Feature Articles

Campus Computing News

If you are an employee at the UNT Denton campus or the System Center, but not the Health Sciences Center, you can purchase Microsoft products from the University Bookstore for essentially the cost of reproducing the CD-ROM's needed to install them. Read the article for all the details.

Happy Tenth Birthday General Access Labs!

One of the most visible examples of student technology fees at work is the convenient location throughout the UNT campus of general access computing labs; a project which marks its tenth anniversary this year. Find out more about the labs in this article.

Lots O'Links

It's a new semester and time to highlight UNT Websites again.

Getting Wise to GroupWise

We publish articles on various aspects of GroupWise, the official mail system for UNT faculty and staff members, on an almost monthly basis. Read this article for a definitive (at least for a little while) source of helpful information on GroupWise.

Click on the title above for an information age
Don't forget to check out our monthly columns. This month's topics:

- **RSS Matters** -- This month we review some of the results of beta testing for the as yet unreleased version of S-Plus for Windows and UNIX.

- **The Network Connection** -- "News from the Internet Front"

  For the want of a nail, a shoe was lost; for the want of a shoe, a horse was lost; for the want of a horse, a rider was lost; for the want of a rider, a battle was lost; for the want of a battle, a kingdom was lost, and all for the want of a horse shoe nail.

  Read this article and find out what might be lost for want of a clue.

- **List of the Month** -- "Online Resources for Modern Scholars" In honor of a new semester, we are featuring not one, not two, not three, but four (!) cool Websites to help you become a better, more efficient scholar.

- **WWW@UNT.EDU** -- "Student Organizations on the Web," read all about it.

- **Short Courses** -- Update on the various training opportunities on campus.

- **IRC News** -- Minutes of the Information Resources Council are printed here when they are available. The July 18, 2000 minutes are featured this month.

- **Staff Activities** -- New employees, employees that have resigned, and staff awards, recognition, performances, and presentations are included in this article.
This month we review some of the results of beta testing for the as yet unreleased version of S-Plus for Windows and UNIX. This release of S-Plus marks the convergence of the version numbering for both Windows and UNIX platforms, S-Plus version 6.0.

Graphical Interface

The most substantial improvement for the UNIX version is the drop down menu system based on JAVA. Most of the Statistics menu items that were present for the Windows version are present in the UNIX version. However, the Data menu option in Windows which displays data manipulation operations is not present in the UNIX GUI. These operations must still be carried out by commands in the command window. The UNIX GUI is displayed below:

There are major organizational differences as well. The familiar Object Explorer is missing from the UNIX GUI. Also the ability to generate and save S-Plus commands into a History window is also missing. The Windows S-Plus GUI hasn't changed substantially, retaining most if not all features introduced in earlier versions. The Windows GUI is displayed below:
S-Plus for UNIX gives users a spreadsheet view of all objects available to the work session. While not as convenient as the "tree" view that the Windows version provides, it is better than a simple listing of objects from the command prompt. The UNIX Objects Summary Window is displayed below:

Integration with Java
This version of S-Plus uses the latest Java code from Sun Microsystems as well as Sun's emerging JavaHelp system. Users have the ability to call S-Plus from a Java application and users can call a Java application from within S-Plus. Additionally, S-Plus 6.0 uses Java classes for S-Plus vector and matrix objects.

Import/Export Filters

Graph editing in UNIX does not provide the "in place" graph editing that is available in the Windows version. However, export filters in UNIX are available that allow one to export graphs into JPEG, TIFF, PNG, PNM, and BMP formats. Additionally, data import and export filters in the UNIX version are limited to ASCII, DBASE, EXCEL, FASCII, GAUSS, HTML, LOTUS, Matlab, QUATTRO, SAS, SPSS, STATA, and SYSTAT. The Windows version provides these data import/export formats as well as FoxPro, Informix, Lotus, Minitab, Microsoft Access, Microsoft SQL, Oracle, Paradox, and Sybase SQL.

Large Dataset Support

Perhaps the most important enhancement is the continuing refinement of S-Plus's memory management. S-Plus has improved its performance by reducing memory requirements to many common operations. A 64-bit version of S-Plus 6.0 for UNIX is available for Solaris. This version allows enhanced processing speed while supporting larger data sets. Large data objects are now memory-mapped, which reduces the amount of swap space required to run S-Plus. These data objects are "reference-counted" so that fewer copies of data objects are created and stored. For the Windows version, specifications that shipped with the beta versions claim that in typical data analysis applications, S-Plus makes 60% fewer copies than S-Plus 2000.

New Libraries

Two new libraries have been added to S-Plus - library "robust" and "missing". Library Robust offers a wide selection of robust techniques. These new functions provide: improved robust regression for the linear model, robust ANOVA, robust poisson and logistic generalized linear models, robust covariance and correlation matrix estimation, new plots for outlier detection and comparing fits, and new multiple model fits and comparisons paradigms. Library Missing provides three different multiple imputation models: Gaussian, Logistic, and Conditional Gaussian. Library Missing uses a model-based approach with model fit by EM methods and data augmentation algorithms (Gibbs sampler). The data augmentation algorithms produce multiple imputations; users may sue their own routines for creating multiple imputations. The library includes capabilities for performing arbitrary analyses "in parallel" on multiple completed data sets, and combining numerical results in a way that reflect the additional uncertainty due to missing data.

Updated Libraries

Major updates have been made to the Survival Analysis Tools in S-Plus. Other major updates include the latest advances in linear and non-linear mixed effects models (NLME).

New Language Enhancements

The class mechanism is completely different from that of earlier versions of S-Plus, and there are many changes to many fundamental functions. The down side of this is that the new S-Plus language architecture is not completely backward compatible with earlier versions of the language. Most examples from earlier books on S and S-Plus should run without modification. However, data objects created with S-Plus 6.0 are different from objects created with S-Plus 2000 and earlier. All objects now have a class, including atomic objects such as vectors and matrices. This extensive support includes new functions for creating classes and methods. To help with the conversion over to the new language specifications, S-Plus 6.0 includes tools that help update S programs written in older versions of S-Plus.

