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CENIC News

President's Message

A few months ago, I summarized for readers CENIC's goals as established during the Board of Directors' annual retreat (see the October 2005 CENIC TODAY). One goal is to operate a cost-effective, state-of-the-art communications network for participating education and research institutions. Shortly after the Board retreat, CENIC began to participate in a State Audit of the K-12 portion of services we have provided since 2000. While there were four auditees, I believe the majority of audit hours were concentrated on activities under CENIC's area of responsibility, the result being an extensive and thorough audit.

The results of the audit provide an interesting view of how successful CENIC is in meeting its goals for the network. While the focus of the audit was on the K-12, the Bureau of State Audit's review was quite comprehensive, and many of the audit's conclusions and recommendations are indicative of services provided by CENIC to all Associates.

One conclusion of the State Auditor reads: No Technical or Financial Reasons to Abandon the High-Speed Network. Essentially this comment validates that the network is well designed and is cost-effective. Since all CENIC institutions use the same backbone network, this comment supports that which those closely involved in CENIC activities already know. Of course, one of the reasons the network is well designed is because we have the input of experts from across California educational institutions to validate both design and implementation.

Another conclusion reads: CENIC Successfully Negotiated Competitive Prices that Resulted in Lower Costs for the High-Speed Network. While our attractive contracts facilitate our providing cost-effective backbone services, this finding also highlights that the portions of the network that extend from the backbone to the higher education campuses or K-12 (county) node sites are also quite cost-effective.

I believe that the audit's validation of CENIC's network design, operation, and cost-effectiveness is a tribute to the work of the CENIC advisory groups, the DC and HPR TAC's, and the BAC, all of which provide invaluable input to assure the outcome found in the State Audit. To everyone involved, congratulations.

Source: Jim Dolgonas, CENIC

CalREN-HPR Connectivity for UC Merced Campus -- The Next Step

CENIC has received authorization from the UC Office of the President to move forward with plans to connect their new UC Merced campus to CalREN-HPR. This newest UC campus has enjoyed connectivity to CalREN-DC for some time. UC's approval paves the way for a Gigabit Ethernet connection from the Merced campus to CENIC's HPR hub sites in Sacramento and Riverside.

Source: Brian Court, CENIC

Cal State System Campus Access Infrastructure (CAI) Initiative -- The Latest News

Four campuses are scheduled to receive their second GigE circuits in the next several weeks. They are San Jose State, Cal State Fullerton, Cal State Dominguez Hills and Cal State Chico. The circuits for these four campuses will be turned over to the CENIC NOC for acceptance testing by early February. The exact cutover/migration date is set by each campus but it is expected that all four campuses will put these circuits into production during the month of February.

CAI project staff from both the CSU system and CENIC are continuing to work together and with campus staff to address fiber path and other infrastructure and design issues in preparation for installation of fiber to campuses that will receive diverse connections via fiber rather than managed circuits.

An updated CAI installation schedule will be posted online the week of January 30 and is available at <http://www.cenic.org/projects/cai>.

Source: Ed Smith, CENIC

Community College Update

Since the last issue of CENIC Today, a GigE connection to Palomar College was put into service. This high-speed circuit will not only serve the students, faculty, and staff of Palomar College but will also serve the California Community Colleges Satellite Network (CCCSAT) program.

CENIC is continuing to work with CCC staff and the campuses who have not been able to migrate to CalREN Video Services for a variety of reasons.

CENIC is also working with service providers and several campuses which are in various stages of having to move or relocate their telecommunication facilities. LA Valley College, Ohlone College, Vista College, and Ventura County CCD are all campuses which will need to relocate their circuits in the coming months.

Source: Ed Smith, CENIC

New Gigabit Ethernet Connection for the Nevada System of Higher Education

The NSHE has enjoyed OC-3 (155Mbps) connections at Los Angeles and Sacramento into CalREN-DC. The completion last week of their dark-fiber build from Reno into Sacramento has provided them with a Gigabit Ethernet connection into both CalREN-DC and CalREN-HPR.

