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The campus is experiencing slow communications to the off-campus Internet, affecting our work, studies, and personal use of the World Wide Web. While we wait for a solution to this problem, you can help ease the load.

EagleMail Gets a New Face, and More...

This spring will bring substantial changes in the EagleMail Web interface to student E-mail. Read all about it. The "BulkMail/ EagleMail Maintenance Schedule" for the Winter Break can be found on this page also.

Lab-of-the-Month

Which lab do you think is featured this month?

Winter Break Hours

Students don't have to be back in classes until January 16, 2001. The staff, however, isn't so lucky. Find out about General Access Lab availability over the break, and more, in this article.

Renew PRAS Accounts for the Spring

If you purchased a Premium Remote Access
Service subscription for the fall semester -- or
had paid through the fall -- and you want to keep



it, you will need to renew it. Don't let the January deadline slip your mind!

Virus Scanning in GroupWise

A new virus scanning E-mail server has been implemented for GroupWise. It is currently checking all incoming E-mail destined for GroupWise mailboxes and all out-going Internet mail sent from GroupWise.

Торау'л Савтоон

Click on the title above for an information age laugh.

Don't forget to check out our monthly columns. This month's topics:

- RSS Matters -- "New Developments on Our RSS Web" What an exciting time to be a researcher at UNT! The RSS folks have gone all out to provide online documentation, free statistical packages and more. Read all about it.
- The Network Connection -- "But is it a Hack..." Is your computer safe from the Internet? Better read this to find out.
- <u>List of the Month</u> -- "Official Website of the City of Denton" The City of Denton is going for "24-7 government," check it out.
- <u>www@unt.EDU</u> -- "FTP vs. Composer," just in time for the holidays.
- Short Courses -- The Academic Computing Services (ACS) short courses are over for this semester, but spring will be here before you know it.
- IRC News -- Minutes of the Information Resources Council are printed here when they are available. The minutes for October 17 are featured this time.
- <u>Staff Activities</u> -- New employees, employees that have resigned, and other staff changes are included in this article.





Research and Statistical Support University of North Texas

RSS Matters

New developments on our RSS Web

By Dr.Karl Ho, Research and Statistical Support Services Manager

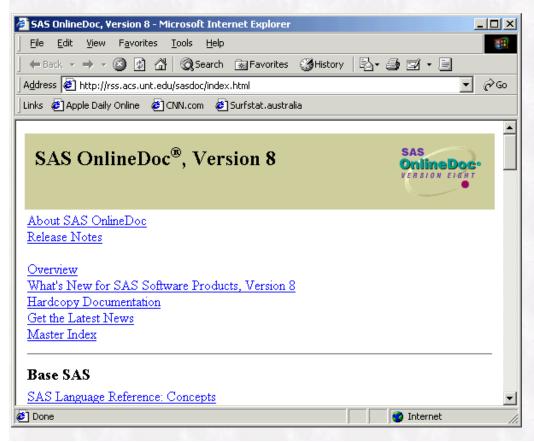
Since early this year, RSS' Research and Statistical Consultant, Rich Herrington, has been working on several developmental projects for the RSS office. One of them is to build a development server that serves the research community in providing computing and documentation resources. Rich has devoted tremendous amount of time in configuring the Linux server and it now is ready to provide services.

1. SAS documentation server (http://rss.acs.unt.edu/sasdoc/)

One of the primary missions of the server is to provide on-line documentation for all researchers on campus. Our first task was to provide online access to all the bulky SAS manuals. The server literally houses all SAS on-line manuals available from SAS (over 22 modules, with contents covering at least 40 hard copy manuals). SAS has been converting its syntax and manuals to HTML format since version 7.0. The latest OnlineDoc version 8 covers materials up to July 2000. A new version that catches up with newest syntax in the UNIX version (version 8.0) and the Windows version (version 8.1) will be available next year. Now you don't need to check out the library reserve manual to check out a SAS syntax! Just visit the site from your internet connected computer:

http://rss.acs.unt.edu/sasdoc/

The server is confined to UNT users use only. The next stage of the development on this documentation server is to install a search function for the SAS manuals and incorporate on-line manuals from other software, if available.

