Express Service Established on Legacy Modem Pool

BY BABETTE SCHMITT

The campus has entered a new phase in the ongoing search for a remote access solution that will minimize busy signals and allow more users to connect to the network. In February, the Network Operations Center created an Express Service on the 14.4K Legacy Modem Pool by limiting dial-up connections to 20 minutes. To reflect this change, the Legacy Modem Pool will be renamed the Express Service Modem Pool in a few weeks.

The decision to implement a shorter time limit was based on campus-wide consultations about remote access issues and on the recommendations made in the Remote Access Management Program (RAMP) report last June. The report suggested that “the old [14.4K] modem pool [be maintained] as a special service only, possibly as an Express Modem Service, dedicated essentially to support of electronic mail.”

Exploring Short- and Long-Term Solutions

The Express Service is expected to provide only a short-term solution to the remote access problems U.C. Davis users have been experiencing in the last few years. It is the latest campus effort to improve off-campus connectivity options for the University community within a financially constrained environment.

In June 1998, the campus modem pool infrastructure was expanded at a cost of $563,000. These one-time funds were approved for the purchase of 56K modems and to cover operational and carrier costs for two years. While these funds provided two first-rate modem pools in the context of post-secondary institutions, with 384 additional lines, the new modem pools did not meet, nor were they expected to meet, the rising demand from students and other University personnel using home computers for connections to both campus and Internet computing resources.

The RAMP report costs and the implementation of the 56K remote access service indicate that a pool of 1,920 modems would be required to meet the demand. Depending on the level of service desired, the cost for a pool of that size would range between $485,000 and $1,423,000 in one-time costs (primarily for equipment and installation) and between $731,000 and $1,595,000 in annual operating costs (for day-to-day support and network operations). (See the RAMP report executive summary at http://access.ucdavis.edu.)

Provost and Executive Vice Chancellor Robert Grey charged the Academic and Administrative Computing Coordinating Councils with finding a long-term remote access solution for the campus. Both councils, with assistance from Information Technology, are exploring remote access and funding options in use at other UC campuses. On February 8, the Academic Computing Coordinating Council (known as the A/C 4) approved a list of thirteen remote access principles that a Steering Committee will use to evaluate other UC campuses’ remote access and funding models. The A/C 4 hopes to determine which model is best suited for the campus. (See “Shaping the Future of Remote Access” on page 7.)

See Express Service on page 8

### Campus Modem Pools at a Glance

<table>
<thead>
<tr>
<th>CAMPUS MODEM POOLS AT A GLANCE</th>
<th>LEGACY MODEM POOL (EXPRESS SERVICE)</th>
<th>STUDENT/STAFF MODEM POOL</th>
<th>FACULTY MODEM POOL</th>
</tr>
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<tbody>
<tr>
<td>Users</td>
<td>Students, Staff, and Faculty</td>
<td>Students and Staff</td>
<td>Faculty</td>
</tr>
<tr>
<td>Time Limit</td>
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<td>2 hours/connection; 3 connections/day</td>
<td>4 hours/connection; unlimited connections/day</td>
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<td>Speed</td>
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<tr>
<td>Number of Ports</td>
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<td>376</td>
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<td>Protocol</td>
<td>SLIP/PPP</td>
<td>SLIP/PPP</td>
<td>SLIP/PPP</td>
</tr>
<tr>
<td>Service ID</td>
<td>IMOD</td>
<td>IRA S</td>
<td>IRMP</td>
</tr>
</tbody>
</table>

### Usage Trends (as of 1/31/99)

- Peak Hours: 6 p.m. - 11 p.m., 4 p.m. - 2 a.m., 8 p.m. - 10:30 p.m.
- Average Session Length: ~12 minutes, ~23 minutes, ~29 minutes
- Average Number of Unique Clients/day: ~3600, ~3800, ~320

### Notes:

a. The Legacy Modem Pool is now the only 14.4K modem pool on campus. The Telnet-only Modem Pool was retired on February 28. Its 48 modems were transferred to the Legacy Modem Pool, and its dial-up number (530-752-7900) was discontinued.

b. “Express Service” refers to the 20-minute limit placed on all dial-up connections to the Legacy Modem Pool.

c. Faculty: Members of the Academic Senate and Academic Federation.

d. The speed of your connection will be capped at the speed of your modem (i.e., 14.4K, 28.8K, 33.3K, or 56K) and may be affected by other factors such as the quality of your phone connection.

e. SLIP/PPP: All modem pools now support SLIP (Serial Line Internet Protocol) and PPP (Point to Point Protocol) connections. With this type of connection, you can browse the Web, check your email using a program like Eudora, or perform file transfers. With its 20-minute limit, the Express Service, however, does not lend itself to long Web sessions or large file transfers.

f. Service IDs are service permits required to access the modem pools. Unlike the IMOD Service ID, the IRA S and IRMP Service IDs are not automatically assigned to your computing account. See the IRAMP web site at http://it.ucdavis.edu/ittimes for more information and instructions on how to add the IRA S and IRMP Service IDs to your campus computer account.
Dial In To The Faculty Modem Pool

A Step-by-Step Guide

BY WENDY PHILLIPS

The Faculty Modem Pool has yet to return a busy signal. It has peaked at little more than 65% capacity over the last two months [1].

