Benchmarks Online

Volume 2 - Number 9 * September 1999

Feature Articles

Campus Computing News

More great news from Dr. Leatherbury about 56K modem dialup ports and cheap Microsoft CDs. He touches on Year 2000 issues also.

McAfee Deploys New SuperDat Updates

You can now update your McAfee virus scanning software on a weekly basis. This will give you better protection from the latest viruses. Wil Clark tells you all about it in this informative article.

Forwarding Your UNT Internet Account

Sometimes people purchase UNT Internet Accounts so that they can use UNT computing facilities from home, but they would prefer to read their mail from another E-mail account. You can do that with mail forwarding.

What's My EUID?

According to the Computing Center Helpdesk, this is the most common question they have been asked this semester. Do you know the answer?

New UNT Event Calendar

Public Affairs and Information Services has announced a new and improved UNT Event Calendar. Read all about it.

Subscribe to Benchmarks *Online*

New Online Library Service

The UNT Libraries have recently announced the establishment of an Online Reference Help Desk. There is even a "virtual librarian."

Computer Memory

Duane Gustavus, UNIX Research Analyst, tells you everything you've always wanted to know about computer memory.

RSS Matters

By [Kyung-Tae (Austin) Kang](#) , Ph. D. candidate, Department of Political Science

My Best Summer at the ICPSR

There may be many ways for UNT students or faculty to kill a hot Texas summer: travelling overseas, going to the beaches, visiting families or taking courses at UNT. Another way of having a unique experience during the summer is taking courses at The Inter-university Consortium for Political and Social Research (ICPSR), located at the University of Michigan.

How much does it cost?

In terms of costs at studying at Ann Arbor, tuition and fees are quite diverse. One credit hour for Michigan non-residents is approximately $1,072 (this may not be changed next year) and fees for registration without academic credit per week are $850 and $2,000 for five-eight week courses. Since I took a one-week course, I had to pay $850. Actually, I didn't have to pay the fee personally because I was sponsored by UNT. I received $400 from the ICPSR through the University's membership and about $500 from the Department of Political Science. All I had to pay by myself was for airfare ($210), food ($300), boards ($230), and others ($100) during nine-day stay.

What about the courses?

ICPSR has many different kinds of statistical or methodology courses that are very useful for quantitative studies in social sciences -- lasting one to eight weeks. Students learn six to eight hours a day in longer courses or two to three hours in shorter courses. Courses offered last summer included: Latent Trajectory/Growth Curve Analysis, Mathematics for Social Scientists, Introduction to Statistics and Data Analysis, and Maximum Likelihood Estimation for Generalized Linear Models.

Prospective participants can choose a course that is convenient for their specific summer situation. Since I had been interested in LISREL programs, I took Structural Equation Model (SEM) II that was open August 2-6 (you need to register early, the classes fill up quickly). The class was composed of lectures in the morning and hands-on computer practice in the afternoon. There were ten students in the class, five or six of them were professors. Some were teaching methodology courses and aimed to improve their knowledge on SEM specifically.

How about the instructors?

One excellent benefit of studying at ICPSR during the summer is the instructors. It is is not uncommon for them to be well-known scholars in the country (sometimes coming from overseas). My instructor was Kenneth Bollen from the

University of North Carolina at Chapel Hill. He has published many books and articles related to SEM and he has also created several tests used in SEM for goodness of fit models. He was very kind and nice as well as knowledgeable. During a reception on the first day of the program and later at a luncheon he talked about his family, his former job at GM and current research projects and so on.

Of course, there were lots of articles and books to read for assignments. I could not sleep more than five hours a day. There were several libraries on campus. The Graduate Library had only several tables and looked like only a place for looking for books and articles. I studied at the Undergraduate Library that had many tables and chairs, like many other regular libraries. The facilities looked good. I usually studied until 2 a.m. and went back to my dorm and then went to bed.

How were the accommodations?

The dorm (Helen Newberry) was not equipped with air-conditioners. I thought summer in the northern part of the U.S. might be cooler, especially at night. Yet, my first night at the dorm was horrible! It was as hot as Texas and humid as well. My room was small with only one window. I could not sleep at all. I went outside the dorm and had to buy something to overcome the hot night: beer and cigarettes. The next day, I asked administrators in the dorm to change my room. They hesitated at first, but later gave me a new room. It was bigger and had two windows facing two separate directions, giving me more air circulation through the windows. The next day, the weather suddenly became cool and was like fall already. The weather was nice and there were many new, valuable things to learn. That was the best summer in my whole life!

More Information

For more information on the ICPSR, you can visit its homepage at http://www.icpsr.umich.edu, or contact the RSS office (565-2140, 565-4066) or UNT's Official Representatives. They are Dr. Philip Baczewski in Academic Computing Services (565-3886) and Dr. Jim Meernik of the department of Political Science (565-4233).

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* As a member of the ICPSR, the University of North Texas receives an annual stipend from the consortium in the form of tuition for summer courses. Please check with the RSS office or one of the UNT ICPSR Official Representatives for more details.

