California Takes the CENIC Route

Don’t let the sound of it confuse you. CENIC (pronounced see-nic) is not a description of the view from Highway 1, but a new direction in academic networking. The Consortium for Educational Network Initiatives in California is a collaborative effort of the University of California, California State University, Stanford, University of Southern California, and the California Institute of Technology to build a high-speed, statewide network among California academic institutions.

The network will serve as the California branch of Internet 2, the high-end network that will link research universities across the country. Internet 2 will combine the forces of a number of regional networks, each of which will be known as a “gigapop,” or gigabit capacity point of presence. These points of presence, routing centers maintained by regional Internet 2 members, will perform at speeds hundreds of times faster than those generally available today.

Information Technology’s Russ Hobby, chair of the CENIC technical planning group and one of ten engineers designing Internet 2, helped write the proposal for funding submitted to the National Science Foundation on January 1st. The majority of funds will come from the university participants: UC and CSU have each pledged $100,000 to create the CENIC organization, and Stanford, Cal Tech and USC have each promised $30,000.

“The idea is to create a California network with Internet 2 attributes,” says Hobby. The best-featured level of service provided by today’s Internet isn’t sufficient for research purposes, particularly with the recent surge in Internet traffic. Lack of reliability may inhibit researchers and instructors from taking advantage of available technologies. Engineers building Internet 2 plan to provide several levels of service, allowing users to reserve bandwidth for specific projects at certain times.

Imagine an astronomer on campus who would like to view the sky via telescope at the same time each week. Rather than make a weekly road trip to Lick Observatory, the astronomer could link remotely to a telescope at Lick from a computer on campus. Today’s network might not provide the reliable service that would make this weekly viewing a certainty. But with Internet 2 in place, the astronomer would be able to reserve bandwidth in advance, and the viewing time would be guaranteed.

“Internet 2 is application-driven. We aim to do things we haven’t been able to do before because of low bandwidth or less than adequate reliability,” Hobby says. Creating new services based on the current and anticipated needs of academics mirrors the evolution of the original Internet. The development of Internet 2, like that of its predecessor, is guided by the current and anticipated needs of the users.

Laptops Connect at New Shields Library Ports

Until recently, the sure sign of a laptop in use at the library was a cord stretched across an aisle. Now laptop users with campus accounts can find specially equipped study carrels in Shields Library that provide not only electrical outlets but network connections.

The twelve carrels, located in the reading room behind the information desk, allow users to plug their laptops directly into an activated wall jack and take advantage of such online services as the MELVYL system, the Web, and the central campus UNIX machines. Whereas laptops might once have been handy for taking notes, completing class assignments, or working with off-line software, now they also can be used for accessing e-mail or locating library resources.

On-campus network access has many advantages for laptop users. While PCs with online capabilities may be found throughout the campus libraries, users outnumber stations during peak times. Lines also form at campus computer labs, so checking ones e-mail on campus is not always a simple task. Downloading information also becomes more convenient with a laptop.

Continued on page 2

UC Sustainable Ag Web Site Wins Second National Award

For the second time in two years, the UC Davis-based Sustainable Agriculture Research and Education Program (SAREP) has received a national award for the Web site it produces. This year’s silver award comes from Agricultural Communicators in Education (ACE), which particularly noted SAREP’s user-friendly approach. SAREP received a bronze award last year from the Council for Advancement and Support of Education.

“We’re extremely honored that this award comes from a group focused on agriculture and education,” says Jill Shore Auburn, SAREP Associate Director. SAREP’s Web audience consists largely of California farmers and others interested in sustainable agriculture issues, such as researchers, consumers, policy makers, UC administrators and government officials. The site allows users to search for and view information in a database of 400 color images of plants, summaries of dozens of SAREP-funded research projects, hundreds of newsletter articles and calendar entries. The site (http://www.sarep.ucdavis.edu) is managed by Joel McKinney, SAREP programmer/analyst.

“Make Money Fast"

If you are tempted to try out one of the “MAKE MONEY FAST” schemes via E-mail or Usenet News, please think twice! Posting a message of this nature is a violation of the UC Davis Acceptable Use Policy (AUP) and may also violate Federal postal regulations. The AUP explicitly states that use of campus e-mail accounts for commercial purposes is prohibited. Infringing or propagating electronic characters is also strictly prohibited. Either of these activities may result in suspension of your e-mail account without warning.

