Last month we announced EagleMail, this month it took flight. Read all about it.

We're well into January and things seem to be fine. Is this it for Y2K problems? Probably not.

Have you ever wondered whether you should send GroupWise mail to everyone on campus? We have some guidelines to help you decide and to help you minimize the impact of large group messages on your GroupWise mailbox.

If you've ever wondered what happened to a job you sent to Academic OS/390 (also known as MVS or batch), this article is for you.

The University has an updated mail program running on the Academic mainframe’s CMS for faculty and students.
If you have questions about WebCT, a Web-based course delivery system used here at UNT, look no further for the answers.

Is Your Student Organization Online?

Officially recognized UNT student organizations are eligible for FREE Web space. Find out how to get your organization online today.
Exploring S-Plus 5.1 on UNIX (SOL) - Part II

In the August 1999 issue of RSS matters we provided an introduction to using S-Plus on SOL (http://www.unt.edu/benchmarks/archives/1999/august99/rss.htm). In this issue we continue our exploration of S-Plus on SOL.

Constructing Expressions in S-Plus

To begin our session we must invoke S-Plus after logging onto SOL. Type "Splus5" at the UNIX prompt to start the S-Plus session. You should see the following screen:

S-Plus : Copyright (c) 1988, 1999 MathSoft, Inc.  
S : Copyright Lucent Technologies, Inc.  
Version 5.1 Release 1 for Sun SPARC, SunOS 5.5 : 1999

Working data will be in .Data

S-Plus expressions are typed in at the "->" prompt. S-Plus will print out the results of the evaluation once the "Enter" key is pressed:

```
> 2+2
[1] 4
> sin(pi)
[1] 1.224647e-16
> sqrt(1000)
[1] 31.6228
```

An incomplete expression will lead to a second prompt, "++". You can continue with your expression at the second prompt:

```
> sqrt({
    + 100}
[1] 10
> }
```

If the "++" prompt continues after pressing "Enter", then enter many "}") to get the "->" prompt back again. Then start your expression once again:

```
> sqrt({
    +
})})})
```

Problem: Syntax error: No opening parenthesis before unbalanced ("" on input line 3

```
>
```

 Scalars and Assignments

The assignment operator is the sequence of characters, "<" (less than) and "-" (hyphen). Assigning the variable "weight" the value of 190 we use the following:
Character values are inserted in quotes. If the quotes are omitted, S-Plus will look for a possibly non-existent data object called "Jim" to assign to the variable "person". The result is not printed until you enter the object name:

```r
> person
[1] "Jim"
```

### Vectors

The function "rnorm()", returns a vector of random deviates from the normal distribution. The "[n]" on the left shows where the row starts:

```r
> rnorm(10)
[1] -0.63147304 1.25447805 -0.84064508 -0.36729337 0.09650417 -0.76198708  
[7]  0.96427689 -2.32446893  0.10866023  0.73403819
> 
```

A single number is a vector of length 1. We can make vectors using the concatenation function, "c()". Then we can assign the integers 1,2,3 to the vector x:

```r
> mean(rnorm(10))
[1] -0.240037
> x<-c(1,2,3)
> x
[1] 1 2 3
```

We can create a vector of names. Also we can create a vector of sequential integers using the function, "a:b", where a is the starting integer and b is the ending integer:

```r
> people<-c("Jim", "Sue", "Dave")
> people
[1] "Jim" "Sue" "Dave"
> 
> seqvar<-5:10
> seqvar
[1] 5 6 7 8 9 10
```

### Object Names

Object names may contain letters, "abcDEF", or numbers, "0123456789", or a dot, ".". Examples of valid names: height, weight, x.var, .yvar, x.y.var, or x110. Objects names cannot use an underscore, a hyphen, begin with a number, or use reserved symbols. Examples of invalid object names: _xvar, y_var, x-yvar, 120xvar, T, F, or NA.

### Handling Objects

We can list out all of the objects in our workspace:
Objects remain until removed, even if one quits S-Plus:

```r
> rm(x)
> x
Problem: Object "x" not found
```

**Objects as Variables**

Objects can be used in expressions:

```r
> x<-1:10
> x
[1]  1  2  3  4  5  6  7  8  9 10
> mean(x)
[1]  5.5
> y<-c(x, 10)
> y
[1] 1 2 3 4 5 6 7 8 9 10 10
> length(y)
[1] 11
> 2*y
  [1]  2  4  6  8 10 12 14 16 18 20
```

**Vector Arithmetic**

Scalar Functions work on an element-wise basis. It is also possible to perform scalar and vector arithmetic:

```r
> x<-1:5
> x^2
[1]  1  4  9 16 25
>
> 2*x
[1]  2  4  6  8 10
```

**Logical Vectors**

Expressions with relational operators return logical vectors, "T" is True, "F" is False:
RSS Matters

Missing Values

A missing value is represented by "NA". Operations on NA return NA. The function is.na() checks for missing values:

```r
> x<-c(1, NA, 3)
> x
[1] 1 NA 3
> x+1
[1] 2 NA 4
> sum(x)
[1] NA
> is.na(x)
[1] F T F
```