If you are a member of the Academic Senate or A cademic Federation, this pool, which supplies remote access service 24 hours a day at speeds up to 56K (depending on the capabilities of your home modem and the telephone lines), is available now to help you get your work done at home or off-site. Interested?

Connecting to the Faculty Modem Pool

First, you must access the campus computer account database, known as M othra, and choose to add the Faculty Modem Pool service to your campus login and password. Why can’t you just dial in? Because the system needs to verify your faculty status, which is accomplished by checking your unique computer account information (your login and password) against the M othra database. If you opened your campus computer account before September 25, 1996, M othra will prompt you to upgrade your login from Old-Style to New-Style when you try to add the new service. Also, M othra will ask you to acquire a Kerberos password (i.e., an encrypted password) if you do not already have one.

You have already taken care of these housekeeping tasks, you’ll be able to proceed directly to adding the Faculty Modem Pool service option, designated in M othra as “IRMP” [2]. When you select the IRMP service option, M othra will confirm your faculty status before granting you the Faculty Modem Pool service.

Connecting to M othra

There are three ways to connect to M othra, the campus computer account database. Select the one with which you feel most comfortable.


2) If no Telnet dialogue box appears when you click on the link (or you don’t have a Web browser), you can try using a Telnet application directly to access M othra. To do this, take the following steps:

   • Start your Telnet software. (Bovine Online includes Better Telnet 2.0b2, a Telnet application for the Mac, and WinC RT 2.0 for the PC.)
   • Select the Connect option.
   • Enter “mothra.ucdavis.edu” for the host or session name as prompted. (mothra.ucdavis.edu is the name of the computer to which you need to connect.)
   • Select the Connect or Open Session option to initiate your connection to the M othra database.

3) If you prefer, you can access M othra from a terminal at IT Express in 182 Shields Library. IT Express consultants can assist you. (See “Resources” at the end of this article.)

Adding the Service

After you have successfully connected to M othra, type “services” at the login prompt. (You must type only “services” at this prompt. If you accidentally type your account name and password, your login attempt will be rejected.) Press Return (or Enter) to bring up the M othra Services menu.

Once you are in the M othra Services menu, select service option “G” to add the Faculty Modem Pool service to your account. If your campus computer account has an Old-Style LoginID, you will be prompted to update it to a New-Style LoginID (this is also accomplished by selecting service option “C” on the M othra Services menu). Likewise, if you do not have a Kerberos password, you will be prompted to choose one. Your account must be current on these two items if you want to add the service.

When you select option “G,” you will be prompted for your employee identification number, your name, and your birthdate. Your university status in the M othra database will be displayed on the screen. When you press Return (or Enter), this information will disappear, and the M othra database will prompt you for your LoginID. Then, it will display the existing services associated with your account. Press any key to continue. A list of the available service options will appear.

Enter “IRMP” at the “Enter New ServiceID” prompt to obtain a Faculty Modem Pool service permit (also known as a “ServiceID”). M othra will verify that you are a faculty member as defined by the Faculty Modem Pool charter (members of the A cademic Senate and A cademic Federation). If there is any difficulty in processing your service request, M othra will return an error message. If you receive an error message during authentication and are a qualified faculty account holder, contact IT Express for assistance in updating your account.

Return to the main menu and select option “Q” to exit the M othra database. The new service will be activated overnight, and you will be able to use it the next day.

Dialing Up

To access the Faculty Modem Pool, you will need to use the (530) 754-7701 dial-up number. You may need to change more than one setting in your email program or modem configuration, so we recommend that you double-check all settings with a dial-up number entry.

Resources

For information about the Faculty Modem Pool, visit http://itexpress.ucdavis.edu/modems.html. To contact IT Express, call (530) 754-HELP or send email to ithelp@ucdavis.edu. Bovine Online is available for purchase at the UCD Bookstore Computer Shop. For more information, see http://online.ucdavis.edu.

