finholt of the University of Michigan, Franz Kurfess of California Polytechnic State University at San Luis Obispo, Joe Mambretti of Northwestern University, Tom West of National LambdaRail and CENIC, and Kathleen McMonigal of ResearchChannel. The Syllabus case studies describe how these institutions are using Internet2 networking for their work in developing and/or deploying advanced network technologies. These stories can be found on the Internet2 Web site at: <http://news.internet2.edu/ncAllShow.cfm> or on Syllabus online at <http://www.syllabus.com>.

#### ◁ **National Internet2 Day – 18 March 2004**

Is your campus participating in National Internet2 Day on Thursday, March 18, 2004? If so, have you signed-up? The first-ever, virtual National Internet2 Day will feature a series of virtual presentations, demonstrations, and performance events across disciplines. Member campuses are encouraged to host local National Internet2 Day events with presentations by campus-based faculty supplemented by netcast national speakers. Internet2 will assist participating institutions by providing technical support and equipment, including loan equipment, as well as publicity and local media support. If your campus is interested in participating in National Internet2 Day, contact Marianne Smith (734) 352-4976 <[melser@internet2.edu](mailto:melser@internet2.edu)> no later than 23 January 2004. If you are a corporate member interested in sponsorship opportunities, contact Ellen Vaughan (734) 652-4954 <[evaughan@internet2.edu](mailto:evaughan@internet2.edu)>. For updated information on National Internet2 Day activities, please visit: <http://events.internet2.edu/2004/Internet2Day/>

#### ◁ **EDUCAUSE Excellence in Networking Awards**

Applications for EDUCAUSE's Excellence in Networking awards are being accepted through 1 February 2004. Winners of the 2003 awards included Internet2 members Indiana University and Purdue University for their work to create I-Light, Indiana's optical fiber network. The award program honors strategic, innovative networking programs or practices that improve the quality of campus network services through new or enhanced network architectures, infrastructure, integration, management, and/or operational practices. For more information and an application form, see: <http://www.educause.edu/awards/network/>

#### ◁ **Board and Council Nominations**

Nominations for the Internet2 Board of Trustees and Advisory Councils are now being accepted. Any member of Internet2 may nominate a candidate for the Board or a Council. Advisory Councils have the following openings: Applications Strategy Council (ASC), 4 openings; Industry Strategy Council (ISC), 3

openings; Network Planning and Policy Council (NPPAC), 4 openings; and Network Research Liaison Council (NRLC), TBD openings. In addition, the Nominating committee will recommend a slate of 3 Trustees for the Board of Trustees. The Nominating Committee will meet to review the nominations and make their recommendations to the Board. The new Council and Trustees will be announced at the Spring 2004 Member Meeting, April 19-21. Nominations may be submitted on the web, sent to <bnanzig@internet2.edu>, or faxed to (734) 913-4255. All nominations must be received by 20 February 2004. For more information see:  
<http://www.internet2.edu/about/nominationinfo.html>

#### <> International Update

##### + Dual 10Gbps between Australia and North America

Announced on December 12, 2003, the SX TransPORT (Southern Cross Trans-Pacific Optical Research Testbed) project will provide dual 10 gigabit per second capacity circuits that will expand current connections between Australia's Academic and Research Network (AARNet) to the advanced research and education networks in North America, such as Internet2's Abilene network. Currently, AARNET connects to the Abilene network via a 310 Mbps link to the Pacific Wave international exchange point, located at the Pacific Northwest Gigapop in Seattle, WA. AARNET has been an Internet2 International Partner since the fall of 1999.

The SX TransPORT results from a partnership between Southern Cross and AARNET to catalyze new, effective ways for Australia's research community to participate in and contribute to global e-science programs. The Australian Minister for Education, Science and Training announced that the Australian Government would contribute AU\$16.4 million towards the total project cost of \$44.8 million. More information can be found at:

<http://www.dest.gov.au/Ministers/Media/Nelson/2003/12/n561111203.asp>  
and <http://www.aarnet.edu.au/news/sxtransport.html>

AARNET, <http://www.aarnet.edu.au>

Pacific Wave, <http://www.pacificwave.net/>

Southern Cross, <http://www.southerncrosscables.com>

##### + Philippines, Sri-Lanka and Thailand Join APAN as Primary Members

APAN, the Asia Pacific Advanced Networking consortium and an Internet2 international partner, recently announced three new primary members: Phillipines, Sri-Lanka and Thailand. In the Philippines, ASIT (Advanced Science and Technology Institute) manages PREGINET, the Phillipine's Research, Education and Government information network. LEARN, the Lanka Education And Research Network interconnects research and education institutions across Sri-Lanka. In Thailand, APAN-TH consists of both Thailand's Social/Scientific Academic and Research Network (Thaisarn) and UniNet- Thailand's Education and Research Network. Both of these organizations are Internet2 international partners.