Vector Indexing

S-Plus uses brackets, [ ], to select elements of a vector. Negative indices remove elements:

```r
> x<-c(2,4,5,8,10)
> x
[1]  2  4  5  8 10
> x[1]
[1] 2
> x[3:5]
[1]  6  8 10
> x[c(1,2,3)]
[1]  2  4  6
> x[-c(1:3)]
[1]  8 10
```

Logical Indices

A logical index selects elements. Symbols for the logical operators are: "<" (less than), ">" (greater than), "<=" (less than or equal to), ">=" (greater than or equal to), "==" (equal to), "!" (negation operator), "!=" (not equal to).

```r
> x<-rnorm(5)
> x
[1] -0.6932126 -0.2386601  1.0713995  0.1983262  1.0289510
> x[x<=0]
[1] -0.6932126 -0.2386601
```
Replacement

You can use [ ] on the left hand side of an assignment, ",<-":

```r
> x <- sample(1:8)
> x
[1] 6 4 7 1 2 3 5 8
> x[2] <- NA
> x
[1] 6 NA 7 1 2 3 5 8
```

Next Time

Next time we will cover matrices, arrays, and lists, among other topics. Good luck with S-Plus!
The Experts Speak

We've survived into the year 2000! You would think that predictions would now be passe, but I couldn't pass up the following gem referred to me by a colleague. Consider, gentle reader, the following:

SOFTWARE EVOLVING INTO A SERVICE RENTED OFF THE NET

The transition of software from traditional packages to an Internet-based service is likely to advance significantly in 2000. Companies are already using the Internet for internal communications as well as customer transactions, and 24-hour Internet connections are becoming common in homes. Software companies in the future will sell applications as a service, just as utility companies sell electricity or phone service. The move to Internet-based computing is happening much more rapidly than the last major shift in computing, which was the move to client/server architectures that occurred about 10 years ago. In the future, the client could become essentially a Web browser, rather than a powerful PC. The shift of computing to the Internet threatens Microsoft's dominance, which was built on the PC computing model. Experts say any ruling in the antitrust trial might be irrelevant because of the rapid changes brought by Internet computing that are diminishing Microsoft's hold on the market. (New York Times 12/20/99)

Hmmm. So where are these "experts"? I've been hearing for years that modular downloadable software is going to put Microsoft out of business, but guess what? Microsoft is still as powerful as ever and still producing annoying monolithic software products. What's worse, Microsoft entices you to buy their monolithic applications by beating you over the head with their operating system. If you don't believe Microsoft has that kind of influence, consider an example that is close to home. We had a site license for a perfectly good word processor. To run all those PCs on campus, we need Windows. So, we site license Windows and guess what? For just a little more, we can license Microsoft Office and all of a sudden, we adopt Microsoft Word as the program of choice. If you think that the Microsoft monopoly does not influence your life, guess again.

So now we have the august experts who are quotable by the New York Times telling us that the Microsoft monopoly is now being made inconsequential by software provided as pay-per-bit service.

The problem with the above story is that in spite of the fact that experts are talking about it nobody's doing it! Let's say you now want to provide your million-line software on a downloadable pay-as-you-go distribution model. To do so requires a whole different approach to product licensing and enabling. It implies that all software "rented" in this way will have enabler codes and that those codes will somehow restrict use to a limited time...
period. They can't be date-based enabler codes, since you can easily set whatever date you want on most computers. This means that all such software will have to have internal usage counters to be able to measure that the time used equals the time paid for. Such a model adds more code and expense to already complex applications.

**Another fallacy**

Another fallacy of the above story is "the-browser-is-the-computer" model. You might be able to deliver a spreadsheet in a browser window, but, I have a hard time imagining recording midi sequences or creating a 150-page orchestral score in a browser window. Perhaps this is a reference to Sun Microsystem's Java programming environment which provides the promise of platform independence. The only problem is that because it requires a compatibility layer on our independent platforms, Java programs suffer from potential performance problems. The other small fact is that I have yet to see a Java application provide a solution that wasn't already offered more effectively and with less overhead by a traditional program.

So, what's one to think about the predictions of the New York Times experts. I think the above is naive at best, and transparently serving of Microsoft at the worst. There is an underlying irony here. It is as ironic as Christy Brinkley listening to Billy Joel sing "I want you just the way you are." The experts don't realize that people don't want to pay for software. People especially don't like paying for software every six months with the promise of "new features." It's the equivalent of technological blackmail. "Pay us now or you'll pay more later."

**The open source movement**

The real change in software will be the explosion of community developed and supported software growing up around the open source movement (see http://www.unt.edu/benchmarks/archives/1999/june99/open.htm). The open source movement is something that Microsoft really does need to worry about. An open source project like LINUX can't be appropriated (i.e. stolen) by Microsoft, since it consists of copyrighted components, and it can't be bought by Microsoft because it isn't owned by any one organization. It consists of sets of ideas which are implemented in a number of ways by a number of people. The reason the open source movement can succeed is directly attributable to the Internet. The development communities who write open source software would not be large enough to sustain that software without the world-wide opportunities for software distribution and idea exchange offered by the Internet.

The other irony is that it is possible to make money on open source software, not by selling the software, but by selling people support for using the software. A company named RedHat is doing just that with LINUX. Since not everyone is interested in downloading, installing, and configuring LINUX to their own specifications, RedHat provides a version of LINUX which is easy to install by even a casual computing user. You can download their installation package for no charge, but RedHat has another way to make money. They will sell you support. Pay them money and they will answer your questions. Since most people are not programmers or computer experts, answers to questions is usually what they need most.