General Enhancements

S-Plus for Windows displays a faster response from the graphical user interface. This was quite a noticeable difference, as prior versions were quite slow.

Supported Platforms and System Requirements
S-Plus 6.0 is supported on Windows 95 and Windows 98; Windows NT 4.0 and Windows 2000 running on Intel platforms. S-Plus 6.0 for UNIX is supported on Solaris, Linux, HP, and SGI. The minimum recommended system configuration for Windows platforms is a Pentium II/233 with 96MB of RAM. You must have at least 125MB free disk space for the typical installation. A complete install requires 230MB of free disk space. It is recommended for S-Plus on Linux/Intel platforms that the minimum system utilize 48MB of RAM, 16-bit color mode, KDE and KWM window managers. Sun Microsystems, Inc. has tested S-Plus 6.0 using Red Hat Linux 6.0.

**Conclusions**

On the whole I was pleased with the performance of both UNIX and Windows platforms. Substantial speed and memory improvements have made using S-Plus as a general statistical analysis package a viable alternative to SAS or SPSS. For the most part, the addition of the "robust" and "missing" libraries have made S-Plus a more complete base package than SPSS or SAS as these packages offer the same functionality as separate costly add-ons. While the UNIX GUI is still in its early stages, it removes a stumbling block for the "point-and-click" crowd in using S-Plus on powerful UNIX architectures. Clearly, S-Plus excels in robust methodology and in graphical rendering as compared to SAS and SPSS. Future RSS columns will explore this new functionality that S-Plus provides in the months to come.
News from the Internet Front

For the want of a nail, a shoe was lost;
for the want of a shoe, a horse was lost;
for the want of a horse, a rider was lost;
for the want of a rider, a battle was lost;
for the want of a battle, a kingdom was lost,
and all for the want of a horse shoe nail.

Recent news on the Internet front indicates that Microsoft may have won the battle but is losing the war. It was announced today that Sun Microsystems will acquire Cobalt Networks, a maker of Internet web server "appliances". This further cements Sun's position as a leading vendor of Internet e-commerce hardware and software. Meanwhile, Microsoft has successfully delayed implementation of the Solomon solution ("Split that baby in two, Bill") imposed by the U.S. Government's recent antitrust suit, and through enough delaying tactics will probably hold off a final resolution until the outcome no longer matters. By then, however, it may be too late for the dominions of Bill to exert the same influence on the computing world as they do today.

Just what is that Kingdom, Anyway?

While the justice department and Microsoft have been publicly battling it out in court, Sun Microsystems has been quietly building the foundation of an Internet empire. About the same time that America Online acquired Netscape, Sun announced the Sun-Netscape Alliance, a subsidiary company consisting of resources drawn from both Sun and the former Netscape which combined Sun's operating systems experience base with Netscape's Internet server expertise. The result was a set of Internet server tools which support the development of electronic commerce sites on the Internet. It was clear from the start that there was a reason that "Sun" comes first in the "Sun-Netscape" Alliance. The products which resulted from this partnership soon adopted Sun's i-planet trademark and have been heavily marketed ever since (maybe you've heard about the "dot" in "dot-com").

The irony is that the Microsoft case centered on the Internet browser as the jawbone of contention. It turns out that AOL's acquisition of Netscape has done little to strengthen or improve that browser software's position as a useful Internet utility. Microsoft, however, spent oodles of time and lawyer fees trying to assert its right to force their browser down the throats of Internet users. Dumb. The money ultimately will be made in the server business. It doesn't matter what browser is being used when people start hitting the multitude of Internet electronic commerce sites which will continue to grow. Who will be making money? Well Sun, with its ability to sell a complete hardware and software solution to anyone from a small one-person company up to a multi-billion dollar multi national is in pretty good position to rake it in.

For want of a Clue?

Microsoft is both an operating system company and an application company and probably ought to be broken up into two, since it has had an apparent record of using its dominance in the operating system arena to promote its applications at the exclusion of all others. The
Department of Justice case against Microsoft may still achieve this end, however, a more natural transition may take place which will make Microsoft irrelevant in the information technology world. Just like you don't need to be an "operator" to use the telephone network these days, soon you won't need to be a computer "operator" to use the Internet. Soon you will see Internet appliances which, like a phone or FAX machine, just plug in are ready to use with a few simple controls. You will no longer need a desktop computer to use the Internet.

Since most sales of computers for use at home are purchase specifically to access the Internet, a future with cheaper and more easily used Internet appliances could dramatically change the course of information technology. If you don't need a computer, you don't need an operating system and you don't need applications (especially, if you can run them on your appliance off the Internet). This dramatically decreases the money to be made on computers and dramatically increases money to be made on Internet servers and associated technology. Microsoft, with a history of protecting its operating system and application business, was slow to embrace the Internet as a serious technology, attempted to get back into the fray with its browser battle, and still lags far behind as a serious provider of robust Internet servers.

**Forward March**

Microsoft continues its onward march, recently releasing the "Millennium Edition" of Windows 2000. It is painfully apparent that what the Millennium Edition adds is money to the pockets of Microsoft share holders. Meanwhile, technology marches on as well, but not necessarily in the same direction as Microsoft. One can only wonder if Bill will end up wandering the battlefield in Redmond, yelling, "A horse, a horse, my kingdom for a horse."
Online Resources for Modern Scholars

In honor of a new semester, we are featuring not one, not two, not three, but four (!) cool Websites to help you become a better, more efficient scholar.

1. **Whatis.com** -- According to their "about us" information, "whatis.com® is a knowledge exploration tool about information technology, especially about the Internet and computers. It contains over 2,000 individual encyclopedic definition/topics and a number of quick-reference pages. The topics contain about 12,000 hyperlinked cross-references between definition-topics and to other sites for further information. We try hard to keep it up-to-date." If you have trouble remembering what DSL, WYSIWYG, ISP, DVD, and MP3 means, then Whatis.com is the site for you. You can become a member of the Whatis.com site, which will give you access to the word of the day, words of the week, industry updates, chats, career services, and more. It was TipWorld's "Cool Site of the Day" for 09/07/2000.