Source: Brian Court, CENIC

CENIC 2006 -- "Your Connection To The World"

CENIC's tenth annual conference, "Your Connection To The World," will take place March 13-16, 2006 in Oakland, CA. This is the perfect opportunity to link with leading educators, researchers, business people, and government representatives at this important three-day event at the Marriott Oakland City Center Hotel.

Keynote speakers include Dr. Francine Berman, Director of the San Diego Supercomputer Center, and Scott Bradner, Technology Security Officer from Harvard University. Dr. Berman will discuss opportunities and challenges of teaming information technologies for today's applications, and discuss the implications on policy, reliability, and social dynamics that occur when information technologies are teamed "at scale." Mr. Bradner will explore the features that caused the Internet to be the mother of all generative forces over the past decades, what is driving these features out, and what the impact of these changes will be.

At the conference, CENIC will also be announcing the winner of its Annual Award For Innovations In Networking, which seeks to recognize exemplary innovations that leverage the network and have the potential to improve the way instruction and research is conducted, even when the impact of the innovation may not be felt immediately.

More information about the conference and the Annual Award for Innovations in Networking can be found at <http://www.cenic.org/events/cenic2006/>.

We look forward to seeing you there!

Source: Sharleen Kim, CENIC

[National Networking News](#)

Analysts See Big Year For Grid

The coming year will be an important one for grid computing, according to a report by The 451 Group.

Major IT vendors have spent heavily promoting the technology, and with service-oriented architectures (SOA) and utility IT models also on the rise, "the expectation is that 2006 will be the year grid technologies start to cross the chasm into the enterprise," wrote analysts William Fellows, Steve Wallage, and Aidan Biggins.

Source: Grid Computing Planet, <http://www.gridcomputingplanet.com/news/article.php/3577831>

Researcher Support for NSF Networking Technology and Systems Proposals

As you may be aware, the National Science Foundation recently announced the Networking Technology and Systems (NeTS) solicitation. Responses are due on March 2, 2006.

The National LambdaRail (NLR) project and Internet2 have facilities in place that may be of interest to the networking research community. Consequently we would like to offer our support to researchers planning responses to this solicitation. For more information, download <http://www.cenic.org/downloads/NLR-Internet2-NeTS%2020061.pdf>.

Source: NSF, http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=12765&org=NSF&from=fund

UCSD Partners with Venter Institute To Build Cyberinfrastructure for Ocean Research

Researchers at UCSD will build a state-of-the-art computational resource and develop software tools to decipher the genetic code of communities of microbial life in the world's oceans. The new resource will help scientists understand how microbes function in their natural ecosystems, enable studies on the effect humans are having on the environment, as well as permit insight into the evolution of life on Earth. The UCSD Division of the California Institute for Telecommunications and Information Technology (Calit2) will lead the project in partnership with J. Craig Venter Institute (Venter Institute) in Rockville, MD, and UCSD's Center for Earth Observations and Applications (CEOA) at Scripps Institution of Oceanography.

Source: UCSD News, <http://ucsdnews.ucsd.edu/newsrel/general/CAMERA.asp>

New NSF Centers Encourage Collaboration Between Ocean Scientists, Educators

The National Science Foundation (NSF) has awarded three new grants in its Centers for Ocean Science Education Excellence (COSEE) program, bringing the total number of the centers to 10. Each new COSEE will receive \$2.5 million over five years, including the COSEE Ocean Learning Communities, a partnership between the Seattle Aquarium, The University of Washington, and the California Maritime Academy.

The effort is designed to integrate ocean-science research into delivery of high-quality education programs in the ocean sciences, and to promote a deeper public understanding of the oceans and their influence on quality of life and national prosperity.

Each COSEE partnership is intended to foster interactions among ocean research institutions, formal education organizations, and informal education providers like museums. The three new centers include themes of connecting inland populations and freshwater systems with the oceans and creating ocean learning communities.