I guess you can't always believe "the experts," even if they are quoted by the *New York Times*. It's not surprising that experts who view things from a commercial perspective can easily miss the impact of free software. Keep your ears open for open source. The next wordprocessor you use could cost you no more than the time you spend waiting for it to
download.

Comments, Questions? Send them to Philip Baczewski.
List of the Month

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

"Unbiased Decision-Making" at SelectSmart.com

SelectSmart.com helps you decide what political party is best for you, what candidate for president best fits your views and more. You can get help with choosing a pet, baby names, nutrition, and a variety of other topics. Visit www.selectsmart.com for more information. While there, you can subscribe to the SelectSmart.com email list group for the latest news and updates.
By Mark Wilcox, Campus Web Administrator

Toward a More Secure Networked World

While the government does make some stupid decisions from time to time (ok a lot of times ;), occasionally they do manage to correct their mistakes.

One example has been US cryptography laws. Under our old laws, it was illegal for anyone in the US to give anyone outside of the US or Canada a copy of cryptographic software. In fact the US government regulated such software as the same class of munitions as nuclear weapons. The reasoning was that the bad guys could get hold of this cryptography and the US military/law enforcement (the good guys ? ;) wouldn't be able to hear/see what they were doing. Of course it ignored the fact that other countries could create strong cryptography on their own & they were not hindered by such laws.

It was just an obscene and naive law. For example, I could write a book on cryptography with the source code (e.g. the commands that tell the computer what to do) and sell it overseas. This was protected under the first amendment. But as soon as I put into an electronic form (even E-mail) and sent it to my friends in England, it was assumed I had committed a criminal act on the same level as say selling atomic secrets to Iraq.

Many people ignored or didn't care about the law really. After all they thought, "if you have nothing to hide, why hide it". Well of course this thinking has changed a bit as the Internet boom has grown. For starters, you don't want to let just anyone see your credit card number. Or you don't want anyone else reading your E-mail to your significant other (which anyone can do right now, fairly easily, unless your E-mail is encrypted).

Because of this law, companies who wanted to provide encryption in their software and wanted to export it overseas had to have two versions. One version for the US and a weaker version for overseas. This cost companies millions, if not billions of dollars in lost revenue (after all who wants to use a weaker security system, if they can get a stronger one from someone else) and in development costs.

This law was also probably unconstitutional. Arguments could be made on 1st, 2nd and 10th Amendments. However, because the law had the backing of the major intelligence agencies, the military and law enforcement (conspiracy believers should ignore the black helicopters and pay more attention to things like this) & thus it was hard to get really a fair shake in court.

However, finally, after many years of lobbying by crypto experts, lobbyists and a few ex-members of the NSA now turned business executives, both Congress and the Commerce Department (who had enforced the old law) have overturned it. [For more information see the CDT Encryption issues page http://www.cdt.org/crypto/]

Essentially you can now export cryptography software overseas (except for Cuba, Iran, Iraq, Libya, North Korea, Sudan and Syria -- the so-called “T-7 countries”).

If this does stand, then it will be likely that we'll see more products appear with better &
easier to use cryptography, which when used as part of a solid, simple, living security plan, makes for a much more secure networked world.

Until next time.

Mark
Short Courses

By Claudia Lynch, Benchmarks Online Editor

ACS Short Courses are being finalized for the spring semester. We anticipate classes starting the first or second week in February. Please consult the Short Courses page if you would like to find out more about the short courses that ACS typically offers.

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. Additional instruction is available from the Multimedia Development Center on such topics as Web Course Management, Videoconferencing, Graphics Production, Audio Capture, Video Capture, Course Authoring Software, and various aspects of WWW Programming as HTML, JavaScript, Java, Shockwave, Quicktime VR, and Streaming Media.

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. 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.

The Center for Distributed Learning will be providing the following training sessions and workshops this semester:

WebCT Training:

* Introduction to WebCT and FrontPage98 - February 2 or 3
- Content Placement and Multimedia in WebCT - February 9 or 10
- Student Management and Communications in WebCT - February 17 or 18
- Quizzing and Testing in WebCT - February 24 or 25

Distributed Learning Strategic Planning Workshops:

- Session 1 - January 31 (9:00 - 4:45) and February 11 (8:30 - 12:30)
- Session 2 - March 20 (9:00 - 4:45) and March 31 (1:00 - 5:00)
- Session 3 - March 28 (9:00 - 4:45) and April 6 (1:00 - 5:00)

Check out "Training and Events" at www.unt.edu/cdl for more information or to register online.