2. **Visual Thesaurus** -- This could be one of the most inspired word related sites to date. It was TipWorld's "Cool Site of the Day" for 09/14/2000, and their description says it all:

   Maybe synonyms aren't sexy like they used to be, but if Captain Kirk were stranded on a deserted planetoid and needed a good reference tool, he'd design a thesaurus just like this one. Enter a word and the visual thesaurus gives you a variety of synonyms. Words don't just appear on the screen--they dance, either rotating around the original word or vibrating next to it. Attached by virtual strings, the new words generate a veritable tree of meaning. For extra fun, click on one of the synonyms, and it sprouts new branches of its own. You can go on forever, layering words upon words upon words upon words upon, hmmm...what's a synonym for "word"?

3. **Encyclopedia Britannica** -- Continuing a publishing tradition that began in 1768, Britannica has placed its entire contents on the Web. It now boasts 45 million words and the Website offers much more than the traditional encyclopedic entries. There is a "Today's News" feature, in-depth looks at current events such as the Olympics, and much much more. This site should definitely be bookmarked for quick access.

4. **iBiblio**: the Public's Library -- According to their FAQ, "iBiblio is a diverse and expansive collection of information on the Internet, created and maintained by the public, for the public. It is the ultimate collection of freely available information, the future of Internet librarianship, and a collaboration between the former MetaLab.unc.edu (formerly known as SunSITE.unc.edu) and the Red Hat Center for Development." iBiblio is home to one of the largest "collections of collections" on the Internet. The
free information resources available on iBiblio include software, music, literature, art, history, science, politics, and cultural studies.
By Claudia Lynch, Benchmarks Online Editor

Mark is taking a break from his column this month. This is a reprise of an article we ran in April.

Student Organizations on the Web

As we reported in January, UNT's Central Web support provides Web space to official University student organizations, free of charge. All you need to do to get your organization online is obtain a UNT internet account at http://getlogin.unt.edu/ and complete an "Application for Student Organization Computing Services." The application can be obtained on the third floor of the University Union suite 422 at the Student Activities Center. Once the center approves your organization you'll receive a message from Central Web Support giving you all the information you need to place your organization online.

The UNT Student Organization's Website can be found at http://orgs.unt.edu/. Why not visit the site and take a look at all the organizations that are currently represented there? Everything from Air Force Reserve Officer Training Corps to sororities and fraternities to religious groups to dorm organizations has a Web page.

If you need help getting your organization's Web page created, Central Web Support offers several courses about publishing with both Microsoft FrontPage and Netscape Communicator each semester. These free courses are announced here in Benchmarks Online in the Short Courses column and also on the Training Web at http://www.unt.edu/training/shortcrs.htm.
Short Courses

By Claudia Lynch, Benchmarks Online Editor

The Academic Computing Services (ACS) short courses for fall 2000 have been pushed back to October due to personnel changes within the department. Please consult the Short Courses page to check on the status of the schedule and to see the types of courses that will most likely be offered.

Customized Short Courses

Faculty members can request customized short courses from ACS, geared to their class needs. Other groups can request special courses also. Contact ACS for more information (ISB 119, 565-4068, lynch@unt.edu).

Especially for Faculty and Staff Members

In addition to the ACS Short Courses, which are available to students, faculty and staff, staff and faculty members can take courses offered through the Human Resources Department, the Center for Distributed Learning, and the UNT Libraries' Multimedia Development Lab.

Center for Distributed Learning

The Center for Distributed Learning offers courses especially for Faculty Members. Topics include those listed in the box below. The center also offers a "Brown Bag" series which meets for lunch the first Thursday of each month at Noon in ISB 204. The purpose of this group is to bring faculty members together to share their experiences with distributed learning. One demonstration will be made at each meeting by a faculty member with experience in distributed learning. More information on these activities can be found at the Center for Distributed Learning Web site.

UNT Libraries'

The UNT Libraries' Multimedia Development Lab has also offered free training to all University of North Texas faculty and staff in the basics of FrontPage and information architecture in the past. For more information see http://www.library.unt.edu/media/services.htm#Distributed.

Technical Training

Technical Training for campus network managers is available through the Campus-Wide Networks division of the Computing Center. Some of the seminars, such as one on disaster recovery/business continuity planning techniques, may be of interest to others on campus as well.

UNT Mini-Courses
These are a variety of courses offered, for a fee, to UNT faculty, staff and students as well as the general public. For additional information surf over to http://www.unt.edu/ccecm/cont_ed/index.html.

**Alternate Forms of Training**

The [Training](http://www.unt.edu/ccecm/cont_ed/index.html) Web site has all sorts of information about alternate forms of training. Training tapes, Computer Based Training (CBT) and Web-based training are some of the alternatives offered. There are also handouts for computer training (Microsoft Office 97 and Windows 95) on the following topics:

- GroupWise 5.2 -- Handout for Win95/NT
- FAQ for GroupWise 5.2
- Info on GroupWise for Win3.1
- Computers - Back to the Basics
- Introduction to Windows 95
- Introduction to Word 97
- Advanced Word 97 - MailMerge It Together
- Introduction to Excel 97
- Introduction to PowerPoint 97
- Introduction to Remedy (THE Call-Tracking Program)
- Using Netscape Communicator and the UNT Home Page

December 1999’s *"List of the Month"* offers links to free Microsoft Word and Excel information also.
Minutes provided by Sue Ellen Richey, Recording Secretary