APAN-TH, <http://www.th.apan.net/>

ASTI, <http://www.asti.dost.gov.ph>

PREGINET, <http://preginet.asti.dost.gov.ph>

LEARN, <http://www.ac.lk/>

APAN, <http://www.apan.net>

TransPAC, <http://www.transpac.org>

#### <> Middleware Update

##### + Shibboleth

An intriguing number of additional countries are showing interest in Shibboleth. The group recently welcomed organizations in Australia and the CSC, the Finnish IT center for science in Finland to Shibboleth experimentation. Special thanks go to the Swiss network, SWITCH, which contributed important code to Shibboleth. More information on Shibboleth can be found at:  
<http://shibboleth.internet2.edu/>

##### + NSF Middleware Initiative 2 (NMI2)

Authority Systems:

The Authority System group is starting to engage, a face-to-face meeting is scheduled for 12-13 January 2004. They will concentrate on finalizing the detailed content and style specifications of the Authority System Recipe and associated case studies. They will also work on detailing the components, timeframes, and responsible individuals for the toolkit pieces.

+ Registration Still Open for CAMP Directory Workshop

Held in Tempe, AZ on February 3-6, the CAMP Workshop on Directories has a few openings available. Register now to attend and learn about enterprise directory implementation for both management and technical staff. For detailed agenda and speaker information about the CAMP Directory Workshop, visit: <http://www.educause.edu/conference/nmi/2004/camp041/program.asp>.

To register, visit the workshop website at: <http://www.educause.edu/conference/nmi/2004/camp041/>

+ New NMI Released December 2003

NMI-R4, released on 16 December 2003, included a robust collection of tools and services for organizations to build their security and identity management infrastructure. For more information on the released components, visit:

<http://nsf-middleware.org> or  
<http://www.nmi-edit.org/development/index.html>.

+ Directories

International eduPerson

The International person schema group had its first conference call in December. The goal is to coordinate person schema development work on a global scale. Current members of the team hail from Australia, Norway, Poland, Spain, the United Kingdom and the United States. One of the first tasks of the group will be to identify a list of attributes of common interest that are not already standardized in such specifications as X.520, inetOrgPerson and eduPerson. For more information, see:

<http://www.educause.edu/eduperson/>

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

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

The team is planning a demonstration of integrated data collection (along with NLANR's The Advisor Project) via a common web interface at the January 2004 Joint Techs in Hawaii (between the UIUC and the University of Hawaii campuses). For more information see:

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

+ OWAMP (One-Way Active Measurement Protocol)

A new version of OWAMP is now available. Man Pages are available to simplify the download and initial use. Development of the BWCTL (bandwidth control) tool is progressing quickly; the tool is under review by folks from TeraGrid, ESnet, and AMP to see if it meets their needs.

<http://owamp.internet2.edu>

+ Workshops

E2Epi hosted a workshop, 11-12 December 2003 at SDSC, to bring together experts in the area of measurement, networking, and E2E performance issues to develop a Roadmap for the topic area. A white paper is being developed and will be reviewed by the attendees, who included (in part) Matt Mathis, Kevin Thompson, Steve Wallace, Connie Logg, Brian Tierney, kc claffy, Margaret Murray, Tony McGregor, and Chas DiFatta. For more information see:

<http://people.internet2.edu/~matt/perfmeasarch/>

+ Case Studies

A case study regarding videoconferencing problems encountered by the Visible Human Project (VHP) has been posted at:

<http://e2epi.internet2.edu/CaseStudies/VHP/VHPcs-index.html>.

+ H.323 Beacon

Internet2 corporate member Polycom recently recommended the H.323 Beacon developed at ITEC-Ohio.  
See:

[http://www.itecohio.org/beacon/polycom\\_govt.pdf](http://www.itecohio.org/beacon/polycom_govt.pdf) (page 12) and  
[http://www.itecohio.org/beacon/polycom\\_itprof.pdf](http://www.itecohio.org/beacon/polycom_itprof.pdf) (page 12).

+ E2Epi Info Sheet

A new E2Epi Info Sheet was distributed in the quarterly member mailing; a PDF version was added to the online InfoKit. Find it at:

<http://www.internet2.edu/pubs/200311-IS-E2E.pdf>.