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

December's "List of the Month" offers links to free Microsoft Word and Excel information also.
IRC News

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 & 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; UNTHSC; 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]

October 19, 1999

VOTING MEMBERS PRESENT: PHILIP TURNER, CHAIR, JON NELSON, PAM HIGHT (for DON GROSE), SUE BYRON, RAMU MUTHIAH, MARK RORVIG, PAUL SCHLIEVE, JONEEL HARRIS, ROBERT NIMOCKS, JOHN WINDSOR, JUDITH ADKISON, JIM CURRY, JENNY JOPLING, STEVE OEFFNER, COY HOGGARD, BILL BUNTAIN, RICHARD HARRIS, ELIZABETH HINKLE-TURNER, CAROLYN CUNNINGHAM, RUSS PENSYL

NON-VOTING MEMBERS PRESENT: MAURICE LEATHERBURY, LESLIE BOWDEN, SUE ELLEN RICHEY (Recording Secretary)

MEMBERS ABSENT: ALLEN LIVINGSTON, PATRICK PLUSCHT, DAN MAULDIN, DONNA ASHER, VIRGINIA WHEELESS, GINNY ANDERSON, KATHLEEN SWIGGER, MIKE FORSTER, DAVID GRIFFITHS

GUESTS: JENNIFER JOHNSON, WIL CLARK, LOU ANN BRADLEY

IR Steering Committee

The Chair reported that the IR Steering Committee met in September, at which time the Intellectual Property draft was discussed. That draft is now on a web site and has been distributed to various groups to gather feedback.
Distributed Computing Support Management Team

Maurice Leatherbury distributed a report from the Distributed Computing Support Management Team which reflects the current staffing levels in distributed computing units on campus. The Support Management Team is looking into the possibility of getting a campus-wide support agreement for Hewlett-Packard printers. In addition, at the DCSMT’s last meeting Rudy Moreno and Sandy Shelton from Purchasing & Payment Services spoke to the group to address some issues regarding purchases made from the web on credit cards. There is currently no procedure in place for doing this, other than employees purchasing items on their personal credit cards and requesting reimbursement. Blanket orders and other purchasing procedures were explained.

Y2K

Coy Hoggard reported that efforts have been made to assess, mediate and replace when required, re-test all critical information systems and devices for Y2K compliance and that everything is as ready as it is possible to be. It is still possible that there will be minor glitches but it is impossible to know about every individual device or application, so everyone still should be aware of potential problems. Coy said he will report any unforeseen problems to the IRC if they arise. There are still some outstanding issues surrounding the Voice Response system upgrade, but those are being worked on.

Instruction Program Group

Jenny Jopling reported for the Instruction Program Group that Classroom Support Services is running smoothly, according to Jim Curry. The program group discussed the possibility of a computer-based testing facility on campus. Maurice will meet with the planning group to suggest that a facility of this type be included in the new Gateway Center. The group also discussed the multi-media editing stations that are going to be distributed on campus as a result of TIF funding and the fact that these are high-end machines. Faculty members will require a lot of training if they plan to use these machines. Abraham Bencid, the CDL’s media specialist, is developing a curriculum that will be made available to specific users in colleges and to network managers who will administer the hardware.

Strategic Planning Committee

Richard Harris reported for the Strategic Planning Committee and distributed copies of the Executive Summary of the Biennial Operating Plan, which was dealt with at their last meeting. The D.I.R. web site will have the final plan when it is approved. The D.I.R. URL will be passed on to IRC members as soon as the plan is posted there.

Communications Program Group

Paul Schlieve distributed copies of minutes from the most recent Communications Program Group meeting. In their last meeting they discussed the ongoing directory update that is taking place to build a common directory services database for the university. The Program Group recommends that the IRC direct the Computing Center to pursue the project to populate a common directory service and to allow designation of a preferred e-mail account for faculty/staff. Bill Buntain stated that this project is problematic because it is so labor-intensive to enter all of the information. Maurice commented that this project is part of the design of the Directory Services project and will be pursued by the Computing Center. It was requested that progress reports be given to the IRC.
Administrative Program Group

Joneel Harris reported for the Administrative Program Group that the Entire X Broker software product was purchased. That software will be a key piece in the web development strategy of the Registrar’s office. The group is also dealing with the issue of Y2K compatibility of Software AG’s product, Entire Connection. Joneel also reported that the group has finished reviewing the three companies they had invited in to demonstrate on-line report viewing applications. The group is also discussing a web strategy, and in this effort has contacted UT Austin to invite someone to UNT to give an overview and presentation of their web strategy and development. UT Austin has been using Entire Broker for quite a while and can share their experiences with UNT. In addition, the group has invited SCT to make a presentation on their student system. Joneel will advise IRC members of the time and place of the SCT presentation.

Research Program Group

Mark Rorvig reported for the Research Program Group that he was elected to serve as Chair again this year. The group will try to find new members for the Program Group. A project they plan to work on is the development of a capital equipment list as well as a funding strategy.

Standards & Cooperation Program Group

Elizabeth Hinkle-Turner reported that the Standards & Cooperation Program Group has not met recently, but deferred to Maurice Leatherbury to present a new draft of the Student E-Mail Policy, copies of which were then distributed. Maurice explained that Dr. Pohl, after discussing this issue with Richard Rafes, has asked that an official Student E-mail policy be developed for presentation at the November Board of Regents meeting. Dr. Pohl asked that the policy address the phasing in of official use of e-mail in lieu of postal mail. Maurice asked for input from the IRC, explaining that this revised draft of the policy is less onerous for students because it no longer says they are required to read their mail weekly. Instead, it says that it is recommended that they read their email frequently, but at least once a week. The policy states that the bulk email system is only for UNT communications to students. Maurice pointed out that it will be the sender’s responsibility to determine whether postal mail or e-mail would be the most appropriate method of communication.