IRC Regular Voting Members: Judith Adkison, College of Education; Ginny Anderson, Fiscal Affairs; Donna Asher, Administrative Affairs; Sue Byron, Faculty Senate; Carolyn Cunningham, Student Affairs; Jim Curry, Academic Administration; David Griffiths, Student Association, Don Grose, Libraries; Jenny Jopling, Instruction Program Group; Joneel Harris, Administrative Program Group; Elizabeth Hinkle-Turner, Standards and Cooperation Program Group; Allen Livingston, Graduate Student Council; Dan Mauldin, University Planning Council; Ramu Muthiah, School of Community Services, GALMAC; Jon Nelson, College of Music; Robert Nimocks, Director, Information Technology, UNT HSC; Steve Oeffner, UNT Health Science Center; Russ Pensyl, School of Visual Arts; Patrick Pluscht, Distributed Learning Team; Mark Rorvig, Research Program Group; Paul Schlieve, Communications Program Group; Kathleen Swigger, College of Arts and Sciences; Philip Turner, Associate Vice President of Academic Affairs for Distance Education and Dean of the School of Library and Information Resources (Chair, IRC); Virginia Wheeless, Chancellor; John Windsor, College of Business. IRC Ex-officio Nonvoting Members: Leslie Bowden, Telecommunications; Jim Curry, Microcomputer Maintenance Shop; Michael Forster, UNT Health Science Center; Richard Harris, Computing Center; Coy Hoggard, Computing Center; Maurice Leatherbury, Computing Center; Sue Ellen Richey, Computing Center (Recording Secretary). [As of 9/99]

July 18, 2000

VOTING MEMBERS PRESENT: PHILIP TURNER, CHAIR, SUE BYRON, DON GROSE, ROBERT NIMOCKS, JON NELSON, LOU ANN BRADLEY (for PAUL SCHLIEVE), ELIZABETH HINKLE-TURNER, CAROLYN CUNNINGHAM, JONEEL HARRIS, JIM CURRY

NON-VOTING MEMBERS PRESENT: RICHARD HARRIS, MAURICE LEATHERBURY, COY HOGGARD, SUE ELLEN RICHEY (Recording Secretary)

MEMBERS ABSENT: RAMU MUTHIAH, GINNY ANDERSON, JENNY JOPLING, DONNA ASHER, JUDITH ADKISON, MARK RORVIG, JOHN WINDSOR, ALLEN LIVINGSTON, STEVE OEFFNER, VIRGINIA WHEELESS, JOEL LANPHEAR, CRAIG BERRY, KATHLEEN SWIGGER, BILL BUNTAIN

There was no quorum, therefore the minutes of the June 20, 2000 meeting will be considered for approval at the September meeting.

IR Steering Committee

The Chair reported that the IR Steering Committee met and Maurice Leatherbury presented the Web Publishing Policy. There was no vote, but the consensus was that the committee approved of the policy and were to have Richard Rafes review it prior to taking it before the Board of Regents for official approval.
Distributed Computing Support Management Team

Maurice Leatherbury reported for the Distributed Computing Support Management Team that they are nearing completion of their evaluation of personal digital assistant devices. In addition, he reported that DIR has granted UNT a waiver from purchasing Microsoft’s Master License through them. He and Mike Wright are now proceeding with the legal review of the Software License Agreement and a request for bid has already been posted on the Electronic Marketplace.

Data Communications, Internet1 & Internet2

Maurice also reported that they now have a final quote from GTE on a line to connect to a co-location facility in the Dallas area. It is four times as much as Southwestern Bell charges for the same line for the same distance. The current plan is to co-locate two routers at the Alliance Data Communications building at UT-Dallas. Mike Maner is working on final arrangements to secure floor space to do this at the UT-Dallas campus. It is anticipated that there will at least be Internet1 traffic over a high-speed line by the end of August, with Internet2 a few weeks behind that.

Richard Harris stated that the AHE committee scrutinized their proposed budget for next year and they will send out a revised budget. They are planning a mega media day for the grand kick-off of Internet 2. Rollie Shafer has agreed to be UNT’s research advisor to the gigapop users’ advisory council that will serve on the steering committee for the mega media day. They’re hoping to have this event in October, but it may have to be moved to the spring. There is a chance that the Health Science Center could be an associate member of Internet2 because of joint projects with UNT.

Richard Harris also announced that he has agreed to serve as Chair of the Internet 1 committee of the Gigapop group.

Communications Program Group

Lou Ann Bradley reported that the Communications Program Group has met and received an update on the building wiring project. In addition, the group discussed the issue of staff retention.

Administrative Program Group

Joneel Harris reported for the Administrative Program Group that after a meeting with Datatel representatives, it was decided to have a technical conference call prior to the demo. Datatel only has two Oracle installations, and cost data is still needed from Datatel. A meeting has been requested by Oracle, to make a high-level presentation of their administrative higher-education systems. Also, there has been an announcement from PeopleSoft that they have partnered with two institutions that are going to be their show and tell demo site. There was some discussion about inviting PeopleSoft in for a demo also.

At the last meeting of the APG, Philip Baczewski made a presentation on LDAP defacto standards for directory services.

Standards & Cooperation Program Group

Elizabeth Hinkle-Turner reported for the Standards & Cooperation Program Group that they are continuing to work on the Access to University Computing Resources Policy.
Distributed Learning Team

Patrick Pluscht reported for the Distributed Learning Team that the group will meet this Thursday and the committee is finalizing plans for the Web CT upgrade implementation. The group is also working on a WebCT mini-conference to be held in September. Patrick reported that due to a delay in asbestos abatement procedures in connection with the new video-conferencing rooms, the completion of those rooms has been delayed. It is hoped to get the classrooms operational by the Fall semester. Dr. Turner commented that he has asked Mr. Pole to expedite the renovation project. Dr. Turner added that he has talked with the Chancellor at Collin County Community College about a video-conferencing relationship with UNT.

Other Business

The Chair announced that there will be no August meeting of the IRC.

Richard Harris announced that the UNT Strategic Plan has been approved by the Budget Board.

IRC Meeting Schedule

The IRC generally meets on the third Tuesday of each month, from 2-4 p.m., in the Administration Building Board Room. From time to time there are planned exceptions to this schedule. There was be no August meeting. All meetings of the IRC, its program groups, and other committees, are open to all faculty, staff, and students.
Transitions

The following are new employees:

- **Jason Tucker**, CPU operator (part-time).
- **Thomas (Spencer) Metcalf**, I/O consultant (part-time).
- **Douglas Alders**, CPU Operator. He's baaaaaacccckkkkkk ....
- **Attila Hakimoglu**, Computer Systems Manager in Data Communications, NCS.
- **Ryan Boettger**, Data Entry Operator (part-time).
- **Garret Rumohr**, Returning Helpdesk Microcomputer Consultant (part-time).
- **Latonya Banes**, Telephone Operator (part-time).