<> **Applications Update**

+ New Internet2 Radiology Working Group

Internet2 has formed a new Radiology Working Group, which will draw together the academic, clinical and industrial communities that manage the development and implementation of medical imaging advances in the health sciences. Speeding the entry of advanced networking technology into the healthcare enterprise is a critical goal, and the Radiology Working Group will leverage the widespread use of medical imaging in the clinical setting to do so. The Radiology Working Group will leverage existing standards in medical imaging and the large imaging research base in academic medicine in order to meet its goals. The chair of the Radiology Working Group is Dr. Greg Mogel, University of Southern California <[mogel@usc.edu](mailto:mogel@usc.edu)>.

For more information see:

<http://health.internet2.edu/WorkingGroups/Radiology.html>

+ H.323 Videoconferencing Training in Hawaii on January 25

Videoconferencing experts from Internet2 member institutions will introduce a broad framework for understanding H.323 videoconferencing over advanced networks. Sponsored by APRUNet, the advanced networking activities division of the Association of Pacific Rim Universities, and Internet2 this day-long training held in conjunction with the Joint Techs workshop 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. The fee is \$100. Join us in Honolulu on 25 January 2004! To register or to learn more, visit:

<http://commons.internet2.edu/train/200401/>

+ Disaster Recovery Trial Core Network Built

With the ultimate goal of enabling telecommunications carriers or universities to route calls via either circuit-switched or IP networks, the Internet2 Voice Disaster Recovery project's Phase II build-out of the core network is ninety-percent complete. The trial's disaster recovery network, which could someday service Internet2 members, consists of: two BroadWorks nodes at MAX/Georgetown University and Texas A&M University; emergency SIP (Session Initiation Protocol) phones deployed on participating campuses; and SIP gateways within PAETEC points of presence, which terminate in College Park, MD and Boston, MA. The project, a part of the Voice over IP working group, consists of Internet2 members: Broadsoft, Georgetown University, Mid-Atlantic Crossroads (MAX), PAETEC Communications Inc., and Texas A&M University. The group will soon examine the possibilities of offering an operational service to the Internet2 membership. Find out more at:

<http://voip.internet2.edu/dr/>

+ Megaconference V Building Strong Videoconferencing Community

At least 167 institutions in 28 countries participated remotely for the fifth annual Megaconference, a 13 hour videoconference held on 10 December 2003. "By all accounts, this was the best Megaconference ever," said Bob Dixon, chief organizer and founder of the Megaconferences. The Megaconferences have allowed engineers and technicians to develop tools and technologies to establish H.323 Internet videoconferencing communities in education and research around the world. For organizations that had participated in all five Megaconferences, Internet2 sponsored a special recognition award. Of the 16 institutions recognized, 13 were Internet2 member organizations. Vendors donated a total of 34 prizes to participants, and Internet2 members Polycom and Radvision donated upgrades to the Internet2 Commons Multipoint Control Units at the heart of the Megaconference cascade. For more details than can be covered here, or to watch the archives, visit:

<http://www.megaconference.org>

### ◁ **Internet2 K20 Initiative Update**

+ Indiana Named SEGP of the Month

Indiana's first K20 Initiative project focused in 2002-03 on introducing public schools to Internet2 and IP videoconferencing using the JASON Project. The Intelnet Commission (manager of the state network), IHETS (operator of the state network), and the Indiana Web Academy (a joint project of Intelnet and the Indiana Department of Education) worked to raise awareness among school teachers, provide technology training, place videoconferencing equipment in schools, and provide multiple distribution mechanisms for the JASON broadcasts (including not only satellite redistribution but also IP video bridging, live streaming, and on-demand access to indexed programs).

For more information on this story and Indiana's SEGP please see the Internet2 K20 website at:  
<http://k20.internet2.edu/segp/index.html>

### ◁ **Future Internet2 Events**

+ Spring 2004 Internet2 Member Meeting: Arlington, Virginia, 19-21 April 2004

+ Summer Joint Techs Workshop, Columbus, Ohio, 18-22 July 2004 - hosted by the Ohio Valley Internet2 Consortium

+ Fall 2004 Internet2 Member Meeting: Austin, Texas, 27-30 September 2004

### ◁ **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>

+ National Internet2 Day

18 March 2004

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

### ◁ **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>.

+ GlobusWORLD 2004

20-23 January 2004

San Francisco, CA

<http://www.globusworld.org/>

+ A Gathering of State Networks - A Net@EDU Event

4-5 February 2004

Tempe, AZ

<http://www.educause.edu/netatedu/events/sn04/>

+ NANOG 30  
8-10 February 2004  
Miami, FL  
<http://www.nanog.org/>

+ HIMSS Annual Conference  
22-26 February 2004  
Orlando, FL  
<http://conference.himss.org/ASP/index.asp>