The Chair pointed out that in order to consider this policy at today’s meeting, the rules would need to be suspended that require a month’s notice before a vote is taken. Paul Schlieve moved that the rules be suspended; John Windsor seconded and the motion passed.

The Council then discussed the motion to approve the Student E-mail policy as presented. During the discussion the high cost and slow speed of postal mail was pointed out, as opposed to e-mail. It was suggested that the responsibility for reading email be placed on the student, just as is the responsibility for knowing degree requirements, as stated in the Course Catalog. There was some objection voiced regarding a total dependence on e-mail as the official method of communication to students, in favor of a phase-in period.

A motion was made to amend the draft policy to include the statement from the Course Catalog regarding the student’s responsibility for knowing the information contained therein. Sue Byron seconded the motion and it passed with one abstention. Maurice accepted a friendly amendment to the wording of the last paragraph of the policy to replace the word ‘definitely’ with the word ‘likely.’ The policy was approved, as amended.
**Distributed Learning Team**

Jenny Jopling reported for the Distributed Learning Team that the center has been delivering a strategic planning workshop to three departments, and that everything is going along well with courses in Web CT. At the last IRC meeting Patrick Pluscht reported that TTVN had closed it’s membership; he asked Jenny to report that TTVN membership is still open.

Dr. Turner commented that the strategic planning workshops being offered by the Center to Deans, Department Chairs and selected faculty are to assist them in looking over the whole issue of distributed learning and whether or not they want to participate. Information about these workshops can be found on the [CDL Web site](http://www.unt.edu/benchmarks/archives/2000/january00/irc.htm) under training.

**Teaching With Technology Grants**

Maurice Leatherbury announced that Dr. Kesterson has met with Dr. Turner and himself regarding the renewal of the Teaching With Technology Grants for another $100,000 this year. Grant proposals will be due February 14th, 2000.

**November 16, 1999**

**VOTING MEMBERS PRESENT:** PHILIP TURNER, CHAIR, JON NELSON, ARNE ALMQUINT (for DON GROSE), SUE BYRON, RAMU MUTHIAH, PAUL SCHLIEVE, JONEEL HARRIS, ROBERT NIMOCKS, JOHN WINDSOR, JUDITH ADKISON, JENNY JOPLING, STEVE OEFFNER, PATRICK PLUSCHT, RICHARD HARRIS, CAROLYN CUNNINGHAM,

**NON-VOTING MEMBERS PRESENT:** MAURICE LEATHERBURY, LESLIE BOWDEN, SUE ELLEN RICHEY (Recording Secretary)

**MEMBERS ABSENT:** COY HOGGARD, RUSS PENSYL, BILL BUNTAIN, ELIZABETH HINKLE-TURNER, JIM CURRY, MARK RORVIG, ALLEN LIVINGSTON, DONNA ASHER, VIRGINIA WHEELESS, GINNY ANDERSON, KATHLEEN SWIGGER, MIKE FORSTER, DAVID GRIFFITHS

**GUESTS:** LOU ANN BRADLEY

**Distributed Computing Support Management Team**

Maurice Leatherbury reported for the Distributed Computing Support Management Team that a subcommittee has been formed to conduct an inventory of desktop computer software. At their last meeting Coy Hoggard briefed the group on the status of Y2K remediation, and the roll-over plans for December 31 and January 1 were discussed. In addition the committee is continuing to work on a campus-wide H-P printer maintenance contract.

**AHE gigapop**

Maurice also reported that he and Richard Harris attended an organizational meeting of the AHE gigapop executive advisory council at TCU. Only three institutions were represented at the meeting: UT Arlington, Texas Christian and UNT. Richard continued by reporting that the council named a project manager for the AHE gigapop. The council agreed that a charter and operating standards for the group would be drafted and considered at a future meeting. The council strongly recommended 7 x 24 support and confirmed that the fee structure was based on a fiscal year basis (September 1 through August 31). They will collect a full year’s amount for this year, even though the gigapop will probably not be up until January. The excess funds this year may offset the cost of 7 x 24 support which was not included in their
initial budget. The understanding is that in August if there is any money left over it will be divided among the member institutions and applied to next year’s fee. The membership fee is around $113,400.00 per year, about $41,400 of that is to be used for capital expenses such as switching equipment and about $65,000 is annually recurring operating expenses such as personnel and connection charges, etc. The council is also looking at a one million dollar grant from one of the corporate members. Richard stated that UNT will be responsible for getting the line down to them, and a technical group is trying to decide where to locate the gigapop. Richard explained that the main connection will be to Internet2, but could include Internet1; the technical details have not yet been worked out.

Instruction Program Group

Jenny Jopling reported that the Instruction Program Group met to discuss a computer-based testing facility. At the planning meeting for the Gateway Center, such a facility was discussed and is being considered for the Center. Jenny stated that she solicited other institutions about the possibility of establishing a computer-based testing network so that distance students could be facilitated state-wide. A number of institutions were interested, so Jenny is looking into the possibility of using TIF funds to establish such a network.

Jenny also reported that she and Maurice have been discussing the CBT software and agreed that some research needs to be done on the usage of that software to determine if it is really needed.

Communications Program Group

Paul Schlieve reported for the Communications Program Group that bids are out on equipment for the campus-wide wiring projects. When those bids are in, there will be intense activity on those projects which the Program Group will monitor and report on to the IRC.