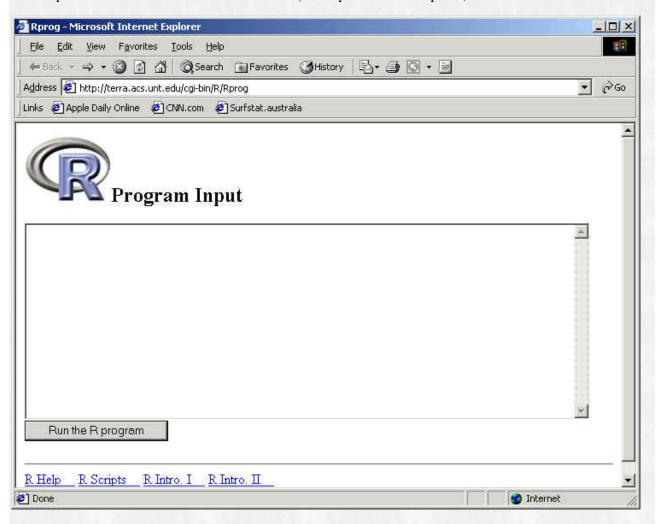


2. R-web (http://terra.acs.unt.edu/cgi-bin/R/Rprog)

R is an open source version of S. On top of providing S-Plus, a package that provides environment and interface for S programming, we offer a "priceless" version for users wishing to run R/S programs without the package. As a matter of fact, we will release in Spring 2001, the student version of S-Plus at the UNT Bookstore at a much discounted price. That said, graduate students and researchers already have the option of keeping a copy of the software and using the Web interface to run R/S programs.

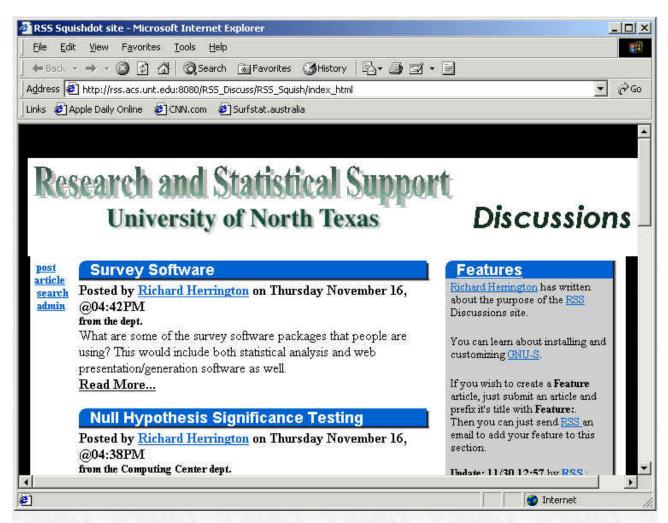
The R-web resides on one of our UNIX servers, Terra, and provides a full Web interface for program input and output. Running a program is straightforward. Just type the syntax in the textbox and hit the "Run the R program" button. On-line syntax help is available at the R Help link and sample programs abound (R-Scripts), thanks to <u>Dr. Randy Schumacker</u>, who has allowed us to use his on-line resources from his forthcoming book.

Once you submit the program, graphical and text output will be returned in the same page. Graphics in High Quality PostScript and Low Quality GIFs will be available upon clicking separate links. Users can either save the graphic files or print them off one at a time via the browser (Netscape or Internet Explorer).



3. RSS Discussion Web (http://rss.acs.unt.edu:8080/RSS Discuss/RSS Squish/index html)

Ever have a statistics question that you expect responses from a group of attendants? Rich developed the RSS Discussion Web using a Linux package called Squish. It allows threaded discussion and you can search from the discussion database using a keyword. We invite you to send in remarks, questions or articles you consider valuable for other UNT researchers and help develop a virtual research community.



RSS is investing in development of more on-line resources for researchers and your feedback is important to us. Now you can contact us via one more channel:

http://rss.acs.unt.edu:8080/RSS Discuss/RSS Squish/index html

Of course, we are still accessible via E-mail and phone:

Karl Ho

940-565-4066

Rich Herrington

940-565-2140

Patti Price

940-565-2140



Have a great holiday!