Wendy Phillips is Senior Writer with IT-C communications Resources.

Notes

[1] The Network Operations Center monitors all modem pools to determine demand and usage trends. If this monitoring reveals that the Faculty Modem Pool has been over-allocated, some modems might be transferred to the Student/Staff Modem Pool, provided such a transfer would not impede access to the Faculty Modem Pool.

[2] The IRMP name comes from the Remote Access Management Program (RAMP), a pilot program that ended in Fall, 1998. The Faculty Modem Pool is the fully operational interim remote access service that was tested in this pilot program.

Faculty Modem Pool

Dial-up Facts

Dial-up Number: (530) 754-7701.
Eligibility: all members of the A cademic Senate and A cademic Federation.
IRMP: the name of the Faculty Modem Pool service permit (also known as a ServiceID).
Kerberos Password: an encrypted password required to access some online services.
Modem Speed: up to 56K.
motthra.ucdavis.edu: the Telnet address for the campus computer account database, M othra.
Motthra option C: the menu option in M othra used to update an Old-Style LoginID to a New-Style LoginID.
Motthra option G: the menu option in M othra used to add new services to a campus computer account.
Number of Modems Available: 92.
Protecting the Privacy of Student Records

Banner’s More Secure Log-in Process Planned for Mid-April

Student education records are official and confidential documents protected by one of the nation’s strongest privacy protection laws, the Family Educational Rights and Privacy Act (FERPA). FERPA, also known as the “Buckley Amendment,” defines education records as all records that schools or education agencies maintain about students, including their identification code, date and place of birth, grades, test scores, courses taken, degrees earned, financial aid, or other information that would make it easy to identify or locate a student. FERPA protects both paper and computerized records.

On our campus, student education records are stored in the computerized Banner Student Information System, which can be accessed only by those individuals with a legitimate educational or institutional business purpose.

In December 1997, Banner was upgraded to a graphical user interface (GUI) in order to stay current with the software supported by the vendor and to conform with state and federal regulations. Since then, Information Technology and Enrollment Services have continued to research ways to further protect the confidentiality of U.C. Davis student records. On April 19, they will deploy their latest security improvement: a new, more secure log-in process.

New Security Tools Required to Access Banner

Unlike the December 1997 upgrade which dramatically changed the “look and feel” of the Banner system, the impending upgrade will affect only the way in which users log in.

A hard token, also known as Enigma Logic security token. Veteran users of the Banner system in compliance with UC federal regulations. Since then, Information Technology and the Office of the Registrar have scheduled a number of presentations and training sessions.

Training workshops focusing on the new log-in process will be available between April 14-21. See http://registrar.ucdavis.edu/training for sign-up information.

Nicole Collins, Debbie Lauriano, and Ann Leamon from IT-Information Resources contributed to this article.

### Need Help With the Banner Upgrade?

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Nicole Collins, Debbie Lauriano, and Ann Leamon from IT-Information Resources contributed to this article.
Register for Courses on the Web

Pilot Project Offers Alternative to RSVP

A growing number of students use the Web to browse through the General Catalog, view their class and final exam schedules, and check their grades, account balance, or financial aid status. Many students also download forms to petition for a change of major, an application for graduation, or a notice of withdrawal.

So, on February 8, many were pleasantly surprised when the Registrar's Office expanded its suite of online services and launched Registration on the Web, a service enabling students to register in UC Davis classes online.

"I'm always looking for ways to make better use of my time," says Erika Lam, a senior majoring in Environmental and Resource Science. "Being able to register and check my schedule on the Web sounded appealing to me."

The Registration on the Web project, developed with technical assistance from IT-Information Resources staff, is not meant to replace RSVP, but it provides services from a system in use on this campus since Summer 1993. The online system offers similar registration services, but it also draws on the Web's convenience, interactivity, visual benefits, and security features.

"Both RSVP and Registration on the Web are available to students. We're just adding one more registration option to our online services," says David Johnston, Senior Assistant Registrar and head of the project.

Building on the success of the online graduate admissions project, Information Resources staff were able to develop, test, and deploy Registration on the Web in nine months, a short period of time for such a complex system. The project was initiated in 1997 by technical staff in the Registrar's Office. Information Resources (IR) assumed responsibility for the development of the system in early 1998, while the project was still in the analysis phase. IR staff had to customize "Banner Web for Students," a component of the Banner software product line from SCT Corporation. (Certain features, such as multiple-pass time-ticketing and Kerberos authentication required custom programming.) The group of IR staff, including Sandra Stewart, Brian A Alexander, Mark Youngs, Karen Munoz, and Bill Wagman also provided technical consultation, server administration, project management, and system design services.