Administrative Program Group

Joneel Harris reported for the Administrative Program Group that members of that group have been working on business continuation plans as well as preparing for testing and re-testing on January 1 and 2. She reported that the SAA Gateway will cease to operate around mid-December, as a part of Y2K remediation. They plan to re-schedule a presentation by Oracle after the first of January. They have met with SCT representatives and will be scheduling a presentation by that company.

Distributed Learning Team

Patrick Pluscht reported for the Distributed Learning Team that at their last meeting the issue of printing in computer labs was discussed, the concern being that students are printing volumes of documents from the web for their web courses. Patrick also reported that they have planned a mini-WebCT conference around April, 2000 and are inviting UNT faculty to make presentations at that conference for other faculty in the area. In addition, he reported that the Faculty Senate has reviewed the Intellectual Property Rights Policy with a favorable response. A vote on the policy will be taken at a future meeting of the Faculty Senate.

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. Planned exceptions to this schedule are that December meeting was moved to Dec. 14; that the May meeting will be moved to May 9 and the August meeting be moved to August 8.

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:

- **Hong Chen**, I/O Consultant (part-time).
- **Sharath Chetty**, I/O Consultant (part-time).
- **Sricharin Panuganti**, I/O Consultant (part-time).
- **Kenya Locket**, University information operator (part-time).
- **Jay Maxwell**, Programmer on Student Records Systems team.
- **Michelle Tisby**, Programmer on HRMIS team.

The following people no longer work in the Computing Center:

- **Suresh Chitturi**, I/O Consultant (part-time).
- **Stacie Luna**, Microcomputer Consultant on CC1/CC2 Network/User Services team (part-time).
- **Vikram Manda**, I/O Consultant (part-time).
- **Justin Osire**, I/O Consultant (part-time).
- **Taeko Ozaki**, I/O Consultant (part-time).
- **Margaret Coleman**, Data Entry operator.

Awards, Recognition

- **Soaring Eagle** awards will be presented at the February 22, 2000 Chancellor's Staff Lunch to the following Computing Center employees:

  **Blair Copeland**, Data Communications Computer Systems Manager, was recognized as a Soaring Eagle in the November 1999 Human Resources Newsletter. Blair was recognized for his "unfailing good humor, willingness to go the extra mile -- even when it's not your area -- cooperative spirit, and general help nature."

  **Cathy Hardy**, Academic Database Administrator, along with Pamela Johnson in Student Accounting and University Cashiering Services, was recognized for "taking such good care of a stray dog." They were able to track the owner down and arrange for owner and dog to be reunited.
The following people received Service Recognition Awards at an Awards Ceremony on December 15, 1999:

Claudia Lynch, Benchmarks Online Editor and Documentation Services Manager, was recognized for 20 years of continuous employment at UNT.

Dr. Philip Baczewski, Associate Director of Academic Computing, was recognized for 15 years of continuous employment at UNT.

Chandrabahan (C.R.) Chevli, Data Communications Computer Systems Manager, was recognized for 15 years of continuous employment at UNT.

Mashid Grooms, Student Services Data Systems Team Leader, was recognized for 15 years of continuous employment at UNT.

Lawana Robinson, Computer Operations Assistant Manager, was recognized for 15 years of continuous employment at UNT.

Barbara Heffley, UNT/HSC Fiscal Data Systems Programmer, was recognized for 10 years of continuous employment at UNT.

Ramona Aref-Azad, Production Control Specialist, was recognized for 5 years of continuous employment at UNT.

Daren Dugan, NetWare 4.1/NDS Support Analyst, was recently found quoted in an article on idg.net http://www.idg.net/crd_directory_79545.html
EagleMail Takes Flight

You may have noticed EagleMail posters, banners, and advertisements appearing around campus. If you are wondering what EagleMail is, the simple answer is that it is the continuation of a service that Academic Computing has offered for a number of years. ACS first provided students access to Internet E-mail when the first Jove UNIX system was brought on line in 1993. The next development in student E-mail came with the use of IMAP and IMSP protocols for client/server E-mail access and the adoption of the Simeon E-mail client for student use.

This spring, E-mail may become a particularly strategic tool for advancing the missions of this University. A policy is being presented to the Board of Regents which designates E-mail as an official means of communication between the University and students. The policy requires students to activate their UNT E-mail accounts and to read their mail regularly. Part of the concept of EagleMail is to make activating and accessing E-mail as easy and convenient as possible for students.

A variety of ways to read and send mail

E-mail accounts can now be activated via a Web page, without a requirement to come in person to the UNT Computing Center. Security is maintained by requiring that students provide specific demographic information to verify their identity. EagleMail includes a number of possible ways to read and send mail. These include the first type of E-mail service we offered, the pine E-mail program running in a UNIX shell. Previously supported IMAP clients, like Simeon, Netscape, and Outlook Express are also still options. A new option provided concurrently with the announcement of EagleMail is a Web IMAP client that runs in any current browser program. The Web client, provides students easy access similar to that which they are used to from Web-based services like Hotmail or Yahoo. Another option for students is to forward their e-mail to an existing commercial E-mail account. All of their UNT messages, including any official communication, can be received at an account that they may have already established before coming to UNT.