Network Connecti**ပ**်ာ

By Dr. Philip Baczewski, Associate Director of Academic Computing

But is it a Hack...

Is your computer safe from the Internet? To be safe, you should have a <u>virus protection</u> program to prevent your personal computer from being affected (or infected) by E-mail born computer viruses. You should also use a backup program to make safe copies of your files (especially data and documents) in the event of a catastrophic happening on your computer, whether it be a virus infection or a hard disk crash. That may not be all that you need. Since many computers now spend much or all of their powered-on time connected to the Internet, you might need to guard your system from Internet hacking activity.

This does not mean that just because your computer is on the Internet, it is vulnerable to being taken over by some netcriminal who will steal your best games, suck all the money out of your Quicken accounts, and erase your hard drive. Any Internet-connected computer can be negatively affected by targeted network activity in the form of a denial of service attack. Most personal computers fall somewhere in between these extremes, and the measures you need to take to safeguard your system depend upon its Internet capabilities, its purpose, and on the time it spends online.

Internet Insecurity?

Internet security is viewed by some as an oxymoron equivalent to military intelligence. It is incorrect, however, to fault the Internet for a lack of security, since it was never designed to be secure. Instead, it was expected that any needed security would be maintained on the client systems that connected to the network. In fact, despite its <u>start</u> as a U.S. Department of Defense project (a.k.a. the ArpaNet), security was among the least of the early Internet design concerns. The problems the Internet was designed to solve included the interconnection of different kinds of computer systems and the development of a network that could still operate when parts of it had been permanently disabled (in other words, in the event of the worst possible cold-war scenario).

For disparate computers to interoperate, they must speak a common language. TCP/IP network protocols provide that language, but also provide remote control and access where previously there had been little or none. Breaking down this barrier to access opened the door to hacking, but at the start of the Internet, hacking as we know it today was not an issue. The network was limited to a small community which participated in military defense research, and was a closed group whose members were familiar to each other. Access to the network required access to a multiuser computer. These multiuser systems required a username and password for access and generally logged the activities of those that used them. Today, personal computers can be easily connected to the Internet, and while the network connection sometimes requires some kind of authentication, there is generally no knowing what individual is using that computer and no detail logging of their activities.

The other design factor of the Internet was its ability to operate with substantial portions of the network out of operation. This made the expansion of the network easy to accomplish, since there is only limited central authority, mostly controlling addressing issues. One thing that was not and still is not required is authentication to a central authority for access to the network. Adding computers to the Internet is just a matter of being sure that there is no addressing conflict. Such a scheme, however, does little to control who can access the network or provide a mechanism for barring those who misuse it.

The History of the Hack

This leads us to the <u>origin</u> of hacking. In ancient days, say about 20 years ago, a hacker was someone who could "hack together" enough programming language to make a computer do what they wanted it to do, usually expanding the capability of computers in the process. This culture of testing one's programming ability had as its goal to demonstrate prowess, without necessarily producing a totally practical outcome.

Also in the days before the AT&T breakup, there were certain people who took great pleasure in "hacking" the long distance network in order to keep "Ma Bell" from taking in more money for the telephone monopoly. While illegal, such activity was at a time almost as common as today's computer hacking and even generated a degree of hero worship of those willing to rebel against the power of the phone company. At some point, these two cultures seemed to influence the origin of the computer hackers of today. Much of Internet hacking was and still is done by people who just need to prove to themselves or others that it can be done.

Today, hacking has a darker side. There are those who take advantage of insecure systems to provide themselves a platform for less than ethical behavior, like sending commercial SPAM, staging denial of service attacks, defacing web sites they don't like, or even stealing commercial or private information. The increasing availability of broadband Internet service, like cable modem and DSL, means that personal home computers are now potentially as vulnerable as all those UNIX systems that originally gave the Internet a reputation as a hacker's haven.

Assessing your Vulnerability

The extent to which your computer is vulnerable to hacking activity is a combination of several factors. The first is how many hours a day your computer is on the Internet without any intervening security measures. Another is how useful is your computer to hackers. Multiuser systems with support for standard Internet protocols are the most attractive targets, since they can be controlled by hackers and used to support continued activity. In case you didn't know, Windows NT and Windows 2000 both fall into this category. Windows 95/98 and Macintosh systems currently are less vulnerable, but not completely free from peril (when Macintosh OSX is released, it will have as its foundation essentially a UNIX system, making it much more vulnerable to hacking activity).