If you have any question as to your use of your campus e-mail account, please check the UC Davis Acceptable Use Policy at http://www.ucdavis.edu/AUP.html.

“...the real challenge facing educators today is identifying the student characteristics and matching them with the appropriate technologies...” — Administrator

North Carolina State University

(Courtesy of Educom Review)
California Takes the CENIC Route

Continued from page 1

predecessor, provides a forum for experimentation, exploration, and exchange of information. Protocols in development include IPv6, a packet format in the 1980s that allows a user to assign priority to data transmitted via the Internet, and multicast, which duplicates data to particular locations at a branch point in the network, making more efficient use of both network capability and desktop memory.

As new protocols become tenable, their use will expand into the commercial sector.

“It’s not cost effective for commercial vendors to build equipment exclusively for universities, if the technology has a use in the private sector, vendors are more interested,” Hobby says. Partnerships with the private sector provide academic engineers with the support they need, and later allow companies to market new technologies to a wider public.

Production on a grand scale also makes equipment more affordable to universities. A statewide academic network was discussed in the late 1980s, but Hobby says, but universities opted instead for autonomy. Now that networking expenses are rising dramatically, collaboration has become more attractive. The partnership will bring costs down across the board by creating leverage with vendors and sharing the costs of building the Internet 2 infrastructure.

— Aviva Luria

Laptops Connect at New Shields Library Ports

Continued from page 1

Library PCs can be used to access the Web, but users must have a diskette to save the material. Laptop users owning the new network port can download data from the Internet directly onto their hard drive.

“I was really surprised at the connection I got,” says David Elston of UC Davis’ more mature project in Agricultural Economics. He connects at home by modem to the campus modem pool, which an additional 14.4 Kbps line rate. Downloading a 1 MB file from home can take up to an hour during optimum periods (early morning hours) and less than a minute via the direct connection.

Ho, who doesn’t own a network card, can borrow one from the Reserve Services desk in Shields. It’s checked out on his library card for a period up to four hours and comes with a coaxial cable, an adapter, and instructions. Currently there are four kits available for check out.

Library Systems Manager Mary Heath says the installation of the network ports serves to forward one of the General Library’s most essential aims.

“We want to ensure that students have access to instructional materials. Because an increasing number of materials and resources are electronic, we see this as one way of realizing that goal,” Heath says. Some journals eventually may discontinue publishing paper copies entirely, and this makes access to online resources increasingly important for students, educators, and researchers.

The ports may encourage more students to purchase laptops, but Ho says laptops are more expensive than desktop computers, students must weigh expense against portability.

“For a student like me who is on the go all the time, a laptop is very convenient,” he says.

The area where the ports are located is marked only with a sign near the Information Desk, and the current availability of PCs is indicative that they are equipped with jacks and outlets for network access. Few students seem to know about them, and the library is working on getting the word out.

Library administrators, with the help of Information Technology, are planning to increase the number of ports, and the project might be accelerated if use of the ports increases substantially.

— Aviva Luria

High-Tech Community Policing Project Wins Grant

The National Institute of Justice will award a grant of about $150,000 to the City of Davis Police Department for implementation of a community policing project. Davis Police are partnering with UC Davis, the Davis Joint Unified School District, and the Davis Community Network to develop an educational program that both utilizes and addresses the uses of technology in the community.

The grant will fund the purchase of computer equipment as well as the development of software vendors for the Internet that provide information about online crimes and other community safety issues, and instruct children on legal and safe ways to use networking technologies.

“Parents are concerned. They don’t understand what the dangers are and don’t understand what their responsibilities are,” says Vicki Suter, a programmer/analyst for UC Davis’ Information Technology. Suter has long been involved in building collaborations between UC Davis and the Davis Community Network. She helped write the grant proposal, and now will work in a liaison role, facilitating the building of project teams and helping them work together.

The teams include high school students, police officers, parents, teachers, and community members such as the DCN Web team. The emphasis is on building community by strengthening cooperative relationships between these various individuals and institutions. Such an emphasis can enhance the quality of life and the quality of education in the community.