The following people no longer work in the Computing Center:

- **Sharon Marek**, Web Developer UNT Central Web Support.
- **Anne Fiedler**, University Information Operator.
- **Anima Gupta**, Report Distribution Assistant (part-time).
- **Glenn White**, CPU Operator (part-time).
- **Sriram Yadavalli**, ACS General Access Lab Consultant (part-time).

Awards, Recognition, Performances, Presentations

The Computing Center has a lot of **Soaring Eagles** this month. The following people were recognized as people "who practice exceptional customer service" in the September 2000 *Human Resources Newsletter*:

- **Mohammad Alsadka**, a Helpdesk Microcomputer Consultant, was recognized because, according to the *Human Resources Newsletter*, ". . .when a staff member went to get a new password, she was so impressed by your helpful nature and sense of humor, she just had to let us know. Thanks for Soaring!"

- **Stuart Christian, Blair Copeland, and Lance Harris** of the Data Communications staff were recognized for getting the Health Center computers up and running in record time after a building-wide shutdown.
• Lisa Bruni, Campus Information Operator, was recognized for taking extra time in helping someone find needed information.

Dr. Karl Ho, Research and Statistical Support Services Manager, attended the American Political Science Association's 2000 meeting held at Washington, D.C., August 31 to September 3. He presented the following papers:

"Asian Values: Democratization, Human Rights, and Economic Development in the 20th Century Taiwan and Beyond," co-authored with Max Yu

"When Variability Does Not Vary: Modeling Human Rights in Time and Space," co-authored with John King of American University

Sandy Burke, Manager of Computing Center Help Desk Support Services; Howard Shaw, Student Records Data Systems Programmer; Jennifer Johnson, Assistant Director for Computing Center Planning and Administration; Rebecca Padia, Planning and Administration Administrative Assistant; and Linda Wallace, Student Records Data Systems Programmer/Analyst, participated in the Donna Trammell musical, Reel Time 2: The Sound of Musicals this summer. They sang a song called "Loss of Memory" to the tune of "Memory" from the musical Cats by Andrew Lloyd Webber. This was the summer community musical/fundraiser for Music Theatre of Denton and was seen by approximately 800 people and raised approximately $12,000 dollars to support MTD's 2000/2001 season of main stage musicals. Over 120 people from throughout the Denton community participated onstage and backstage.
Microsoft Campus Agreement Software in Bookstore

In August 1999, UNT entered into a one-year Microsoft Campus Agreement that provides a campus-wide site license for some of the most commonly-used Microsoft desktop products. We are in the final stages of renewing that agreement, and I thought that users on campus should be reminded that an important feature of the agreement allows UNT employees at the Denton campus or the System Center, but not the Health Sciences Center, to purchase the following products for essentially the cost of reproducing the CD-ROM's needed to install them:

- Microsoft desktop operating system upgrades (Windows 98, Windows NT 4.x, Windows 2000, etc.)
- Office 2000 Professional. This package includes Word, Excel, PowerPoint, Access, and Publisher.
- FrontPage (including FrontPage 2000.)
- Visual Studio Professional. This package includes development software such as Visual Basic, Visual C++, and Visual Interdev.
- Macintosh versions of Office and FrontPage are covered under the Campus Agreement as well.

Faculty and staff have the right to install one copy of each of the software packages, for school related activities, on either a laptop or desktop that they own or lease. Copies of these products for sale in the Bookstore for a fee of $7.00 per CD (Office 2000, for example, comes on two CD's, so your cost would be $14; Office 2000 normally costs $200 to academic users.)

If you're responsible for acquiring any of these products for on-campus use, you should see the network manager because the products can be installed for free on any machine owned by the University.
One of the most visible examples of student technology fees at work is the convenient location throughout the UNT campus of general access computing labs; a project which marks its tenth anniversary in the year 2000. In these labs UNT students, and to a lesser extent, faculty and staff have available to them the latest in computing technology and printing services at no additional cost. Though all these labs serve the entire university student community, many have unique characteristics, software, and hardware designed to specifically cater to the needs of the colleges and schools in which they are located. The General Access Computing System was formally established in early 1990 utilizing university-applied student course fees to help provide all students in all colleges and departments equity in computing resources. This emphasis on "distributed computing" was crucial to the development of the first general access labs. Before this time all computer labs were purchased from individual college funds and college student fees.

**UNT computer labs provide valuable additions to students' computing resources**

There are currently thirteen general access labs scattered around campus. These are not to be confused with additional specialty labs where a student might gain access through their major study area. Some of the first labs were established in the College of Business Administration (COBA), the College of Education (COE) and the Willis Library. The most recently built labs include the School of Visual Arts (SOVA), the College of Music Lab (COM) and the Adaptive Lab in Chilton Hall.

Though many students have computers and small printers in their dorm rooms or
in off-campus residences, few can pay to upgrade hardware and software regularly, and much equipment as well as many applications are simply too expensive to afford for individual use. For the semi-equipped student, the labs thus provide valuable additional digital peripherals such as CD-ROM burners, a variety of scanners, color and laser printing and the latest creative and statistical software for their class work. For the student who does not have the luxury of owning any computer, the labs are a lifesaver in terms of service and support. Additionally, UNT's general access labs should be considered an almost unlimited pool of digital potential for the creative and innovative "gearhead" as well as a fine "test before you buy" resource for others as yet unsure of their computing needs and goals. The tour of the labs provided in this article will show all interested users that this university asset provides them with options ranging from a quick check of email to the creation of a full-length digital motion picture with sound effects!