The next factor which affects vulnerability is the visibility of your computer on the Internet. If you connect via a dialup service and only remain connected when you are engaged in online activities, then your exposure is minimal, but not nonexistent. Each time you dial up, you are assigned a different Internet address, so the window of time in which a hacker could attempt to access and control or harm your system is limited. On the other hand, if you have a direct connection to the Internet which is always on, then your vulnerability increases because you usually have one assigned address which identifies your computer.

If you run any Internet services like a web server, then your visibility and thus vulnerability increases. If you run LINUX or Windows NT/2000 and receive e-mail on those computers and run your own web server, you are definitely at the high end of the vulnerability index.

Protecting Your Virtual Turf

Just because your system may be vulnerable doesn't mean that you have to sit up nights worrying about being hacked. In fact, there are a number of software tools available, freeware, shareware and commercial, that give you a certain degree of control over what kind of network connections can be made to your personal computer. Most of these are in the category of personal firewalls. A firewall is software which only allows selected network communication to be processed by your computer. Using a firewall lets you screen out any Internet services which might pose a security hazard to your computer and will usually notify you of any unusual Internet activity which occurs. Concepts of Internet security are not simple, but personal firewall software simplifies security management. This can be a good thing and a bad thing, since you are putting a lot of your trust in a program written by someone you don't know. It is up to you to read that program's documentation and understand as much as possible how it works.

There are some places you can look for security advice and software. The SANS (System and Network Security) Institute (http://www.sans.org/) publishes security-related information including hacking vulnerabilities found in software and operating systems for most types of computers. There are also other sites where you can find software tools and information about network security. There is a useful Internet Security page at http://security.webattack.com/ which provides links to various kinds of security software and provides overviews on issues of network security. Most of the software referenced, however, seems to be for Windows computers. Macintosh users might want to visit the "tucows" software download site (http://mac.tucows.com/macintosh.html) which includes sections for network tools and security. LINUX users can get security information from their particular LINUX distribution site, or from the LINUXLINKS security page: http://www.linuxlinks.com/Security/

But is it a Hack?

It's a good idea to make use of firewall or other utilities if your computer is possibly vulnerable to attack. Certainly you should do so if you have a fixed Internet address and you leave your computer turned on for hours or days at a time. You should also make use of common sense in evaluating threats to your system. In my role as administrative contact for the UNT network, I've gotten several e-mail messages lately along the lines of "your network is hacking my PC!" These have generally turned out to be one single attempt to access one Internet port as reported by their personal firewall software. While it is certainly good to report activity that you suspect as hacking, you would probably not call the police because someone accidentally came to the wrong address and knocked on your door. You might if they tried the knob. You should if they try the knob and every window and keep trying. One access to one Internet port is the equivalent of an accidental knock on the door.

The security of your personal computer should be your personal concern. There isn't an "Internet Police Force" which will guard your security for you (and I'm pretty sure I don't want one). With some common sense and a few key tools you can greatly increase your computer's security. It's your computer. It's your responsibility.

- If you're interested in Internet history, the Internet Society's <u>"A Brief History of the Internet"</u> is fascinating reading and <u>"Hobbes' Internet Timeline v5.2"</u> helps put it all in perspective.
- For a interesting view into the early culture of computer hacking, read "Cyberpunk, Outlaw and Hackers on the Computer Frontier" by Katie Hafner and John Markoff,

Simon and Schuster, 1991, ISBN 0-671-68322-5.



List of the Month

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

www.CityOfDenton.com

Official Website of the City of Denton

The City of Denton is going for "24-7 government," according to a recent article in the <u>Denton Record Chronicle</u>. You can now pay Municipal Court citations online using a credit card. Plans for future additions include the ability to pay for recreational programs, taxes, and library fees online. The ability to make utility payments online, get utility accounts information and request utility service connections and disconnections may be added soon also.