Network Connection

By **Dr. Philip Baczewski**, Associate Director of Academic Computing

An Etiquette of E-mail

*For this month's Network Connection, I've reached way back in the files of this column to retrieve an article that was originally published in April of 1991, when the column was called "The Bitnet Connection." I had decided to revisit the subject of E-mail etiquette and appropriate use and looked at this old column as a reference. What I found out was that the advice I published in 1991 still holds true today. The only difference is that now more people than ever are using E-mail but not following these guidelines. The only change made to this reprint was the removal of two references to BITNET. The only explicit advice I'd add to the discussion below is: **be sure not to reply to everyone when only one person needs your response!** Hopefully, you will find it as useful as I have in the last ten years of following these guidelines. - pcb*

Back in the "old" days people were forced to perform their communication through writing, by hand, on blank sheets of paper and then conveying those blank sheets to others. It is even reported that the U.S. Postal Service, today known primarily for its ability to deliver multitudes of "junk mail" and bills to your door, conveyed large numbers of these hand-written communiqués, known as "letters." The exchange of letters tended to foster a certain style of communication: letters were received and thoughtfully read; letters were generally more formal than spoken communication; letters had permanence and could be saved for later reference; in responding to letters, people would often think and then write one sentence, think and write another sentence, etc. Now days, electronic mail has revolutionized communication. There is no need for paper or messy hand writing utensils. You no longer have to use that formal writing style. Mail is received and read with heretofore unknown speed. It's now possible to dash off a reply to an electronic mail message without even thinking.

No Flames Please

Well, maybe it's not quite that cut and dried, but electronic mail does seem to have the ability to evoke what are known in E-mail circles as "flames:" emotional responses to messages which don't necessarily do much for fostering effective communication. Norman Z. Shapiro and Robert H. Anderson, in a report prepared for the National Science Foundation and published by the Rand Corporation, list several possible causes for the flame phenomenon[1]:

- Difficulty in determining the formality of a message from its appearance;

- Attempts at humor, irony, sarcasm, and wit are often misinterpreted;

- Cues such as body language [or voice inflection] are lacking in electronic mail;

- The ease of an immediate "reply" encourages "off the top of the head" responses;

- Electronic messages containing hasty or ill-chosen words can stay in electronic in boxes or can be printed in a way that gives them importance never intended.

Although anonymity is often mentioned as a factor, we have observed no significant difference in "flaming" between remote correspondents who don't know each other personally, compared with communication among people who know each other.

Shapiro and Anderson go on to give several suggestions for minimizing the possible problems of "escalating emotions:"

- Carefully label message that have a deliberate emotional content. Sometimes just the annotation "Flame! Flame!" alerts the reader to the fact that the writer knows he or she is being emotional;

- Resist the temptation to fire off a response. Write the response, file it away, and wait 24 hours. Reconsider the response later, in the light of a new day (and perhaps a rereading and reinterpretation of the original message);

- Use alternative media to break the cycle of message-and-response. A telephone call or personal conversation can do wonders, when we can use body language, eye contact, and the other cues we've developed.

The Etiquette

Just as in other human situations, the development of an etiquette can help solve some of the problems which potentially arise with electronic communication. John Quarterman, in his book entitled The Matrix, offers a number of suggestions concerning E-mail etiquette when sending messages to others or posting messages to LISTSERV or USENET lists2:

- **Electronic mail is not like other media**. Treating E-mail just like the telephone, paper mail, or any other medium can lead to misunderstandings and mistakes.

- **Emulate experienced users**. See how those already posting to mailing lists make the most effective use of those forums.

- **Be brief**. Often a few well-chosen words are better than long-winded elaborations.

- **Label your message**. Choose a title that fits the subject and stick to it.

- **Remember your audience**. Use language, references, and subjects that will be comprehensible and not objectionable.

- **Choose an appropriate medium and forum**. Use a conference or mailing list on a topic related to that of your message.

- **Identify yourself**. Sign your message with some appropriate information such as your name and affiliation.

- **Post new ideas**. Try not to repeat what has already been said except in brief confirmation.

- **Respond to the topic and not the person**. Try to understand what the person is saying. If you can't understand what the person is saying, ask. If you must criticize someone, give them a chance to respond. If you comment on the style of a message, respond to the content as well.

- **Read other messages before responding**. Others may have already made the same obvious response.

- **Don't respond in anger**. Wait a few minutes or hours, or even until the next day. If you are still angry when you respond, say so.

- **Give the benefit of the doubt**. Mistakes, misunderstandings, and ignorance are far more common than maliciousness.

- **Be careful with humor and sarcasm**. Many people have trouble recognizing these things even in person. Some networks have developed typographic conventions to get around the difficulties of expressing subtleties of expression through ASCII characters. One of the more universal is that UPPER CASE means shouting. Another is the use of the sideways "smiley face," :) or :-), to indicate lack of serious intent.