By deploying this service, UC Davis is joining a growing group of universities, including Stanford, Oregon State, and UC Berkeley, who have successfully implemented similar online registration systems in the last few years.

Making registering for courses easy, convenient, and secure accounts in large part for the success of online registration systems. Equipped with a student ID number, Personal Access Code (PAC), UCD LoginID, and Kerberos password, students can access online registration services from any location connected to the campus network, including a residence hall room or an apartment off campus. Students with part-time jobs and busy schedules will appreciate the convenience of accessing the system any time between 6 a.m. and midnight, though students will still need to use their appointment time or open registration times to register for classes.

Students can even view their registration appointment times online, add and drop classes, change class options, print a summary or detailed class schedule, and check registration fees. Or they may search UC Davis courses using a number of criteria, such as open courses and sections, day of the week, and time of day.

The system was tested extensively with help from student participants before the pilot was officially launched on February 8. A with any other pilot systems, the technical team will continue to monitor and fine tune Registration on the Web as needed.

"During this introductory period, the Web site may be unavailable from time to time as necessary adjustments are made to the software," says Johnston.

Making the online service available on a voluntary basis now provides a valuable opportunity to identify and work out any problems that might arise before the system is fully implemented in Fall 1999. (To optimize your use of Registration on the Web, see the tips below.)

Problems or Questions?

If you do not find an answer to your questions on the Web site, cannot sign in, or encounter difficulties with the online system, the Office of the Registrar recommends that you complete your registration session via RSVP.

To report technical problems, please call the Office of the Registrar's RSVP Hotline at (530) 752-0318 or the Information Technology Banner Help Desk at (530) 757-8996, between 8 a.m. and 5 p.m.

If you have questions about your UCD LoginID, Kerberos password, or Web browser, contact IT Express at (530) 754-HELP, ithelp@ucdavis.edu, or 182 Shields Library. IT Express' Web site is at http://itexpress.ucdavis.edu.

Tips for Registering on the Web

If you decide to register for classes online, point your Web browser to http://registrar.ucdavis.edu/html/web_reg.html and keep the following tips in mind:

• Verify your appointment time. You can access the system any time between 6 a.m. and midnight to view your classes and schedule, but you can register for classes only during your appointment time and open registration hours.

• Be prepared with the list of classes you need as well as alternate classes, though you will also be able to search the system.

• Have your UCD LoginID, PAC, and Kerberos password handy. You will be prompted to type them in to access the system.

• To protect the confidential nature of your registration records, NEVER share your LoginID, password, or PAC with anyone.

• Refrain from using the "Back" button of your Web browser unless told to do so by the application. If you use the "Back" button, you will be prompted to re-enter your student ID number and PAC.

• The application requires a wide display, so be prepared to scroll both up and down, left and right.

• Make sure your browser is set to accept cookies. See http://help netscape.com/kb/client/970226-2.html for more information on what cookies are and how they work.

• Be sure to properly terminate your Web registration session by using the "Exit" button and quitting your Web browser. Failing to do so will leave the session "hanging" and enable others to access your records or use your account.

• To guard against human or technical errors, check your schedule through RSVP or on the Web at least once after registering.

To find out more about these and other tips, visit the Registration on the Web site at http://registrar.ucdavis.edu/html/web_reg.html.
Fall Statistics Reveal Upswing in Computer Usage

by Jeff van de Pol

Recently released statistics for the Fall quarter of 1998 reveal campus computer rooms are an increasingly hot commodity for both students and faculty at UC Davis.

A recent study by the Information Technology's Lab Management, over 1,300 more users logged on to Lab Management facilities in Fall 1998 than in Spring 1998. Coupled with an 85 percent increase in the number of logons from Spring 1998 to Fall 1998, all signs are pointing towards an enormous campus-wide surge in computing.

The Fall quarter of 1998 also produced a significant increase in faculty computer usage, with 19 percent increase over Spring 1998. Such numbers point towards a growing trend in the classroom, as a greater number of instructors and TAs are becoming increasingly comfortable with using technology as a teaching tool.

The increase in computer usage can be directly seen in the number of computer lab logons, which jumped nearly 85 percent over the summer, from 215,000 logons in Spring 1998 to 394,000 logons in Fall 1998. "The significant increase in logons is a very tangible reminder that computers are playing a larger role in today's educational setting," says Peter Blando.

Equally compelling is the room usage data, which shows that for Fall 1998, the thirteen computing facilities operated by Lab Management were collectively operating at near maximum capacity between the hours of 9 a.m. and 6 p.m. The figures reflect statistics taken from Monday through Thursday, as Friday has consistently proven to be significantly less popular among both students and faculty. On average, up to 12 users wait in line to utilize computing resources in highly impacted classrooms during these peak periods.