Besides the services, current and planned, mentioned above, the site is home to all sorts of useful information for city residents. Information such as:

- The latest updates to budget information, including a detailed report from the City Manager.
- The latest updates to tax information including links and information concerning county taxes, delinquent taxes and exemptions.
- The Annexation Plan.
- The stats on the quality of our water and the number of tests performed to ensure its quality!
- Your test scores, if you've applied for a civil service position with the city's human resources department.
- How to keep your power bill down, efficiently landscape your home or how to pay your monthly bills as an average of your monthly electric consumption, by linking to Denton Municipal Electric's Website.
- What plans the City of Denton has for your neighborhood and how the city is preparing for growth for the next twenty years by viewing the comprehensive plan on-line.
- Community related links involving local, state and federal government as well as service organizations supported by the city.

Point your browser to http://www.cityofdenton.com/ to see what all the excitement is about.





This article originally appeared in the February 2000 <u>issue</u> of Benchmarks Online. Since many folks may be planning on using the Winter Break time to update their personal and/or student organization Websites, we thought it would a good time to run it again. -- Ed.

Uploading Your Website: FTP vs. Composer

By **Shane Jester**, Central Web Support

If you're in charge of a student organization at UNT or just developing a personal Web page on people.unt.edu you pretty much have two choices for publishing your site. You can either use Netscape Composer to upload the files or you can use an FTP program. For the novice developer, Netscape seems to be the obvious choice due to its friendly interface, however that doesn't necessarily make it the best choice. Although it may take a little bit more effort to initially learn how to use an FTP program, in the long run it will save you many headaches while trying to maintain your site in the future. Therefore I'm going to offer a brief tutorial on how to interpret and use FTP.

FTP, in brief

First, if you don't already have an FTP client you need to download one from the Internet and install it on your computer. Most FTP clients are pretty much the same and there are several free or very inexpensive clients on the Internet. If you are using the computer labs on campus, there should already be a client installed.

Once you have the program installed and have launched it, you should see a dialog box with several fields that need to be filled out. The first field you should populate is the Host Name. This is the Internet address of the Web server that your Website is located on. It is the same as the first part of the ftp address that you would use when publishing with Netscape. For example if you are publishing a page for a student organization the Host Name would be pollux.acs.unt.edu. The next field is the Host Type. You should leave this field selected as Automatic Detect. The third and fourth fields are your UserID and password. These are the same as your UNT Internet account ID and password. IMPORTANT: if you are using a computer on campus make sure the Save Password option is NOT checked. Otherwise the next person using the computer will be able to login to your Website. At this point you must make sure that the Anonymous Login checkbox is NOT selected. Otherwise the system will not allow you to login. Finally you must set the Remote Host option under the Initial directories section of the dialog box. This will be the same as the remaining portion of the FTP address that you use when publishing with Netscape Composer. For example if your student organization was called jimbob then this portion would be filled with /data/calliope/virtual/orgs/jimbob. Finally you may fill out the Profile Name box and click the save icon so that next time you only have to fill in your password. Click on the OK button and the program should connect you to your Website as long as you filled in the information correctly.

Assuming you connected correctly you should now be looking at the FTP file management window. Notice that the window has two different sections. The left side of the window displays information about the computer you are currently using, and the right side of the

window displays information about the server that contains your Website. In each case there is a top window and a bottom window. The top window works in a similar fashion to Microsoft's Windows Explorer. It displays the current drive and directory in the drop down bar and lists any subdirectories. You can double click on any of the directory names to view the contents of that directory or click on the .. to back up a directory. For Example if you are initially in the C:\Program Files\FTP directory and you want to be in the C:\Temp directory simply double-click the .. twice and then double-click the Temp directory. The bottom, windows then displays any files that are located inside the selected directory. The right side of the screen works the exact same way, displaying the content of you folders on the Web server.

I'm sure that you can already see some of the benefits of using the FTP client over Composer. You can now visually browse the contents of your Web page which makes managing you files much easier. If there is a file you no longer need you simply click it once and then press the delete key. This is something that was previously impossible when limited to Composer. Additionally you can rename files or directories. The main feature of the program however is to transfer files and this is really quite simple once you understand what you're actually looking at on your screen. If you want to transfer a file from your A:\ drive on your local computer to your Web page simply select the A:\ on the left hand side of your screen. Select the file that you wish to transfer and press the --> button that is located between the left and right side of the screen. You can transfer files from your Web page back to your computer by pressing the <-- button. Once you get the hang of this, you will be a proficient FTP user, capable of managing your Website effectively.