- **Do be encouraging and polite**. The most effective encouragement is often a simple response acknowledging a posting.

- **Discourage when necessary**. But do it privately and politely when possible. Don't discourage at all unless you're sure it's needed and that you are an appropriate one to do it.

- **Assume Permanence and ubiquity**. Mail posted to discussion lists and sometimes even mail to individuals may be saved permanently, with or without your knowledge, and may be read by anyone, at any time, anywhere. Remember that even if a mail message has been delete, it may exist somewhere on a backup tape.

The Ethics

It's not enough just to observe etiquette. Quarterman also provides some valuable guidelines for e mail ethics.

- Observe copyrights.

- Cite sources.

- Be careful with private correspondence. Do not redistribute private correspondence without permission. Don't read other people's mail without permission. If you receive a message by accident, return it to the sender or forward it to the intended recipient.

- Be honest. Don't distribute false information, and don't pretend to be someone you aren't in order to take unfair advantage of someone else.

- Someone is paying the bills. Remember that what you post may cost others time and money.

- Try to stick to useful information distributed to appropriate people.

- Don't post harmful instructions or information.

- Resource sharing systems are not like anything else. **A computer network is neither like a home computer system nor like any other single computer system. The damage that can be caused by mistakes or malevolence increases with the power and extent of the system.**

- People depend on networks and conferencing systems.

Don't leave a security hole unfixed. This applies to system administrators, system vendors, and users who choose obvious passwords.

- Don't use security holes to cause damage.

Some of these points of etiquette or ethics are obvious; others perhaps wouldn't occur to you. By following these guidelines we can make electronic mail a very effective and efficient means of communication. Or we can wax nostalgic for the good "old" days of paper, fountain pens, envelopes, stamps, waiting five days to get a letter....

References:

1. Shapiro, Norman Z. and Robert H. Anderson, "Toward an ethics and etiquette for electronic mail." Rand report number R-3283 (Rand, 1985).

2. Quarterman, John S., *The Matrix* (Digital Press, 1990): 34.

Comments, Questions? Send them to [Philip Baczewski](mailto:).

List of the Month

Each month we highlight one Internet, USENET Special Interest Group (SIG), or similar mailing list.

The Free Site

Who can resist something for nothing? If you are on a budget and/or really like a bargain, then you will enjoy *The Free Site*. Just point your browser to http://www.thefreesite.com and see what is billed as the "largest and most popular site devoted to the topic of freebies on the Net." The site lists **hundreds** of freebies, along with critical reviews of them so you don't have to bother with anything you're not interested in, and they get nearly two million visitors per month!

They also have an E-mail newsletter that keeps you up-to-date on the best in free stuff so you don't miss anything good. You can subscribe by visiting the site and filling out a short form.

WWW@UNT.EDU

By Mark Wilcox, Campus Web Administrator

FrontPage Server Upgrades

If all goes as planned, we are upgrading the FrontPage server extensions on our central FrontPage capable servers (www.unt.edu, www.art.unt.edu, www.econ.unt.edu, www.sportpsych.unt.edu, orgs.unt.edu and www.workteams.unt.edu) on Friday, September 24. This upgrade will enable those users who have FP 2000 to be able to use all of FP 2000 new features such as document check-in/out (which you use for multiple author sites).

If you are using FP 97/98 or FP 1.0 for Mac, you shouldn't experience any problems. If you do have problems, contact the Helpdesk at 565-2324 or send a message to CWS at www@unt.edu. Central Web Support's FrontPage resources are at http://www.unt.edu/webinfo/

Site Recommendation

If you've ever wondered what I do in my "spare time," now you'll know. I read trade magazines and browse sites like this: http://udell.roninhouse.com/ It's the home of John Udell, who used to be a columnist with BYTE magazine. He now specializes in writing for other online zines and O'Reilly about Internet groupware. Check out the neat articles.

Until next time.

Mark

Short Courses

By Claudia Lynch, *Benchmarks* Editor

Short courses for the fall will commence September 29. There is still time up to sign up for classes in Computer Tools for Research, SPSS, SAS, S-Plus, Creating a Homepage with Netscape, and Creating a Homepage with FrontPage, and more. We have four **new classes** this semester also:

1. Introduction to Student E-Mail at UNT

2. Using Statistical Applications on ACS UNIX Systems

3. New Technologies for Survey Research I

4. New Technologies for Survey Research II

These classes are all **free** for UNT students, faculty, and staff members. Please consult the Short Courses page for course descriptions and registration.

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 Windows 95, PowerPoint, Video Conferencing, and a series of classes concerning putting course materials on the World Wide Web using WebCT®.

The center 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. Each meeting is followed, for those interested in using WebCT®, by a one hour orientation for beginners in ISB 203. 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 98 and information architecture in the past. For more information visit the Multimedia Development Lab's home page at http://www.library.unt.edu/mmdl.

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.