While these waiting lines have become a common sight on campus during the week, especially at The Station and the basement facilities in Olson, the login data does suggest that most users need computer access for relatively short periods (see graph below).

With two-thirds of all log-in periods lasting less than fifteen minutes, it appears that most users need computer access for relatively short periods. A survey of the computer lab logons confirm this, with a significant increase in faculty use of computer facilities in Fall 1998 than in Spring 1998.

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For Erin McLeod, a third-year student, The Station has already made a big difference. "It seems like every quarter I spend more and more time using a computer," says McLeod. "It's nice to see that the University is trying to give us students exactly what we need to succeed."

While the statistics reflect the tremendous popularity of facilities like The Station, they also highlight the growing student need for computer access on campus.

As the faculty becomes increasingly computer savvy, more and more students are being required to use campus computer accounts to access lecture notes, homework assignments, and practice exams. This increase in computer usage can be directly seen in the number of computer lab logons, which jumped nearly 85 percent over the summer, from 215,000 logons in Spring 1998 to 394,000 logons in Fall 1998.

"The significant increase in logons is a very tangible reminder that computers are playing a larger role in today's educational setting," says Peter Blando. "As demand has increased, so has the importance of providing new labs for the students."

The Station: A Big Hit With Students

by Jeff van de Pol

As the statistics roll in for the Fall quarter of 1998, the numbers are backing up what nearly everyone on campus is saying: The Station is a hugely positive step toward meeting the computing needs at UC Davis. The second open-access computer room to open on campus (the first is located at TB 114), The Station has proven an especially big hit with students.

According to statistics provided by Information Resources Lab Management, 5,010 students — almost one-fourth of the entire student population (both undergraduate and graduate) — used The Station at least once last Fall.

Located in the Memorial Union's former East Conference Room, The Station's 19 Dell PCs and 15 Macintosh G3s were accessed by these students over 68,000 times during Fall 98.

Third-year Spanish and exercise science student Erin McLeod is decidedly upbeat about the new lab: "It is so wonderful to have access to more computers on campus. The location is great, and I can use my time between classes more effectively," she says.

Responding to a survey in which students stated more computer access as a top priority, a coalition of university organizations — Student Affairs, MU Auxiliary Services, CURB (Campus Unions and Recreation Board), and IT Information Resources — put The Station on the fast track, taking the lab from drawing board to ready-to-use facility in less than a year.

Peter Blando, Operations Manager for Information Resources Lab Management, states that extensive cooperation made the project possible: "Preparing a project of this size in such a short time frame was made possible through the excellent communication between the departments, who all realized the importance of a new open-access facility to students."

This quick response did not go unnoticed by the students: "It seems like every quarter I spend more and more time using a computer," says McLeod. "It's nice to see that the University is trying to give us students exactly what we need to succeed."

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Fourth-year communications and political science student Heather Kopeck discussed the current situation: "Before the Station opened, it was a crapshoot over how long it would take for a computer to be available to use. The new lab has helped a lot, but waiting lines are still an everyday thing during the week."

In response to this large upswing, Blando reveals that Information Resources plans to further highlight the growing student need for computer access on campus.

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In response to this large upswing, Blando reveals that Information Resources plans to further increase computer access for students by opening another open-access lab, located in 301B Surge IV, in March, and a new computer classroom in 1 Olson by Summer 1999. "The Station and the upcoming computer rooms are part of the larger goal: meeting the computing needs of the students at UC Davis."

Resources

Student Computer Access Reports: http://it.ucdavis.edu/pubs/accessreport/

Computer Room Availability: http://it.ucdavis.edu/rooms/available/

Student Computing Guide: http://it.ucdavis.edu/pubs/SCG/
The Academic Computing Coordinating Council (AC4): What it is, what it’s doing, and why I agreed to chair it

BY HARRY R. MATTHEWS

How do you get “A C4” from “A cademic Coordinating Council?” Well, there’s a parallel A administrative Computing Coordinating Council, so “AC3” or “AC3” would be ambiguous. Adding one C from “A cademic” resolved the ambiguity.

The two Councils (A C4, chaired by me, and A dc3, chaired by J. R. Long, Dean of Engineering) comprise the largest part of the new oversight structure for information technology that was implemented about eight months ago. The Councils provide input to the IT Policy Board [1] and coordinate campuswide information technology activities.