“The focus of the project isn’t crime or police. It’s the community,” says Suter. The program will create interactive Web functions, such as community discussion forums. Community members will be able to set up custom-designed Web pages with specialized resources, such as crime statistics that are regularly updated.

UC Davis graduate students in the Division of Education will develop software programs, such as tutorials, Internet games, and classroom materials, for use in Davis public schools.

Data that resides on the A 11 will not be updated beyond the 96/97 fiscal year. After that time, users should turn to the newer systems, such as DaFIS and the Payroll Personnel Data Warehouse.

— Mary Heath

I.T. Volunteers Judge Field Day

Volunteers from Information Technology judged the computer portion of the annual Ag Science Field Day, a series of competitive events for high school students involved in agriculture. Over 2,400 student members of California 4-H and Future Farmers of America participated in 23 agriculturally-based competitive events. The Field Day has been sponsored by the College of Agricultural and Environmental Sciences for the past 18 years as part of an outreach and recruitment effort.

About 75 participants took part in the Computer Applications Contest, which required students to submit a computer application (in this case a spreadsheet) and do a three-minute oral presentation.

In the allotted three minutes, students addressed the uses of modern technology in agriculture, such as devices that help track the eating habits of cattle, and the uses of the Internet to obtain information on weather conditions and stock prices.

“Hard to get up and talk in front of people, but they did a really nice job. I learned a lot of things I didn’t know,” said Lisa Rocca, a computer resource specialist in Information Resources, one of the judges of the oral presentations.

The other volunteers from Information Technology were Catherine Olivera, Mike Schiltz, and Steve Fath.
Microsoft Grant Aids UC Davis Students

Political Science professor Geoffrey Wandesforde-Smith is beginning to feel less like a computer science instructor these days. Thanks to a gift from the Microsoft Corporation of 60 workstation licenses for FrontPage 97, he can spend less time teaching his students about Web site construction and more time on politics and law.

Students in Wandesforde-Smith’s classes, which include Environmental Politics and International Law, work in groups on a range of research tasks, using both library and Web resources, and then create Web sites to display and publish their research and writing. “This is the modern equivalent of the traditional college term paper, because it combines the teaching of basic and time-honored scholarly skills with the cutting-edge technologies students must know to be competitive and successful in today’s world,” says Wandesforde-Smith.

Until now, substantial class time had been spent in computer labs, teaching students Web site construction and design, including HTML, a language used in creating Web pages. But FrontPage 97 allows students to create Web pages with the point and click of a mouse. Students can create, edit, and publish complex and attractive Web pages after mastering just the fundamentals of HTML.

The new software came to Wandesforde-Smith and UC Davis from a competition Microsoft launched through which Microsoft makes its products available to college teachers and students across the United States. The award is the first of its kind made by Microsoft to UC Davis, and breaks new ground for the company as well. Past awards have supported computer science and engineering but not the social sciences or humanities. With the new software installed in the 27 Olson and Surge IV computer labs, students of all majors will benefit when they use the labs on a drop-in basis.

Wandesforde-Smith sees the significance of this gift going beyond his own political science classes: “I hope it’s the start of a broader and continuing link between Microsoft and UC Davis that works to the benefit of all our students. Microsoft and UC Davis serve as a place where faculty and students together are doing innovative and worthwhile things with technology. I think that’s a big step forward, for all of us.”

Microsoft's donation will help students at UC Davis create HTML pages for their course projects, leading to a better understanding of the political and social implications of technology.
Editor's Note: If you wish to enroll in a class offered by Staff Development & Professional Services, you must complete an Application for Enrollment. Applications are in the Staff Development Catalog. To request an application, call 752-1766.

April

14 Introduction to Microsoft Excel: Staff Development and Professional Services, (two-part class offered April 14 & 16), 8:30-9:30 p.m., 40 Mrak.

Introduction to Microsoft Access Database Design: Staff Development and Professional Services, (two-part class offered April 14 & 16), 8:30-11:30 a.m., 14 Hutchison.

15 Intermediate Microsoft Word: Staff Development and Professional Services, (two-part class offered April 15 & 16), 1:30-4:30 p.m., 40 Mrak.