Source: NSF, http://www.nsf.gov/news/news_summ.jsp?cntn_id=104553&org=NSF&from=news

Cooperative Installation of Fiber Infrastructure in San Luis Obispo, CA

The city of San Luis Obispo, CA (pop. 44,000) had a future goal of creating a large city-wide fiber optic network, connecting all key city facilities together. By 2002, the conduit for the network was largely in place, except for a few small gaps.

To fill in those gaps and complete the fiber optic ring by installing fiber optic cable, Cal Poly would prove to be an important partner to make the fiber optic network come full circle and meet the technology goals of both organizations.

"By working cooperatively with Cal Poly, the city and the university were both able to install a robust fiber infrastructure that meets each agency's critical information technology (IT) needs at a much lower cost than would otherwise have been possible if we had each gone alone," said Bill Statler, Director of Finance & Information Technology.

Source: <http://www.ig.org/news/displaynews.asp?NewsID=824>

Grids In Class And At The Museum

Do people learn more about science when they experiment with real data? The leaders of the Interactions in Understanding the Universe initiative think so, and they are using the grid to get data from current experiments into classrooms and museums.

"The idea behind I2U2 is to have a framework available so that when an experiment joins the grid, a toolkit and consultants will be ready to help them build a formal and informal educational program," said Marjorie Bardeen from Fermilab, one of the I2U2 principal investigators.

Source: Science Grid This Week, http://www.interactions.org/sgtw/2005/1207/i2u2_more.html

New Survey To Look At Technology Use in Schools

A new effort has just launched to gather information that will shed light on how America's schools are going to evolve in the use of technology over the next five years. The emphasis is on current and future plans for ubiquitous, "one-to-one" computing programs and the ways in which their adoption will change expectations for curriculum and content, professional development, and e-learning in U.S. schools. The new online survey targets the nation's 2,500 largest school districts, which serve roughly 74% of all U.S. public school students and receive 75% of K-12 funding.

Source: Tech Learning.com, <http://www.techlearning.com/content/ednews/#article2>

'Virtual' Software: The Future For Schools?

As school administrators consider ways to make technology more accessible to more students -- and as broadband networks continue to play a larger role in the delivery of everyday instruction -- information technology experts contend a new "game-changing" technology is poised to alter the paradigm of software administration and IT management in schools, shaking up a market notorious for its resistance to change.

Source: eSchool News.com, <http://www.eschoolnews.com/news/showStory.cfm?ArticleID=6057>

What Does It Take To Get Good Telephony?

Video telephony is one of the most appealing possibilities promised by broadband Internet. There are huge advantages to being in a telephone call and being able to see the other person. As has been known for quite some time, the nuances of face, body and arm gestures add a wealth of information to communication. Good video telephony adds quality to telecommunication that reduces the need for people to physically travel to meetings. Good video telephony can prevent the elderly and less mobile from becoming isolated. For video telephony to be widely accepted it needs to be easy to use, provide sufficient quality and be affordable.

Source: Citynet, <http://www.citynet.nl/upload/What-does-it-take-to-get-good-videotelephony.pdf>

About CENIC

CENIC is charged with designing, provisioning, and operating robust, high-capacity, next-generation Internet communications services through a cohesive infrastructure for its associates and affiliates. CENIC represents the common interests of its associates, who are drawn from California's higher education academic and research communities, and is highly accountable to the institutions it serves in order to fulfill the trust that has been placed with it. CENIC also provides services to California K-12 schools and, in order to facilitate the education and research mission of its associates, to non-California higher education institutions, and to industry research organizations with which CENIC Associate researchers and educators are engaged.

For more information, visit www.cenic.org.

Subscription Information

You can subscribe and unsubscribe to CENIC Today via the web at: <http://lists.cenic.org/mailman/listinfo/cenic-today>

Website questions: webmaster@cenic.org

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