One of the Councils’ first tasks was to recommend recruitment of a Vice Provost—Information and Educational Technology, replacing the Associate Vice Chancellor position. That recruitment is now in progress but nominations and applications are still welcomed. A site is more of our work and becomes more and more critical to our missions of teaching, research and service/reach, it becomes necessary that information technology be represented at the highest level in our administration. In addition, a position at this level, possibly filled by a person with an academic background, will provide a broad strategic overview of information and educational technology on campus.

The new Vice Provost will be a member of the IT Policy Board and the two Coordinating Councils. The A C4 membership also includes:

• Several other senior administrators, including the University Librarian, the University Librarian, two Deans, another Vice Provost, and a Vice Chancellor.

• A comparable number of faculty members representing A cademic Senate and School College Executive Committees.

• Representatives of the A cademic Senate, staff, students, and some other committees.


One of my goals, as Chair of A C4, is to involve the campus as a whole in the work of the Council. Clearly, it is critical to get broad-based input as the Council deliberates such issues as Provision of remote access. The staff and student modem pool is saturated for several hours every day, leading to frustrating delays as people try to connect to the campus network from their homes. Should people respond by signing up with an independent Internet Service Provider (ISP), like CallWeb [2], as I have done, or should UC Davis get further into the modem business by providing higher availability alternatives to the existing “fully subsidized” modem pool? How should the modem pool be funded? A C4 has adopted a group of guidelines or principles to help analyze and judge different approaches (see “Shaping the Future of Remote Access” on page 7).

Instructional Technology Funds. How should we balance the resources and responsibilities for instructional technology between central services such as general access student laboratories and decentralized services in the schools and colleges? What are the most pressing needs for central services?

Student access to computers. Roughly 80% of our students currently have access to a computer in their homes. Are the students without computers at a disadvantage? Are those without a computer getting the education they need for today’s and tomorrow’s professional, social and political environment? How can we make sure that students who are financially disadvantaged are not further disadvantaged by lack of appropriate computer access? Can financial aid cover computer purchase? At what point, if ever, should we have a formal expectation that each student own a computer? What kind of computer? What infrastructure do we need to support students who own computers?

A second major goal is to develop an overall plan for academic computing at UC Davis. The plan will simplify the decision-making process and the development of systems that interact synergistically and complement rather than duplicate each other. The plan is a work in progress, but the first stages are described in the December minutes, which are posted on the AC 4 Web site (http://ac4.ucdavis.edu). Vicki Suter in the Division of Information Technology is leading a complementary effort, to define the technological infrastructure of academic computing at UC Davis. A C4 is sponsoring this important project, known as the LAD project [3], which is related to national developments in the area of academic computing architecture.

With such a large council, it is inevitable that subcommittees do some of the detailed work. One subcommittee, chaired by G. J. Mathey, is now deliberating UC Davis’ role in the California Virtual University. The report of the first subcommittee, chaired by Bill Horon, on Multimedia and Databases is available (see A 4 on page 7).

Barbara Sommer is the Interim Coordinator for the Teaching Resources Center.
continued from page 6

(M A D) in Instruction, has been adopted by the A C4 and is available on the Web site [4]. It is a forward-looking report recommending that standards be adopted for electronic storage and retrieval of academic digital materials for teaching and research, and that academic databases be made more available and easier to use. The report is helping guide the allocation of resources for information technology and some of its work is being continued by the LEAD project.

Campus members are encouraged to submit suggestions and comments through the Web site (http://ac4.ucdavis.edu) or by email (ac4list@ucdavis.edu) [5]. ac4list@ucdavis.edu is the forum for discussion of issues before the Council, like decentralizing resources and responsibilities or universal student access to computing. In addition, the email address, ac4@ucdavis.edu, is available to members of the campus community who wish to communicate directly with A C4 staff and myself. I also welcome direct correspondence to hrmathews@ucdavis.edu.

Harry M. Matthews is Professor of Biological Chemistry and Computer Science, A C4.

Notes
2. http://www.calweb.com. The service costs from $9.95 to $24.95 per month, depending on the number of hours used per month and I have found it reliable. I also like having a second email account that lets me keep my personal email separate from my professional email. Some campus services are still unavailable through an ISP, but many sites have moved to a Kerberos-based security system that accommodates access through an ISP.
5. To subscribe, send an email message from your usual workstation to listproc@ucdavis.edu. In the body of the message type: subscribe Harry Matthews ac4list@ucdavis.edu (replace “Harry Matthews” with your own name—I’m already subscribed).

A Conversation with Professor Harry Matthews, Chair of the AC4

Editor: Why did you agree to be the founding chair of the Academic Computing Coordinating Council?