A philosophy of E-mail

EagleMail is as much a philosophy as it is a service. The philosophy is to make E-mail as accessible and useful to students as possible. At last count, 53% of active students already have active UNT Internet E-mail accounts. To reach the other 47%, we will need to have a service that is recognizable, meaningful, memorable, and accessible. The name EagleMail and the associated logos you will see with it are just a start. An ongoing process of further developing and improving this service follows. So, tell any students you know about EagleMail and don't forget to visit the EagleMail Website at http://eaglemail.unt.edu/.
Y2K A-OK?

By Claudia Lynch, Benchmarks Online Editor

Well January 1, 2000 has come and gone and we're still here, most of us none the worse for either obsessing of not obsessing about the Y2K Problem. The folks here at UNT involved in the "Y2K Rollover" did an outstanding job making sure there were no big disasters waiting for people when they returned to work on January 3.

But it's not over yet ..

We may have passed the January 1, 2000 test with flying colors but many people, including UNT's Dr. Leon Kappelman, believe that Y2K-related problems will be with us for quite some time. Check out "Glitch Central" if you are interested in how things are going so far.

There are still some dates in the future that might cause problems with some systems. Two of these dates are February 29, 2000 and October 10, 2000. The 29th of February 2000 might cause computers to crash if they can't handle the fact that this year is a leap year. The 10th of October 2000 is the first eight-digit number of the new millennium and might cause some problems with our computers, according to the experts.

Upgrade your browser

As we mentioned last month, it's not really a Y2K problem but if you have a Web browser that is below version 4.5 for Netscape or version 5 for IE, you should upgrade to the latest versions of these browsers. To upgrade Netscape see: http://home.netscape.com/try/download/index.html For Internet Explorer, try: http://www.microsoft.com/windows/ie/

References

Denton Record Chronicle, Sunday January 23.

List of adverse events from around the world:
http://www.y2kalert.com/rollover.html


Y2K: IT AINT OVER 'TIL THE FAT LADY SUES:
http://www.y2kalert.com/fatlady.html
Large Group E-mail Guidelines

By Allen Bradley, Manager, Campus Wide Networks Computing Team

About twice a year I send the following "Large Group E-mail Guidelines" policy to all GroupWise users. Please be aware that "bulk mail" sent through GroupWise is to be for UNT business only. Please review the following policy as set out by the Vice Presidents and Provost in 1997.

Large Group E-mail Guidelines- 2/17/97:

The Provost and all Vice Presidents recommend the following guidelines for using large E-mail groups:

1. Departments and individuals should be judicious in sending E-mail to all faculty and staff. Many recipients may consider the message to be annoying "junk mail," especially if "everyone" messages continue to proliferate at the current rate. As a general guideline, the message should be of sufficient general value that it would justify being sent as a memorandum if E-mail were not available. In other words, is the message important enough to justify sending to virtually every University employee? Campus-wide discussions should use Usenet news groups, not E-mail.

2. All large group mailings should use appropriate mail groups. A public group will be maintained in the GroupWise (GW) address directory that will include all UNT faculty and staff in the GW directory, as well as more limited groups such as department heads and account holders. Offices or individuals that make frequent or regular large group mailings, that are not official notifications to all faculty and staff, are encouraged to maintain their own groups. Messages to these groups should have an introduction indicating willingness to remove an individual from the group if requested by return E-mail.

3. Anyone sending mail to large groups should use the GroupWise send options to conserve system resources. In the "Mail To" screen, select "send" and then "send options." For the current mail message, these options will override the typical preferences. Generally, the following send options should be selected:

   - no status information
   - low priority
   - expiration date set to delete unopened messages in two work days
   - do not notify recipients unless it is an urgent official message
   - no return notification
   - no reply requested

Also, from the main GW screen, select "file" and "preferences" to confirm that the "advanced" send option is set to "insert in out box." Then, if a mistake is made, the out box message may be used to "delete" the message from all "in boxes," correct it, and resend. Take care to delete from in boxes, not the out box.
Managing GroupWise "Everyone Mail"

If you are overwhelmed with the quantity of messages that you receive from "UNT GW Directory List *** " ["Everyone Mail"], you have at least two options for handling those messages.

1. Automatically file the incoming mail in a folder. This allows you to browse the messages at your convenience without cluttering up your main mailbox folder.

2. Alternatively, you can create a rule which automatically deletes incoming mail from that group.

For detailed instructions on setting the GroupWise rules for both of these options, browse www.unt.edu/cwn/gwrules.html. Note that these procedures do not prevent you from receiving "official" messages like emergency weather warnings, road closures or other important notices.

For detailed information on other GroupWise features, browse the online manual at www.unt.edu/cwn/gwmanuals.html.
J2 on the Academic Mainframe

By Cathy Hardy, Academic Database Administrator

Have you ever sent a job to Academic OS/390 (also known as MVS or batch) and you never saw it again? Did it go into that nebulous bit bucket in the sky? If you are logged into CMS (Conversational Monitor System) on VM/ESA and you submit JCL to OS/390, you probably expect some feedback. On a great day, that feedback would be output with no programming errors (but I digress). On a bad day, feedback never shows up in your CMS account. So, what do you do first? (Hint: Cursing won't help.) (Hint2: Submitting another copy of the same (unchanged) JCL will not help.) Why not check the OS/390 queue?