**Fame and fortune could be a lab visit away**

![College of Music Lab](image)

*A visit to the College of Music lab and the School of Visual Arts lab provides a potential Stephen Spielberg, George Lucas, Wendy Carlos, or Danny Elfman with everything needed for creative fame and fortune. Featuring some of the*
fastest and peripheral-packed Macintosh and Pentium computers on campus, the Music lab provides over 40 workstations with electronic keyboards and several additional stations with scanners and digital audio recording hardware and software. A highlight of the lab is its two multimedia stations for video digitization projects and movie-making. Digital video cameras and digital audio recording equipment are also available for checkout. The School of Visual Arts lab also has an equal mix of powerful Mac and PC machines and the greatest variety of printing and scanning resources on campus. Slide and negative scanners as well as large-scale color printing are featured bonuses and a variety of multimedia software (way beyond PowerPoint!) is available for use. Though primarily utilized by art and music majors, these labs are general access labs and can be shared by everyone. Potential users should keep in mind that some restrictions may apply to more highly specialized and expensive equipment use and occasionally these facilities are reserved for the teaching of classes.

Leveling the playing field for disabled students

Another enhanced general access lab is the Adaptive Lab located in Chilton Hall, room 116. Equipped and staffed to meet the specific needs of UNT students with disabilities, the lab currently includes twelve Pentium II computers with 17-inch monitors, CD-ROM drives and zip drives. Two laser printers, a Braille printer and a scanner for text and pictures are also available. Adaptive equipment includes a Chroma Color TV, ergonomic keyboards and mice, and a screen polarization filter. In addition to the generally available software, specialized software includes JAWS (a screen reader), Megadots (Braille software for texts), Dragon Naturally Speaking (voice recognition), Zoom Text (screen enlarger) and Paperport (scanning and conversion software).

Lab Features
If a student is curious about the buzzwords "Linux" and "Open Source Movement" and what they mean for the future, he or she can check out the machines running the Linux operating system in the Academic Computing Services general access lab (ISB 110 - in the Science and Technology Library). The ACS lab is currently the only lab with Linux machines available for the general student population and plans to add even more to its Linux inventory in the next few months due to increased student demand. The ACS lab also features all currently available statistics software packages (S-Plus, SPSS, SAS) on Pentium III 600 MHz machines for optimal use. The statistics software can also be found in the COBA, COE, Chilton Hall, and many of the College of Arts and Sciences (CAS) labs. Additional mention should be made of the lab located in the School of Library and Information Science (ISB 205c) which has been specially designated for graduate student use.

All of the labs feature the Microsoft Office Suite, Netscape and Internet Explorer, ftp software, and terminal emulation software as part of their general computer menus. In addition to these resources, students will find an increasing amount of other standard lab features as managers continue to adapt their facilities to changing and expanding student needs. CD-ROM burners are becoming the norm rather than the exception in most labs and accommodation for the multimedia needs of WebCT-based course participants (headphone jacks, browser plug-ins) are provided. Currently the ACS lab and the Chilton labs feature the necessary plug-ins for the viewing, editing, and composing of texts and the internet in multiple language characters (Chinese, Japanese, Arabic to name a few) and the expansion of this type of access is planned in the other labs as practical and appropriate.

**The 24-7 lab**
This article would not be complete without mentioning one of the favorite lab features on campus: the 24-hour, seven-days-a-week access of the Willis Library lab where even the most ardent procrastinator or night owl can complete his or her project at 3:00 a.m. if needed or desired! The Willis Lab has recently upgraded all of its Pentium-based machines to PIII 800 MHz level with an upgrade of its Macintosh resources planned for next year.

There is a lab just right for you ...

The general access computing accommodations on the UNT campus are so vast and varied that many members of the university community are not even fully aware of all their many features and functions. Various resources are publicly provided for additional information. The official General Access Lab System Website is located at www.gal.unt.edu and contains information such as lab hours, locations, and phone numbers and a complete listing of all lab managers. Information about lab manager meetings (GALMAC, the committee of lab managers meets monthly) is publicly posted and interested students are welcome to attend. Pamphlets located at the Computing Center Help Desk (ISB 119) and in the labs clearly state lab locations, regulations, hours and contact information and include a handy map to each facility.

Additionally, students are urged to visit each of the labs and are strongly encouraged to make hardware, software, and service suggestions to the lab managers and to their student senators. As we begin our second decade of general access lab use, all UNT community members are also asked to be patient and courteous as well as mindful of lab regulations when taking advantage of these valuable facilities so that we may continue to enjoy the resources for many more years to come.

Elizabeth Hinkle-Turner is Student Computing Services Manager for the University of North Texas and the manager of the Academic Computing Services general access lab. She would like to thank the members of GALMAC and Cengiz Capan for much of the information for this article.
Lots O'Links

Compiled by Claudia Lynch, Benchmarks Online Editor

It's a new semester and time to highlight UNT Websites again. We're talking about sites that are of interest to the campus community but may have escaped your detection. The last time we printed such a list was in March. Listed below are some sites/pages that you may have missed. Many of these were covered in the March article, many more have been added.

General Links

- **UNT News and Events** -- This is the UNT News Service page. Things posted here are frequently associated with sources of funding, big expenditures, large gifts etc. Also covered are events that will be of interest beyond the Denton campus.

- **Events Calendar** -- Dates for major Metroplex and university-wide events are listed here. The purpose of this site is to aid you in planning an event so that it won't be conflicting with other events on campus or the Metroplex. Metroplex events include miscellaneous events in Denton, Bass Performance Hall in Fort Worth, Meyerson Center in Dallas, Texas Motor Speedway and Majestic Theatre in Dallas.

- **University of North Texas Press** -- According to their Webpage, the UNT Press has over 140 titles currently in print, with special emphasis in the areas of Texana, folklore, and multiculturalism. Various series are also published, including the Vassar Miller Prize in Poetry, and Publications of the Texas Folklore Society.

- **NT Daily** -- The Web version of UNT's student-run newspaper; "UNT's Online Community and News Source."

- **Printing Services and Copy Centers** -- Everything you need to know about the services available from these departments can be found from this page. Did you know that you can send things to be copied via GroupWise, the Internet, etc.? They also accept material on 3 1/2" disks and zip disks.

- **Mail Services** -- All sorts of information is available at this site for both intra- and inter-campus mail.

- **The Eagle Student Services Center** -- See details below.