Chair Matthews: It takes exceptional wisdom to understand one’s own motivations, but maybe I can list some of the components. The most obvious is a sense of duty: the University pays my salary, so I should agree to a request from the Provost. This obligation should neither be under-estimated nor undermined by tenure.

A second motivation is belief in shared governance. The A C4 is all about shared governance. It includes administrators who seek and manage resources, faculty members who control the curriculum and direct most of the research, students who enrich our lives and pay our salaries, and staff who make it all happen. Shared governance is about respect, shared values, and a shared mission. It depends on participation. How could I not participate when asked? I think these are the reasons I said “Yes” when asked.

Editor: Are there any rewards that come with being the founding chair of the A C4?

Chair Matthews: The short answer is “No,” there is no title, no salary, no parking privileges. In fact, one gets asked to sit on yet more committees—just like most other academic Senate service. Beyond this short answer, though, is an opportunity. Thinking back to my time as Chair of the Committee on Academic Personnel, the Committee’s major achievement that year (in addition to the normal tenure and promotion decisions, which should never be routine) was the completion of the Merit Equity Review (http://moxy.ucdavis.edu/CAFM/megfinal.htm) begun while John Polos was chair. During this process, which was a shared 2-year effort between the Committee and the Vice-President, many faculty members, almost all women, were moved up to the rank and step they deserved based on their accomplishments. It was tough and lonely, and during this process but the overall results, and their eventual widespread acceptance by the Academic Senate, are shared achievements that are important to me.

Editor: Will the A C4 have to address issues as contentious as gender equity?

Chair Matthews: I hope not. My initial and overriding aim, of course, is to establish the Council as a valuable part of our shared governance structure, and this by itself is challenging and achievement enough. At this time, I don’t know what, if any, other overarching issue will emerge. There is the Plan for Academic Computing, already underway. There is the challenge of developing academic computing so that we exploit synergies between systems rather than fighting incompatibilities. And there is the issue of universal student access to computing (U SA).

I guess the other short answer to the rewards question is: “Here is an opportunity to make a difference.”

Shaping the Future of Remote Access

“After substantial discussion, it became clear that we needed a process to focus the discussion of remote access for the campus, identify the key issues, and allow real progress,” says Harry Matthews, Chair of the Academic Computing Coordinating Council (AC4). To focus the discussion, the AC4 developed and approved on February 8 the 13 remote access principles below. The Council invites all campus members to review them and send suggestions for changes, if appropriate, and for weighing each item to ac4@ucdavis.edu.

A worksheet, including the 13 principles and a scoring system, has been developed to evaluate various remote access models. Through the campus consultation and evaluation process, these models will be refined and narrowed down to a short list for final consideration.

“As you review these principles, keep in mind that they must be viewed as a whole, and that we will have to make compromises,” says Matthews. Feedback will be most helpful if received before the next AC4 meeting on March 15.

AC4 Remote Access Principles

➢ Students, faculty and staff need to access the UC Davis Intranet and the Internet from their homes. (See footnote below.)
➢ Arrangements for remote access should support rather than discourage the use of the Internet for academic purposes.
➢ Faculty members should be free to incorporate reasonable use of the Internet and Intranet in their courses as needed without being constrained unduly by lack of student access.
➢ Research should not be constrained unduly by lack of access to the Internet and Intranet.
➢ Administration should not be constrained unduly by lack of access to the Internet and Intranet.
➢ Remote access policies should be consistent with UC Davis’ network security policy.
➢ Remote access policies should encourage cost-effective use of remote access facilities.
➢ All students should have the access that is needed to complete the courses in which they enroll.
➢ A university subsidy, if any, for remote access must be consistent, in nature and amount, with the university’s mission.
➢ The amount of funding of a university subsidy, if any, for remote access must be appropriate in the context of the overall needs of the campus.
➢ Internet access is used both for university business and other activities. The university should not subsidize use of the Internet and Intranet for non-university business or pleasure.
➢ Consideration of funding models should include efforts to minimize the total cost to the campus and its constituents.
➢ Provision of access and its funding should remain viable as the use of the Internet and Intranet continues to increase.

Footnote: For students, access to the Intranet and the Internet is becoming an essential part of many courses. In order to carry out required coursework, outside scheduled class time, and communicate with their instructors by email, students must either 1) use open access laboratories on campus, 2) connect their own computers to the campus network through a network connection on campus, or 3) connect through a modem from their homes.

Students expect UC Davis to provide adequate access so that they can complete their required coursework. (Note: this statement applies independently of how that access should be funded.) Remote access is relatively new but several years of fully subsidized access, albeit with restricted availability, have developed a sense of entitlement.