Alternate Forms of Training

The Training 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

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* The next Brown Bag will be on Thursday, October 7, from 12:00 1:00 p.m. in ISB 204. Professor Carol Simpson of the School of Library and Information Sciences will be discussing her second WebCT course. A brief orientation session for WebCT will be held following the session in ISB 203 from 1-2 p.m.

IRC News

Minutes provided by Sue Ellen Richey, Recording Secretary

INFORMATION RESOURCES COUNCIL MEMBER LIST

There was no IRC meeting in August and the September minutes are not currently available. The membership list has been revised however. The table below reflects the current membership.

NAME	AREA REPRESENTED	E-MAIL ADDRESS	OFFICE LOCATION/ PHONE #
Philip Turner, Chair	School of Library & Information Science and University Planning Council		ISB, 2445
John Windsor	College of Business		BUS 338E, 4147
Carolyn Cunningham	Student Affairs	DSA:CUNNINGH (GW)	UB 3rd Floor/3796
Jon Nelson	College of Music		
Robert Nimocks	Dir., Information Technology - UNT Health Science Ctr.		Ft. Worth HSC/817/
Ginny Anderson	Fiscal Affairs		Admin. 102, 3230
Judith Adkison	College of Education		
Donna Asher	Administrative Affairs		Marquis Hall 150/2281
Jim Curry	Academic Administration		
Ramu Muthiah	School of Community Services		Chilton 255/3460

Kathleen Swigger	College of Arts & Sciences	IN:SWIGGER@CAS.UNT.EDU	GAB 451/2817
Sue Byron	Faculty Senate		
Russ Pensyl	School of Visual Arts		
Allen Livingston	Graduate Student Council		
David Griffiths	Student Association	dg0005@jove.acs.unt.edu	
Dan Mauldin	University Planning Council		
Patrick Pluscht	Distributed Learning Team		Academic Affairs/4936

Ex-officio Members (Voting)

NAME	AREA REPRESENTED	E-MAIL ADDRESS	OFFICE LOCATION/ PHONE #
Virginia Wheeless	Chancellor, for Planning and University Planning Council	ABN:WHEELESS (GW)	Adm. 301/2085
Steve Oeffner	UNT Health Science Ctr. Chair, Info. Resources Council		Ft. Worth HSC/817/735-2131
Paul Schlieve	Communications Program Group		
Joneel Harris	Administrative Program Group	CC1:JHARRIS (GW)	Admin. 122/2748
Mark Rorvig (Acting Chair)	Research Program Group		
Elizabeth Hinkle-Turner	Standards & Cooperation Program Group		
Jenny Jopling	Instruction Program Group	CC1:JOPLING	Marquis Hall 229/4462
Don Grose	Libraries	LIBRARY:DONALD (CCMail)	Lib. 223/2411

Ex-officio Members (Non-voting)

NAME	AREA REPRESENTED	E-MAIL ADDRESS	OFFICE LOCATION/ PHONE #

Richard Harris	Computing Center and University Planning Council	CC1:HARRIS (GW)	ISB 235/3853
Coy Hoggard	Computing Center/Administrative	CC1:HOGGARD (GW)	ISB 235/3855
Maurice Leatherbury	Computing Center/Academic	CC1:MAURICEL	ISB 121/3854
Jim Curry	Microcomputer Maintenance Shop	AGN:JIMC (GW)	GAB 529/2387
Leslie Bowden	Telecommunications		HOSP 204/4299
Michael Forster	Health Science Center		
Bill Buntain	Computing Center, Network		
Sue Ellen Richey	Recording Secretary	CC1:SUE (GW)	ISB 235L/3859

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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.

All meetings of the IRC, its program groups, and other committees, are open to all faculty, staff, and students.

Staff Activities

Transitions

We welcome the following new employees:

- **Suresh Chitturi**, I/O operator (part-time).

- **Ben Howard**, Helpdesk Microcomputer Consultant (part-time).

- **Manohar Yanamala**, I/O Consultant (part-time).

- **Adam Rubenstein**, I/O Consultant (part-time).

- **Rajesh Khullar**, I/O Consultant (part-time).

- **Onn-Pooi Lee**, CPU Operator (part-time).

- **Shane Jester**, Web Developer, UNT Central Web Support.

- **Christian Weimer**, Campus Information Operator (part-time).

- **Mithoon Karam**, I/O Consultant (part-time).

- **Nagraj Arya**, I/O Consultant (part-time).

- **Blake Broyes**, ACS Lab monitor (part-time).

- **Ronnie Crim**, ACS Lab monitor (part-time).

- **Eric Gody**, ACS Lab monitor (part-time).

- **Hamid Tenouri**, ACS Lab monitor (part-time).

The following people no longer work in the Computing Center:

- **Ty Young**, ACS UNIX Systems Administrator, accepted a position as UNIX Systems Administrator at i2 Technologies, Inc. in Dallas.

- **Amy Moreland**, ACS Lab monitor (part-time).

- **Brandon Wilkerson**, ACS Lab monitor (part-time).