- **Colleges and Schools** -- This is a handy page with links to all the colleges and schools at UNT.

- **Campus Master Plan** -- If you've ever wondered what the future holds for the UNT Denton campus, this site may be able to satisfy your curiosity.

- **UNT System Center at Dallas** -- the new center has a new homepage.

- **UNT Health Science Center at Ft. Worth** -- Homepage for UNTHSC.
• **Campus Chat Food Court** -- Hungry? This could be the site for you. Hours of operation and daily specials are listed on the menu page.

• **Avesta** -- Maybe you want something a little more restaurant-like, rather than the food court. You can experience gourmet cuisine without leaving the Union at Avesta, located on level 2.

• **The Club at College Inn** -- Yum! View the menu and reserve a table from this site.

• **VolUNTeer Center** -- According to their Web page, the VolUNTeer Center opened in January of 2000. The center is a collaborative effort between the Dean of Students (a division of Student Development) and the School of Community Service and their purpose is to provide the community a link between those who want to serve and those who need assistance.

• **UNT Top Ten Sites** -- Find out what the most popular UNT Websites are.

• **State of Texas** -- This is not a UNT site, but it should definitely be of interest to the campus community. Did you know that the State's Website was recently ranked number one in a university poll of state governments that have effective, efficient Websites? Well it was. Read all about it here.

**Faculty/Staff Related Links**

• **Employment Bulletin** -- Human Resources keeps this page up-to-date with the latest staff vacancies. There are currently quite a few computer-related positions:

  - TELECOMMUNICATIONS MANAGER (Computing Center/Telecommunications)
  - COMPUTER SYSTEMS MANAGER II (Computing Center)
  - COMMUNICATIONS ANALYST III/VIDEO (Computing Center)
  - PROGRAMMER ANALYST II (Computing Center)
  - PROGRAMMER ANALYST I (Computing Center)
  - PROGRAM/PROJECT COORDINATOR I (STATISTICAL SUPPORT) (Texas Center for Educational Technology)
  - COMPUTER SUPPORT SPECIALIST III (Public Affairs & Information Services)
  - PROGRAMMER III (Computing Center)
  - PRODUCTION CONTROL SPECIALIST I (Computing Center)
  - COMPUTER EQUIPMENT OPERATOR II (Computing Center)

UNT is also now posting job openings on the NationJob network.

• **Human Resources NewsFlash** -- Find out the latest Human Resources news on this page.

• **Employees Retirement System of Texas** -- Not exactly a UNT link but one that is definitely worth bookmarking if you are in ERS and/or use
insurance supplied by UNT.

- **Student Employment Services** -- Besides providing information about part-time employment opportunities for currently enrolled students, this site also has a Reference Manual for Supervisors of Student Employees, Training Opportunities, Sample Employment Forms for review, Sample Student Employee Evaluation form, and a Sample Student Employee Expectations sheet.

- **Faculty Senate** -- Home of the Faculty Handbook, among other things.

- **Faculty/Staff Fitness Program** -- The Fall 2000 registration form is available here, as well as fitness program information.

- **Legal Affairs** -- Officially called the "Office of the Vice Chancellor and General Counsel," this group states that the aim of their Website is "to provide useful legal information to those we serve and to provide a schedule of legal events offered. We encourage you to explore and use this information site, and to allow this office to be your legal link to the University, the Health Science Center at Fort Worth and our Systems Center in Dallas."

- **Office of University Planning** -- According to their Website, "The purpose of the Office of University Planning is to collect, analyze, maintain, and disseminate information about the university for purposes of planning, decision-making, and the overall successful operation of the institution as a whole, and to facilitate and coordinate the university strategic planning process." The 1999-2000 Fact Book is accessible from there as well as the results of surveying students and former students.

- **University Policy Manual** -- Provided by the Office of University Planning, this site deserves its own entry due to the importance of the information contained here. This site is continually updated as policies are added, changed, or made obsolete.

- **Texas State Library and Archive Information** -- Not a UNT link, but one that has a lot of useful information, particularly in relation to State agencies. TRAIL (Texas Records and Information Locator service), for example, provides access to information from over 150 Texas state agency Web servers.

### Student Related Links

- **Calendars, Schedules & Catalogs** -- Pretty much what the name implies. The current Academic Calendar goes through 2001.

- **Student Employment Services** -- Student Employment Services (SES) provides part-time employment opportunities for currently enrolled students. They also host job fairs and help students get off-campus jobs.

- **Study Abroad Center (SAC)** -- Like the Website says, visit here to learn how to "Go Away!".

- **Student Health Center** -- All kinds of important information is available at...
this site geared especially to students. There is even an online form for prescription refills.

- UNT Dining Services -- Everything you ever wanted to know about residence hall dining can be found at this Website.

- The Eagle Student Services Center -- This Website was launched last February. All of the services located within the building have moved their Web presence to this site or can be reached through this site. That includes the following offices:

  Undergraduate Admissions  
  Graduate School/Admissions  
  Registrar's Office  
  Student Financial Aid and Scholarships  
  Student Accounting and University Cashiering Services  
  Campus Operators

  A new feature has been added for students called "My Financial Aid." Also the online Centranet directory is now included on the Campus Operators page.

- Electronic Preparation and Filing of Theses and Dissertations -- The Toulouse School of Graduate Studies is now requiring that all theses and dissertations be in electronic form.

- External Funding for Graduate Students -- Although this isn't a UNT-based resource, it is a resource that is supported by The Office of Postgraduate Fellowships. There are over 300 opportunities (conveniently divided into disciplines and areas) available through the courtesy of Cornell University. The categories listed there include:

  General  
  Biological Sciences  
  Humanities  
  International Students  
  Minorities  
  Physical Sciences  
  Social Sciences  
  Summer  
  Women.

  Dr. James Duban, Director of the UNT Office of Postgraduate Fellowships, urges graduate students to consult that Web page, to secure application forms through the E-mail addresses listed there, and to contact him (jduban@unt.edu; Tel.: 940/565-2820) to set up a series of appointments to obtain feedback on application essays.