Basic Melvyl Searching - How to find books and journal articles and how and why searches work (hands on): Library Instruction Programs, 10 - 10:50 a.m., Microcomputer Room, 163 Shields; LibraryClass@ucdavis.edu or 752-4381.

16 Intermediate Melvyl Searching - Lists, add, update, and more (hands on): Library Instruction Programs, 3:30 - 4:30 p.m., Microcomputer Room, 163 Shields; LibraryClass@ucdavis.edu or 752-4381.

21 Internet and WWW Publishing: Overview of Images: Information Technology, 8:30-11:30 a.m., 14 Hutchison; learnit@ucdavis.edu.

16 Voice Mail System Training - Managing Your Voice Mail Box: Information Technology, 1:30-3 p.m., CR Customer Service Trailer, Tercero Hall Circle; 752-6888.

Basic Melvyl Searching - How to find books and journal articles and how and why searches work (hands on): Library Instruction Programs, 10:30-11:30 a.m., 163 Shields; LibraryClass@ucdavis.edu or 752-4381.

17 Information Provider Series - WWW Publishing: Working with Tables: Information Technology, 10:30 a.m. - 12:30 p.m., 2nd Floor Instruction Room, Shields; advancedit@ucdavis.edu or 752-4381.

18 Voice Mail System Training - Managing Your Voice Mail Box: Information Technology, 10:30 a.m. - Noon, CR Customer Service Trailer, Tercero Hall Circle; 752-6888.

Intermediate Eudora: (hands on): Library Instruction Program, 3:30 - 4:30 p.m., Microcomputer Room, 163 Shields; LibraryClass@ucdavis.edu or 752-4381.

19 Introduction to WWW Publishing: Creating Effective Web Pages: Information Technology, 2 - 4 p.m., 1113 Academic Surge; learnit@ucdavis.edu or 754-8091.

20 Telephone Features: Information Technology, 10:30 a.m. - Noon, CR Customer Service Trailer, Tercero Hall Circle; 752-6888.

20 Introduction to Microsoft Excel: Staff Development and Professional Services, (two-part class offered May 12 & 13), 8:30-11:30 a.m., 14 Hutchison.

21 Intermediate PageMaker: Staff Development and Professional Services, (two-part class offered May 13 & 15), 8:30-11:30 a.m., 14 Hutchison.

Intermediate Windows 95: Staff Development and Professional Services, 8:30-11:30 a.m., 40 Mrak.


Intermediate Melvyl Searching - Lists, add, update, and more (hands on): Library Instruction Programs, 10 - 10:50 a.m., Microcomputer Room, 163 Shields; LibraryClass@ucdavis.edu or 752-4381.

22 Advanced Voice Mail: Managing Your Voice Mail System: Information Technology, 8:30-11:30 a.m., 14 Hutchison.

May

1 Internet via Modem: Mac OS: Staff Development and Professional Services, Noon - 1 p.m., Cabernet Room, Silo.

5 Introduction to Microsoft Word: Staff Development and Professional Services, (two-part class offered May 5 & 7), 1:30-4:30 p.m., 40 Mrak.

How I Gave Up My Daytimer: Staff Development and Professional Services, Noon - 1 p.m., Cabernet Room, Silo

8 Using a Microsoft Access Database: Staff Development and Professional Services, 8:30-11:30 a.m., 14 Hutchison.

Advanced Melvyl Searching (hands on): Library Instruction Program, 10 - 10:50 a.m., Microcomputer Room, 163 Shields; LibraryClass@ucdavis.edu or 752-4381.

Information Provider Series - WWW Publishing: Working with: Tables: Information Technology, 1:30 - 4:30 p.m., advancedit@ucdavis.edu or 754-8091.

7 Voice Mail System Training - Managing Your Voice Mail Box: Information Technology, 1:30 - 3 p.m., CR Customer Service Trailer, Tercero Hall Circle; 752-6888.

21 Voice Mail System Training - Managing Your Voice Mail Box: Information Technology, 10:30 a.m. - Noon, CR Customer Service Trailer, Tercero Hall Circle; 752-6888.

Intermediate Eudora: Staff Development and Professional Services, 1:30 - 4:30 p.m., 40 Mrak.

Best wishes to Catherine Curran, former I.T. Times editor and now Public Relations Coordinator for the new Northern California Shriners Hospital in Sacramento.

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