- **Nahareen Alam**, Report Distribution Clerk (part-time).

- **Dhanyu Amrasinghe**, Report Distribution Assistant (part-time).

- **Srinivas Vemula**, I/O operator (part-time).

- **Ravi Bhamidipati**, I/O operator (part-time).

- **Yan Boon (Philea)**, I/O Consultant (part-time).

Smita Makthal, I/O Consultant (part-time).

- **Satish Pudi**, I/O Consultant (part-time).

- **Jamie Courville**, ACS Lab consultant (part-time).

- **Srihari Jellapuram**, I/O operator (part-time).

Publications, Presentations

- **Dr. Karl Ho**, Research and Statistical Support Services Manager, attended the 1999 American Political Science Association Annual Meeting September 3-4, 1999. It was held at the Atlanta Hilton and Towers, Atlanta, Georgia. He presented two papers at sat on two panels. The papers are:

  "Tales of Three Parties: Modeling the East Asian Voter (in Taiwan and Korea)", co-authored with Dr. Alex Tan of the UNT Political Science department and two Ph.D. students, Max Yu and Austin Kang, of the UNT Political Science department .

  "Bound Competition, Tolerance, and Human Rights in Latin America", co-authored with Dr. John King of American University

Campus Computing News

By **Dr. Maurice Leatherbury**, Senior Director of Academic Computing

Dial-up with 56K Modems

The Networking and Communications Services department of the Computing Center has upgraded the software on many of our dialup ports to support the recently-ratified V.90 standard for modems. That standard, although designed for modems that are sold as "56K" modems, specifies that a maximum of 53 thousand bits per second is possible on standard phone lines. You may not (probably will not!) be able to get a full 53Kbps connection, but you're likely to see a higher speed than you're used to seeing if you have a V.90-capable modem. If you have a modem that supports the older "KFlex" protocol, you'll still be able to connect at the higher speeds afforded by that protocol. Of course, if you're really addicted to speed, we do offer ISDN connections at true 64Kbps for single lines and 128Kbps for dual lines.

As of the end of September, 1999, the following is our configurations of dialup lines and the protocols they support:

Denton	Premium -- 212 lines (V.90 & 64K or 128k ISDN)**
	General -- 47 lines (V.34 & 64k ISDN)
DFW	Premium -- 47 lines (V.90 & 64 or 128k ISDN)* **
	General -- 23 lines (V.90 & 64k ISDN)*

*ISDN and 56k services are not available to Fort Worth residents.

**We restrict Premium lines to seven subscriptions per line to prevent busy signals, so the Denton Premium service can support 1,484 subscribers at this time.

Microsoft CDs Now Available for Employee Purchase

Employees of the University (including student workers) can now obtain the following Microsoft software packages in the UNT Bookstore under our recently-implemented Microsoft Campus Agreement:

- Windows 98 and Windows NT 4.0 Workstation operating upgrades (one CD each)

- Office 2000 Professional (two CD's)

- Office 98 for the Macintosh (one CD)

- Office 97 (one CD, by special order in the Bookstore)

- FrontPage 2000 (two CD's), FrontPage for the Mac (one CD)

- FrontPage 98 for Windows (one CD, by special order)

- Visual Studio Professional (five CD's)

- Microsoft Press Office Step by Step for Office 2000 (one CD, but won't be released until some time in the near future)

You can purchase the distribution CD's in the trade book section of the UNT Bookstore for $7.00 per CD plus tax. The details of your rights and responsibilities under the Agreement can be found at: http://www.unt.edu/dcsmt/campusagreement.htm (you are required to sign a copy of that form when you purchase any of the CD's.)

Documentation and technical assistance on the products are not part of the Campus Agreement, so you'll need to purchase books on how to use the products separately (there are numerous ones on most of these packages for all levels of expertise.)

Year 2000 Compliance Checking Software Being Investigated

The Computing Center is investigating software packages that purport to check other software packages for Year 2000 compliance. The goal of the investigation is to select and purchase a product or several products that will assist the campus in identifying potential problems with **desktop** application software packages that are now in use. The products that we're looking at perform such tasks as checking whether a particular package has been certified by its manufacturer as being Y2K compliant, checking whether data formats in various types of files are potential problems, and even checking whether date values in some data fields could cause erroneous calculations. For example, one package claims to check whether two-digit or four-digit dates are entered into Excel spreadsheets. Sandy Burke (extension 3856) is spearheading the investigation of the various checking products and the results of the evaluation will be published in various fora when we feel confident that the best product(s) have been selected. Computer users on campus will be notified by their network managers when the checking packages are ready for use.

McAfee Deploys New SuperDat Updates

By [Wil Clark](#), ACS General Access Lab Manager and Campus Virus Guru

Most of us are familiar with the way virus protection software works. You purchase anti-virus software, install it on your machine and it alerts you when you get a computer virus. And many of us know that the software is only as good as the list of viruses that the software knows about. And so you dutifully download and install new virus definition files periodically. What? You don't update your virus scanning software regularly? Well here is the scoop…

Virus Definition Files

The virus definition files (called Dat files in McAfee VirusScan) tell the virus scanning software about known viruses. The software then compares the files on your computer to the know list of viruses and lets you know if you have a virus. So if you are using Dat files over a month or even a week old then you are not fully protected against possible viruses.