If you have followed University naming conventions for your job, the job card will begin with your CMS 4 character userid (XXnn) and you can look for it on the MVS queue with J2. Just type J2 at the CMS Ready; prompt and the system will let you look at jobs on the MVS queue with job names beginning with your 4 character userid. If a batch job abends before it reaches the route cards in your JCL, it won't know where to route and will be sitting on the MVS queue.

If you find your job on there, use PF11 to list the dataset(s), open it (them) and find out what the problem is. OS/390 (MVS) reads your JCL top to bottom and begins with the job card. If there is a problem with the job card (for example: wrong password, expected continuation not found, etc.) MVS stops the job. Consequence: OS/390 never gets to the Route cards you've carefully coded to get your output back to you, so your job never returns to your CMS machine and will be on the MVS queue until you discard it.

Before we had the J2 interface, many students (in their infinite optimism) just kept resubmitting the same JCL over and over, apparently in the hope that the system would become impatient, run the job anyway and send them output. No such luck. MVS is either VERY patient, or very dumb. If you don't communicate in language it can comprehend and relate to, you are the one who is out of luck.

Between semesters Mainframe Technical Support upgraded J2 to version 6 (we were using version 3 in the fall semester). For help with J2, just type Help J2 at the CMS Ready; prompt. For security reasons, you can only look at your own jobs (J2 matches your CMS login ID with the first four characters of your job card).

For questions, contact your professor or the Computing Center HelpDesk at helpdesk@unt.edu or 940-565-2324.
MailBook 2000 on Academic CMS

By Cathy Hardy, Academic Database Administrator

The University has an updated mail program running on the Academic mainframe’s CMS for faculty and students. MailBook 2000 is an updated version of the old RiceMail program that has been used here for years. RiceMail was working well, but was not Y2K compliant and the University did not have the program source code to customize it. MailBook is by the author of RiceMail, Richard Schafer, and is very similar to the RiceMail we’re used to using. The MAIL command still reads and sends electronic mail (E-mail).

Reading mail

MAIL's incoming mailbox (inbox) is the standard CMS virtual reader, not a separate virtual machine like the OfficeVision inbox server. If inbox E-mail exists, MAIL scans reader files and builds a menu of inbox messages. Items can then be selected for display. The sortable and searchable menu can be limited in various ways, including by date ranges.

Inbox messages can be acted upon in several ways: saved in NOTEBOOK files, deleted, printed, replied to, or forwarded.

Sending Mail

The MAIL command also sends E-mail. Users can easily send E-mail to one or multiple recipients, either typing the E-mail message to send or including one or more CMS files. E-mail can be sent to local system users or, if connected to the Internet, to users of systems around the world.

The MAILBOOK command manages the NOTEBOOK files created by the MAIL command. MAILBOOK uses the same user interface as the MAIL command, but works with messages stored in NOTEBOOK files instead of the user's inbox.
WebCT Frequently Asked Questions (and Answers!)

By Sharon Marek, Web Developer UNT Central Web Support

What is WebCT?

WebCT is a Web-based course delivery system, used at UNT for full or partially online courses. Visit the Introduction to WebCT at UNT, online at http://courses.unt.edu/webct/studentguide/introduction.html for necessary information.

What software do I need to have to use WebCT?

All you need is a Web browser - Netscape 4.05 or better, for preference. If you're not sure what browser you have, visit the Browser and Plug-In Detection page at http://courses.unt.edu/webct/clientdetect.htm

Where is my WebCT class listed?

WebCT courses are listed at http://webct.courses.unt.edu/ They are divided by College or School - so a Computer Science class will be in the Arts and Sciences category, and a Public Administration class will be in the Community Service category.

Why do some classes at http://webct.courses.unt.edu/ have a blue image next to them, and others don't?

The blue image means that a class has a Welcome Page. A Welcome Page is created by the instructor, and is publicly available, so that anyone can see what's on it. Many instructors use the Welcome Page to provide information about the class for prospective students, and to give current students critical information -- like the instructor's email address.

When I click on my course, it prompts me for an ID and password! What is my ID and password?

The default WebCT ID/Password scheme is explained at http://courses.unt.edu/webct/studentguide/idpw.html While most instructors are using the default scheme, some instructors choose to use their own ID/Password scheme. If the default scheme does not work for you, contact your instructor. They can manually adjust your account if necessary.

Where can I get information about how WebCT
works - the bulletin board, the email, the quizzes?

General information is available in the Student Guide to WebCT, online at http://courses.unt.edu/webct/studentguide/ If you have specific questions not answered in the Student Guide, contact your instructor.
Is Your Student Organization Online?

By Shane Jester, Central Web Support

Are you a member of an official UNT organization? If so, does your organization currently have a Website? Did you now that UNT Central Web support will provide Web space to official University student organizations, free of charge? Well, its true and its easy to do.

All that is required to get your organization online is obtain a UNT internet account at [http://getlogin.unt.edu/](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.

What if you want to go online, but you don't have any web developers in your organization? Keep your eyes open at [http://www.unt.edu/training/](http://www.unt.edu/training/) for dates about UNT Short Courses offered during the semester. Central Web Support offers several courses about publishing with both Microsoft FrontPage and Netscape Communicator during the semester and best of all, they're free.