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Quote of the Month

"CENIC is embarking on a truly new approach to network operations and management for the research and education community. Our agreements with Level 3 for securing dedicated dark fiber are crucial to the deployment of our three-tiered optical network architecture to serve all research and education in California.."

-- Tom West, President/Executive Director, CENIC

CENIC News

Level 3 Providing Dark Fiber to Research and Education Community in California

Level 3 Communications, Inc. has signed agreements to provide both metropolitan and inter-city dark fiber to CENIC. CENIC will use the fiber to create a statewide multi-tiered, advanced services and education network linking the top 40 research institutions (including Stanford University, the California Institute of Technology, the University of Southern California, the University of California system, and the California State University system), the California Community Colleges and elementary and secondary public schools. CENIC's network known as CalREN (the California Research and Education Network), will be used for experimental and high capacity research applications and for production services for all public educational institutions.

CENIC has purchased metropolitan fiber from Level 3 in San Diego, San Francisco and San Jose as well as inter-city fiber linking those cities with Sacramento, San Luis Obispo and Los Angeles. The multi-million-dollar agreements have a 20-year term.

"We are very pleased that CENIC has once again chosen Level 3 to be a provider of network services, representing as it does many of the world's most recognized and prestigious academic institutions," said Jack Waters, Level 3's chief technology officer. "The research and education sector has played a seminal role in the creation of the Internet and Internet Protocol, and we believe it will be an increasingly important source of demand for network services in the future. CENIC is a national leader in the deployment and management of academic research networks, and we look forward to helping them to create an advanced, secure and dependable communications infrastructure."

CENIC Hires Brian Court as Director of Network Engineering and Design

CENIC is pleased to welcome Brian Court as the new Director of Network Engineering and Design. As Director of Network Engineering and Design, he will be responsible for coordinating and leading the implementation, design, and day-to-day engineering support of CENIC's advanced network services.

Mr. Court previously served as Manager of Network Engineering Services for the California State University, Office of the Chancellor. As manager, he has lead a team of technical professionals responsible for the engineering and support of the two major educational networks in California, CSU's WAN (4CNet) and CalREN-2, the California Internet2 network. These networks together provide connectivity for most of California's educational community (K-20).

NGI Call for Proposals

CENIC is now accepting presentation proposals for the NGI Roundtable Workshop: Innovative First Mile Strategies. The workshop will take place October 9, 2002 at the Fairmont Hotel in San Jose, CA.

Instead of waiting for the "last mile" to get to users, the "first mile" provides a user-oriented, proactive view of advancing access to significant broadband resources.

CENIC's Next Generation Internet (NGI) Roundtable addresses critical technical, policy, financial and organization challenges facing the delivery of one gigabit broadband to all Californians by 2010. The Innovative First Mile Strategies workshop will bring together the interests of research, education, commerce, state and local government and the general public to address the issues surrounding the implementation of robust end-to-end broadband capabilities to every education institution, business and home in California.

Proposals from individuals and companies with innovative "first mile" solutions and strategies for ubiquitous broadband deployment will be considered. Areas of interest include strategies for wire line, wireless, satellite, and cable broadband deployment.

CalVIP -- Bringing Video over Internet Protocol to CalREN and 4CNet Users

In recognition of the need to deliver video services over IP, the California State University and CENIC have worked together to form a joint steering committee to address the issues of implementing video over IP on the CSU and CENIC networks.

Membership of the steering committee is being drawn from the California State University, the University of California, the California Community Colleges, the K-12 community, the independent CENIC universities and the staffs of 4CNet and CalREN.

The immediate goal of the committee will be to support the current environment for existing rooms and technology involved in video conferencing while integrating video over IP into the environment. The next goal will be to establish standards and specifications for converting systems to the new H.323 environment as it fully matures. Finally, the steering committee will address new technologies such as streaming video.

For more information on CalVIP see: <http://www.csu.net/CALVIP/index.htm>

National Networking News

NSF Provides \$3.7 Million for NCSA-based NLANR/DAST

The National Science Foundation (NSF) has awarded \$3.7 million to the National Laboratory for Applied Network Research (NLANR) Distributed Applications Support Team (DAST) to continue providing technical support, tools development, and community education to the NSF-funded high-performance networking and applications communities.

The award is a three-year extension of the original NLANR/DAST program, which began in 1997 to help scientists and engineers make the most of distributed applications designed to run on high-performance grids. The NLANR/DAST team is located at the National Center for Supercomputing Application (NCSA) at the University of Illinois, Urbana-Champaign, and is one of three NLANR teams. NLANR is an NSF-funded collaboration that provides technical, engineering, and traffic analysis support for NSF's High Performance Connections sites and for projects involving NSF-funded high-performance networking infrastructure.