McAfee currently updates its Dat files once a week. Lately it has been adding 30 to 80 new or variant viruses each week. As you can guess, your anti-virus software can become outdated very quickly. As if this was not enough, your software not only needs to know about new viruses it also needs to know how to detect or clean some new viruses. This requires a scan engine update. The scan engine updates happen less frequently than Dat file updates but are no less important.

SuperDat

McAfee has recently implemented steps to make the process of updating both Dat files and the scan engine easy using a file called a SuperDat. If you take care of updating your own copy of McAfee VirusScan you are probably familiar with the updates you can download from McAfee's or UNT's virus Web pages. Now you can download the SuperDat from those same Web sites and be assured of updating both the scan engine and Dat files.

The SuperDat is easy to use. Simply download the file and run it. To run it you generally double click on it. Then the SuperDat wizard walks you through installation. You will typically need to reboot your machine when you are done. During this reboot the files are actually installed. You may receive a message that the Dat files are missing or corrupt. You can ignore this message the first time you reboot after installing the SuperDat. Keep in mind that you will want to contact your network administrator before using this on your UNT computer. But for your personal computer you will want to make this a habit.

SuperDats are released weekly, typically on Wednesdays. You can download a copy from http://www.unt.edu/virus/Distribution This Web page is restricted to the UNT network so you will have to be on campus or use a UNT Internet

Services Account to access them.

Stay tuned . . .

Next month we will show you how to automate your virus protection updates.

Forwarding Your UNT Internet Account

By [Claudia Lynch](#), Benchmarks Online Editor

Sometimes people purchase UNT Internet Accounts so that they can use UNT computing facilities from home, including our connection to the Internet, but they would prefer to read their mail from another E-mail account. This is particularly true of faculty and staff members who get most of their mail in GroupWise.

It is important for you to make sure you be are able to read mail sent to your UNT Internet Account because that is where expiration notices and other official communications are sent regarding your account. If you have not set up forwarding so it will go to your preferred E-mail account (in GroupWise, Pegasus Mail, or something else), then your messages will sit in your Internet E-mail account unread. You can make sure those messages are automatically forwarded by doing the following:

1. Go to http://people.unt.edu/manage
2. Log in using your Internet ID and password.
3. Once logged in, you can select "Forward your Mail". If you are forwarding to GroupWise, you will need to put in the entire address, for example: jdoe@CC.ADMIN.UNT.EDU If you have an alias, you can use that -- i.e. jdoe@unt.edu
4. Click on "Exit UIS Management System".

What's My EUID?

By Claudia Lynch, *Benchmarks Online* **Editor**

According to the Computing Center Helpdesk, the most common question they have been asked this semester is: "What's my EUID?" EUID stands for "Enterprise UserID" and has been created to simplify access to computer resources across campus. This EUID is created as soon as your fees are paid (if you are student) or as soon as your forms are processed by Human Resources (if you are a faculty or staff member).

The EUID is used by several systems on campus as your UserID so that you don't have to remember as many UserIDs when accessing UNT computer systems. Some of these systems include UNT Internet services, WebCT, and UNT Libraries.

If you have an account via the UNT Internet Service then your EUID is your UNT Internet Account. IF you are not sure what your EUID is, you can find out at the "What's My EUID" Web page.

New UNT Event Calendar

By [Claudia Lynch](#), *Benchmarks Online* Editor

Public Affairs and Information Services has announced a new and improved UNT Event Calendar. It was designed to provide an improved tool to aid in communication between departments, scheduling of events, and event publicity and marketing. You can access the calendar on the Web at www.unt.edu/events The following features make the new event calendar particularly useful:

- An improved user interface that visually displays events at a glance on a monthly basis for information or scheduling.

- The ability to preview scheduled events up to a year in advance.

- The ability to show only a specific category of events such as "Only UNT Events", "UNT and Metroplex Events Combined", or "Academic Dates".

- A user-friendly preference option that allows a user to set the calendar to display only the events that a UNT community member is interested in viewing.

- An easy data entry system to add appropriate new events to the calendar.

- A Master Calendar Coordinator who checks all new events before they are scheduled in the calendar and checks for possible conflicts with other large events.

- Icons incorporated into the calendar that show "heavy expected attendance" or "traffic warnings," which allow a scheduler to pick the most appropriate dates for new events.

- The ability to integrate events scheduled for the Web Event Calendar with the events calendar on the monitors located throughout the university.

- An online reporting function that allows a user to generate a report of UNT events throughout a specific time period.

- A "Help" link that will explain to the user how to use the calendar.