- Laboratory for Recreational Computing -- The blurb on the Website says it all: The Laboratory for Recreational Computing (LARC) was established at the University of North Texas by Ian Parberry in 1993 to train students as game programmers. The Laboratory is a crucible for creativity and originality, and stresses extracurricular educational activity, cooperative learning, and group activity on large programming projects.
We concentrate on Windows game programming using Microsoft DirectX.
Getting Wise to GroupWise

By Claudia Lynch, Benchmarks Online Editor

We publish articles on various aspects of GroupWise, the official mail system for UNT faculty and staff members, on an almost monthly basis. Last month, as a part of the article "News You Can Use," we provided links to many of the articles on GroupWise that have appeared in Benchmarks Online in the past. This month we have expanded on that idea to give you, we hope, what will become for you a definitive source of helpful information on GroupWise (at least for a little while). Please note that articles on GroupWise 5.2 are included because many features remain the same across versions of the software.

Benchmarks Online Articles

- **Making Your GroupWise Mail Immortal** *(October 1998)* -- If you don't take steps to prevent it, each of your GroupWise mail messages will be deleted when it is 180 days old. This article instructs you on ways to ensure that your messages live on, long after their targeted day of expiration. [There are some broken links in this article due to it's age but the information in the body is still valuable -- Ed.]

- **GroupWise 5.2 Proxy** *(January 1999)* -- Proxy is defined by Webster's Dictionary in part as: "authority or power to act for another." With GroupWise Proxy that is exactly what you will be able to do. Proxy allows you to define who you wish to have access to your mail, calendar, notes, tasks, alarms and notifications.

- **GroupWise 5.2 Calendar: The Basics** *(February 1999)* -- The most requested feature of GroupWise, besides creating and reading mail, is the calendar. This article will help you to make better use of this very useful tool!

- **GroupWise 5.2: When You're Away** *(March 1999)* -- Did you know you can access your GroupWise mail from anywhere in the world? Find out how in this article.

- **GroupWise 5.2 and Outlook 98** *(April 1999)* -- If you have been wanting to use GroupWise and Microsoft Outlook on the same PC, this article is for you. It also addresses some issues with Outlook and UNT Internet Services E-mail.

- **Accessing GroupWise E-mail From Home** *(August, 1999)* -- The GroupWise client that you use at work is now available for you to use from home. If you have an Internet connection, either with a UNT Internet Account or through a separate Internet Service Provider, you can access your GroupWise E-mail box from home.

- **Mass Document Operations In GroupWise** *(July, 2000)* -- Sometimes it is necessary to make changes to a large number of documents at one time. With "Mass Document Operations," you can achieve this with very little
complication.

- **Routing Messages in GroupWise** *(June, 2000)* -- Have you ever written E-mail that you wanted to send to a group of people in a certain order? Well, here's your opportunity to start doing it.

- **HTML Formatting in GroupWise 5.5** *(May, 2000)* -- Did you know that the GroupWise 5.5 extended client allows you to "webify" your E-mail? Now your mail messages can be just as colorful and creative as a Web page.

- **GroupWise 5.5 Enhancement Pack CD Available for Home Use** *(February, 2000)* -- The GroupWise 5.5 Enhancement Pack Client is now available. It is being installed around campus and you can also check it out for home use. Significant updates and new features are highlighted in this article.

- **GroupWise Document Management** *(February, 2000)* -- Although GroupWise is initially an E-mail client, there are other features of GroupWise that are now available to the user since the recent upgrades. One of these features is GroupWise Document Management Services. The document management feature is actually quite impressive and a good fit with the functionality of the GroupWise client.

- **GroupWise Document Management: Storing Documents** *(March, 2000)* -- This is the second in a series of articles on the topic of GroupWise Document Management.

- **GroupWise Document Management: Creating Documents** *(April, 2000)* -- This is the third in a series of articles on the topic of GroupWise Document Management.

- **GroupWise Document Management: Checking Documents In and Out** *(May, 2000)* -- This is the fourth in a series of articles on the topic of GroupWise Document Management.

- **Large Group E-mail Guidelines** *(August, 2000)* -- Did you know that "bulk mail" sent through GroupWise is supposed to be for UNT business only? Find out about the official UNT policy on mass mailings via GroupWise, and more, in this article. Information on "Managing GroupWise 'Everyone Mail'" is included.

**Other GroupWise Information**

**CWN Documentation**

The definitive source of GroupWise information on campus, besides this article, is the Campus Wide Networks (CWN) Computing Team's GroupWise Website. From this site you can read and/or download:

- **GroupWise Users Guides**, including:
  
  GroupWise 5.5 - User's Guide for Windows 32-Bit
Getting Wise to GroupWise

GroupWise 5.5 - WebAccess User's Guide
GroupWise 5.2 - User's Guide for 32-bit Windows
GroupWise 5.2 - User's Guide for 16-bit Windows
GroupWise 5.2 - User's Guide for Macintosh

- **GroupWise 5.5 Enhanced Client Computer-based Training (CBT)**
- **End-User FAQ**
- **Remote Access FAQ**

HelpDesk FAQs

Other tidbits of GroupWise information are available in the HelpDesk FAQs:

- **FAQ: Sending mail to the Internet from GroupWise mail** -- This FAQ includes information on both "Sending E-mail to the Internet from GroupWise" and "Sending mail from an Internet mail client (Pine, Simeon, etc.) to GroupWise."

- **FAQ: GroupWise E-Mail Access From Home** -- Instructions on accessing GroupWise E-mail from home via the Internet.

- **FAQ: E-Mail Addressing Conventions** -- Answers the question "How do I send E-Mail to someone who is using a different E-Mail system than I am?"

- **FAQ: I want to check my GroupWise E-Mail using the same client I use on my office machine. How do I do this?** -- FAQ answers this question. See also "Accessing GroupWise E-mail From Home" above.

- **FAQ: GroupWise and the Warning about Identify Certificate Expired** -- Learn what to do if you encounter this problem.

1 For a trip down memory lane see "Electronic Mail at UNT," which details the history of campus-wide E-mail here at UNT.
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