NLANR/DAST supports researchers who use the resources of high-performance networks and the middleware-based grid environments that depend on these networks. The team members provide aid at every level of an application developer's project. They maintain tools for measuring network performance, build distributed applications, and assist others developing distributed applications. The team has offered training and demonstrations across the country on NLANR-developed tools such as [lperf](http://dast.nlanr.net/Projects/lperf/) (<http://dast.nlanr.net/Projects/lperf/>), and [Netlog](http://dast.nlanr.net/Projects/#netlog) (<http://dast.nlanr.net/Projects/#netlog>).

The next stage of NLANR/DAST will include developing and extending tools for both high-bandwidth optical networks and low-bandwidth wireless networks. The new award will also allow NLANR/DAST to evolve from a team focused on specific projects into an organization that supports network engineers and application scientists worldwide who use high-performance networks for science and engineering. In addition, the team plans to expand outreach efforts among groups newly funded by the NSF so that these groups know how important networking technologies are to their work.

Source: I2- News

House Approves Bill to Bolster Undergraduate Science and Math Education, Increase High-Tech Workforce

On July 9, the House of Representatives approved by voice vote a Science Committee bill to address the decline in the nation's technical workforce and to improve undergraduate math and science education. "The Tech Talent Act," (H.R. 3130), would establish or enhance programs at the National Science Foundation (NSF) to expand the number of U.S. students majoring in science, math, engineering and technology. The bill authorizes nearly \$390 million over five years for these programs.

The bill's sponsor, Science Committee Chairman Sherwood Boehlert (R-NY) said, "The problem is that fewer and fewer American college students are majoring in mathematics, engineering, technology, or science, particularly in the physical sciences. This is a source of growing concern for many reasons. First, and most obviously, the nation needs to have a workforce that can compete in this increasingly technological world. But the problem goes beyond filling jobs that explicitly call for someone with a science degree. In today's world, just about every job has a component that is informed by science and technology, from the assembly line to the boardroom. And yet, we have fewer and fewer Americans who have the background to understand and analyze technical information."

NSF Science and Engineering Indicators- 2002 revealed that while approximately a third of all U.S. undergraduate degrees are earned in science and engineering, the portion of those degrees awarded in the physical sciences and engineering has been declining for more than ten years. Since 1975, the U.S. has dropped from third to thirteenth in the world in terms of the proportion of 24 year olds who hold natural science or engineering degrees while European and Asian countries have shown strong growth in degree production in all science and engineering fields. Asian institutions of higher education now produce approximately six times as many engineering degrees as do U.S. institutions.

H.R. 3130 takes aim at this problem by directly encouraging colleges and universities - including community colleges - to increase the number and quality of science, math, engineering and technology majors. Under the bill, NSF would provide grants to improve undergraduate science, math and engineering education that are contingent on the grantee increasing the number of graduating majors in those fields by a specific amount, without reducing quality.

The bill also creates a number of other important programs to improve undergraduate education, including grants to enable colleges and universities to expand successful, innovative undergraduate programs; grants to enable faculty to improve their teaching skills; and grants to help colleges purchase new research equipment for undergraduates

Source: House Committee on Science, www.house.gov/science

Asia To See Online Surge

Asia's Internet business will surge over the next five years in a global industry revival, but regional constraints will limit the surge, a senior IDC official said. "Asian IT is continuing to grow quickly but penetration is going to be lower," Dane Anderson, an IDC vice president, told Reuters on Thursday.

He was speaking on the sidelines of an IDC seminar forecasting industry trends for 2003. The statistics show Asia-Pacific outpacing worldwide growth but starting from a small base. IDC expects Internet users worldwide to double to 1.05 billion in 2006 from 500 million in 2001. Within this, the Asia-Pacific region excluding Japan but including Australia would account for 291 million, up from 94 million in 2001.

Source: Reuters

Vacation Notice

CENIC Today is taking a vacation in August. We'll see you again in September.

About CENIC

CENIC is a not-for-profit corporation formed by the California Institute of Technology, the California State University, Stanford University, the University of California, and the University of Southern California to facilitate and coordinate the deployment, development, and operation of a set of seamless and robust advanced network services. The CENIC Associates program offers qualified companies the opportunity to collaborate with CENIC in pursuit of the goal of providing the most advanced network services for research and education. Cisco Systems, SBC, and the University and Community College System of Nevada are CENIC's Partner Associates.

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