New Online Library Service

By [Claudia Lynch](), *Benchmarks Online* Editor

The UNT Libraries have recently announced the establishment of an Online Reference Help Desk. The Online Reference Help Desk can:

1. Assist you in locating information
2. Suggest databases and Websites to use
3. Answer questions

To access this service:

- Point your Web browser to http://www.library.unt.edu/admin/HelpDesk/helpdesk.asp

- Log in to the Online Reference Help Desk by typing in your name and E-mail as instructed.

- Type in your request.

- Press the "Page a Librarian" button to alert the "virtual librarian" know you need help. Within a few minutes a librarian will be helping you connect to the information you need.

The Online Reference Help Desk is available to all UNT students, faculty and staff. Hours of operation are Monday through Friday from 2:00 p.m. to 5:00 p.m. For more information about this service please contact Monika Antonelli at mantonel@library.unt.edu

Computer Memory

By Duane Gustavus, UNIX Research Analyst

Part of the difficulty of understanding any new body of knowledge is mastering new terminology. In the "Information Age" access to information is being trivialized, but access is not understanding. "It's all Greek to me!" is rarely a lament about foreign language skills.

Context is Everything

This problem is often exacerbated by the "over-loading" of word definitions -- the use of the same word to mean entirely different things in different contexts. Now this is not a problem peculiar to computer technology. When a young woman "drops" her beau, we assume it is his spirits that will fall, but that is because the context is all too familiar to us. When a computer "drops" a bit, it is not quite so obvious what is in danger of falling (though we suspect it is not an occasion for celebration).

A very broad cross-section of the population has recently become exposed to the arcana of computer technology. Some usages, like the word "bug" to denote a malfunction, have already become common parlance. Familiar words remain, however, which might confuse the unwary due to their altered meaning in computer contexts. Perhaps I can thing the fog a bit by pointing out some of them.

Memory is as good a place to start as any. The fact that computers store information, rather than old clothes that no longer fit, is probably why they have memories instead of closets, but the crucial concept here is storage. The context of human memory that we all experience on a personal basis can be very misleading when applied to computers. Nobody seems to think of books as having memory, but of course information storage is quintessential "bookness", and probably a better context for the meaning of memory when applied to computers.

Volatile and Non-volatile

Computer memory may take many physical forms which are usefully differentiated by the permanence of the information storage. Assuming a modicum of care in shelving them, the information stored in a book is not expected to change; in computer lingo this kind of storage is called non-volatile. My grandmother's house had light switches that were two push buttons, both black, but the on button was inlaid with a mother-of-pearl dot. My grandma had non-volatile memory in her light switches and used a light bulb on the ceiling to display the state of the switch. Even if a thunder storm deprived the display devices of power, the light switches "remembered" how things were supposed to be, and the light would come back on when the storm passed and power was resumed.

If the validity of the information is dependent on keeping the power turned on,

the memory is referred to as volatile. Webster's fourth definition for volatile is perfect: changeable. Your computer's RAM (random access memory) is volatile, while its ROM (read only memory) is non-volatile. Several decades after my discovery of Grandma's cool light switches, I cannot help but notice when the storm passes and the lights come back on, my VCR's clock seems always to think it's 12:00. Volatile memory I suspect.

When you turn your computer back on after the storm passes, you no doubt expect it will take a short while to "boot-up". The BIOS (or ROM) inside your computer is non-volatile, and embedded in that memory is the information required to restore the RAM (which forgot everything when deprived of power) to a useful state for operating your computer. While this transfer of information from non-volatile to volatile memory is taking place, your computer is said to be "booting". My VCR clock is incapable of booting itself and requires tortuous (and generally ill documented) manual intervention to restore its function as a clock.

There is, of course, commerce between these to types of memory; devices which store information despite being deprived of power, but which can nonetheless change the information if properly manipulated. The disk family (including floppy, hard disk and of late certain CD products) is representative of this phenomenon. As a matter of fact, in most contemporary computers the information about how to "boot" is comprised of instructions to transfer a useful computer state from some disk storage device into RAM. In this mode of operation, the disk serves as non-volatile memory. When you saved your data to floppy before the electrical storm hit (you did backup didn't you), the disk served as a volatile memory device, changing its previous contents to store the latest state of your data.

You may take me to task because the term floppy disk seems deliberate obfuscation: it is a small square plastic device that is quite rigid. The component of the floppy that stores information in a magnetic pattern is, however, a thin acetate disk that spins inside the plastic case you handle. Deprived of the support of the case, the disk actually does flop about quite a bit. It was originally referred to as a flexible disk, but whoever makes these decisions felt floppy had more appeal. If you're an iMac user you may safely disregard this entire paragraph.

What is that stored stuff?

So now we know that computer "memory" is comprised of a group of information storage devices which vary in the permanence of storage, as well as cost, speed and physical properties. As luck and current technology would have it, the most volatile storage devices (RAM) are also the fastest, which makes up for the fact that they forget so easily when deprived of power. Dare we ask exactly what is stored in these devices? Information of course, but can we hope to understand the "stuff" of information in a computer? Sure, given that the required resolution of information is not overly ambitious.