Many faculty members need to access the Intranet and the Internet from their homes to carry out their duties in teaching, research and service, particularly outside normal office hours. Access from home makes it practical for faculty members to extend their working hours. Because this access is being used to further the university’s mission, many faculty members expect the university to pay the cost of access. Several years of fully subsidized access, and currently a high quality of service, have nurtured high expectations.

Staff members, who telecommute or, like faculty members, work from home outside normal office hours, need high-availability access to the Internet and the Intranet. Because staff members use this facility to carry out their university tasks, staff members expect the university to make remote access available.

In many cases, particularly for faculty and staff, the most important access is to their office or departmental computer. Frequently, this is achieved with a local modem, usually posing a security threat to the Campus network and to the availability of the voice service, including emergency calls.
Express Service
continued from page 1

Why an Express Service?
The Express Service concept is not new, nor is it unique to U.C. Davis. Many universities experiencing rapid increases in remote access demand have implemented similar solutions with positive results. In the UC system, the speed of the modems and the size of the pools vary tremendously from one campus to another. Most campuses, however, have already established express pools with time limits ranging from 10 to 20 minutes per connection:

- U.C. Los Angeles has adopted a 20-minute limitation on one of its pools.
- U.C. Santa Cruz offers a small Express log-in pool with a limit of 10 minutes per connection.

Who Should Use the Express Service?
The Express Service is open to all U.C. Davis members. It should be particularly attractive to students and staff who are often faced with higher contention ratios on the 56K Student/Staff Modem Pool (530-754-7720) or the Faculty Modem Pool (530-754-7701). These two pools are equipped with 56K modems and allow longer sessions (see Table on page 1).

What did the change entail for the 14.4K Modem Pools?
The Network Operations Center reconfigured both 14.4K modem pools. This reconfiguration entailed three main steps:

- Establishing the Legacy Modem Pool as the only pool equipped with 14.4K modems. The dial-up number remains (530) 752-7925.
- Transferring the 48 remaining Telnet dems. The dial-up number remains (530) 754-2115 or email ArborFacultyTechCenter@ucdavis.edu.
- Creating an Express Service of twenty minutes per connection and unlimited number of connections per day on the Legacy Modem Pool. This means that all connections to this pool will be terminated after twenty minutes, but users may dial right back in and initiate as many connections as they need.

What Do You Need to Do?
If a twenty-minute session is adequate for your dial-in needs and your computer is already configured to access the Legacy Modem Pool, you don’t have to do anything; just continue connecting to (530) 752-7925 as usual. Keep an eye on the clock, though, for sessions are terminated without warning.

If you sometimes require more than twenty minutes to accomplish your task, you’ll need to learn how to adjust your modem configuration. This way, you can choose to dial in to the 56K modem pool for which you are eligible on those occasions when you need the longer time limit (see the table on page 1).

Next Steps
Usage statistics collected since the Express Service was established on February 8 indicate that the daily number of unique users dialing into the 14.4K Legacy Modem Pool has increased from around 3,600 to approximately 7,000.

Other usage highlights about the new Express Service include:

- The contention ratio on the Legacy Modem Pool has decreased from 85% to approximately 66% during peak hours (between 6 p.m. and 11 p.m.).
- The average user connects 3 times a day and stays connected 12 minutes per session (down from 20-25 minutes before the Express Service was established). Over 55% of modem pool users access the Express Service daily.

The Network Operations Center will continue to monitor the demand for the Express Service and for the 56K modem pools to determine variations in access patterns. The intent is to offer connectivity to the widest possible number of U.C. Davis users and to encourage the most efficient use of the modem resources currently available. If the new time limit does not provide the expected improvements for users who need a short modem pool connection, or if it results in a net reduction in availability within any of the pools, the limit will be adjusted.

Resources
Please send your comments and questions about the new Express Service to access@ucdavis.edu.

For more information about the 20-minute limit and connecting to the modem pools, see the IT Express Web site at http://itexpress.ucdavis.edu/modems.html. If you need assistance with accessing the modem pools, contact the IT Express at (530) 754-Help, or email ArborFacultyTechCenter@ucdavis.edu.

To view modem pool usage statistics, the RA M P report executive summary, previous IT Times articles, and a host of other information about the campus modem pools, see the Remote Access Web site at http://access.ucdavis.edu.

To report technical problems with the modem pools, contact the Network Operations Center (NOC) at (530) 752-7656 or noc@ucdavis.edu.

Banner Presentation: Utilizing Images
Arbor Workshop, 1:30-4:30 p.m., Arbor
Bannar Presentation: 10 a.m., MU II (See article on page 3.)