To effectively press my case about the inequitable distribution of jelly beans with my older brother, it was necessary to expound at some length on the concept of quantity. This involves assigning numbers to items which, while they could be represented by words like "You have five while I only have three!", is

so common that numbers have been assigned special symbols like 5 or 3 to use in place of the words. As we all learned in school while not paying much attention, these symbols have unique properties that words don't have. That is why your English teachers wouldn't accept "5" for "five", and why you cannot misspell 90 even though you can "ninty" (and incidentally why I rarely made A+ on my themes). Quantity requires no translation; nobody cares much what words you use as long as you divide the jelly beans equally.

If you were looking for a language-neutral representation for information in a computer memory, numbers would seem to be a good candidate. Computers store information as numbers. This concept is probably not epiphanous for you, but with computers, the slick part comes in the choice of the symbols which represent the number.

The tried-and-true 0123456789 symbol set has gotten us to the moon and beyond, but not because of their appearance (let's remember that the Russians managed to keep Mir in space for over a decade with a 7 that had a slash through it). If the quantity is something separate from its representation, then almost any symbol set would do as long as the symbols are distinguishable from each other and used in a consistent manner. You could even say my grandma's light bulb represented a zero when it was off and a one when it was on, and that you weren't playing with the light switches you were counting (somehow I don't think that

argument would have carried the day with my grandma)! While counting to one may not seem like the stuff of Nobel prizes to you, computers don't have fingers and are therefore not hung-up on quantities like 10. They do have, as it turns out, gazillions of tiny switches (you may replace the technical term gazillions with your favorite largish number without fear of doing damage to the discussion). While they don't have light bulbs connected to them, these switches do consume power when they're turned on, but not when they're turned off. When a memory switch is "read", it is taken as a 1 or 0 depending on whether it is conducting current or not. In the case of non-volatile memory, you can think of the switches as "stuck" in one position or the other.

It's all in the code ...

It is not news to you, I'm sure, that computers are facile with numbers, but how can this facility be employed to represent something besides numbers? No doubt cereal boxes have always come with things in them besides cereal (the fun ones anyway). I suspect that in Battle Creek Michigan there is still a warehouse full of magic decoder rings patiently waiting for the tides of fashion to recall them to the fingers of a new generation. The strings of numbers which my decoder ring revealed as anti-climactic messages from Kellog's marketing division were proof that more than quantity could be represented with numbers. In this case the quantity represented the displacement of the pointer around my ring. Decoding (converting the numbers to a message) involved moving the pointer by the desired quantity and seeing what letter it then pointed to. You will have already seen the problem with this idea. When numbers are to represent some information other than quantity, that information is not inherent in the number but rather in the design of the code. Thus it is sadly improbable that my decoder ring will unravel ET communications unless the human condition is considerably more catholic than I presumed.

If computer information consists entirely of stored numbers, some of which can be properly understood only within a context other than quantity, how does one make sense of all those gazillions of switches? Well, my brother and I depended on Tony the Tiger to manage all that kind of detail; governments tend to prefer standards organizations. If you have ever received email that looked like the portion of the monkey's typing that wasn't Shakespeare, you and your correspondent need to exchange decoder rings. And before you start complaining about why everyone can't use the same code as Microsoft, let me point out that the "American Standard Code for Information Interchange" has existed since 1966 (Bill was still working on his first million). You have probably seen it mentioned as ASCII, pronounced "askee" in that most American of penchants for speaking abbreviations as if they were words. If it is useful to have one ring to bind them all, surely ASCII should be it.

Charge On, Charge Off

Hopefully you now have a better context for understanding the word memory as applied to computers. OK, OK; about the gazillion switches. For anything like that number of switches to fit in the box on your desk, they would have to be microscopic. They are, of course, and if the word transistor brings to mind little battery-powered radios, you're almost as old as I am. Even though it's a bit pedantic to describe transistors now, many of the parts in your computer are constructed from clumps of them, so I'll hazard a few sentences to placate the over-achievers in the crowd. As you know, most things will conduct electricity; metals and water quite readily, but ceramic and cows with more difficulty (I shall pass over the occasion of my delight in finding out about the cows). In the fifties (that's 1950's for those fair readers for whom Y2K lurks in the background of every date) some smart folks figured out how to make a semi-conductor, which is just what the word says. Essentially, it's a tiny chip of crystalline looking material with three wires attached that will conduct electricity through two of the wires when the third has a charge on it, but won't when the third wire has no charge. Charge on; no charge off (sound familiar?). The important difference between it and my Grandma's light switch is that no mechanical motion is involved when turning a transistor on or off, so it can be done very quickly (but without the satisfying click). That's why, when you peer inside your computer to see what the memory looks like, you will only see little black plastic rectangles stuck to a fiberglass board with geometric doodles of metal lines all over it. No clicks, no whir (except the cooling fan), not any sign of activity at all. Immensely unimpressive.