What about Composer?

Please don't misinterpret my article as a knock against Netscape Composer. Composer is a very valuable tool and I would still recommend using it to create the actual Web pages for your site, especially if you are a novice Web developer. I am simply suggesting that learning to upload and manage the files of your Website is much easier using an FTP client. You can visit the Central Web Support Website for more information and documentation on different Web publishing techniques.



Short Courses

By Claudia Lynch, Benchmarks Online Editor

The Academic Computing Services (ACS) fall short courses are over for the semester. We will be offering similar courses next semester. Please consult the Short Courses page to check out the classes offered this semester.

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

Center for Distributed Learning

The Center for Distributed Learning offers courses especially for Faculty Members. A list of topics and further information can be found at http://www.unt.edu/cdl/training_events/index.htm The center also offers a "Brown Bag" series which meets for lunch the first Thursday of each month at Noon in ISB 204. The purpose of this group is to bring faculty members together to share their experiences with distributed learning. One demonstration will be made at each meeting by a faculty member with experience in distributed learning. More information on these activities can be found at the Center for Distributed Learning Web site.

UNT Libraries'

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

Technical Training

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

UNT Mini-Courses

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

Alternate Forms of Training

The <u>Training</u> Web site has all sorts of information about alternate forms of training. Training tapes, Computer Based Training (<u>CBT</u>) and Web-based training are some of the alternatives offered. There are also handouts for computer training (Microsoft Office 97 and Windows 95) on the following topics:

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

December 1999's "List of the Month" offers links to free Microsoft Word and Excel information also.



Online

IRC News

Minutes provided by Sue Ellen Richey, Recording Secretary



IRC Regular and Ex-officio Voting Members: Judith Adkison, College of Education; Ginny Anderson, Fiscal Affairs; Donna Asher, Administrative Affairs; Craig Berry, School of Visual Arts; Sue Byron, Faculty Senate; Bobby Carter, UNT Health Science Center; Jim Curry, Academic Administration; VACANT, Student Association, Don Grose, Libraries; Jenny Jopling, Instruction Program Group; Joneel Harris, Administrative Program Group; Elizabeth Hinkle-Turner, Standards and Cooperation Program Group; Abraham John, Student Affairs; VACANT, Graduate Student Council; VACANT, University Planning Council; Ramu Muthiah, School of Community Services, GALMAC; Jon Nelson, College of Music; Robert Nimocks, Director, Information Technology, UNTHSC; Patrick Pluscht, Distributed Learning Team; Mark Rorvig, Research Program Group (Acting Chair); Paul Schlieve, Communications Program Group; Kathleen Swigger, College of Arts and Sciences; Philip Turner, School of Library and Information Science and University Planning Council (Chair, IRC);; Virginia Wheeless, Chancellor; John Windsor, College of Business. IRC Ex-officio Nonvoting Members: VACANT, Telecommunications; Bill Buntain, Computing Center Networking; Jim Curry, Microcomputer Maintenance Shop; Richard Harris, Computing Center; Coy Hoggard, Computing Center; Joel Lanpher, UNT Health Science Center; Maurice Leatherbury, Computing Center; Sue Ellen Richey, Computing Center (Recording Secretary). [As of 10/2000]

October 17, 2000

VOTING MEMBERS PRESENT: CHAIR: PHILIP TURNER, JHINUK CHOWDHURY (for JOHN WINDSOR), SUE BYRON, PAM HIGHT (for DON GROSE), ROBERT NIMOCKS, JON NELSON, PAUL SCHLIEVE, ELIZABETH HINKLE-TURNER, JONEEL HARRIS, PAUL HONS (for JUDITH ADKISON), RAMU MUTHIAH, PATRICK PLUSCHT, JENNY JOPLING

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

MEMBERS ABSENT: BOBBY CARTER, MARK RORVIG, KATHLEEN SWIGGER, CRAIG BERRY, DONNA ASHER, GINNY ANDERSON, JIM CURRY, ALLEN LIVINGSTON, VIRGINIA WHEELESS, JOEL LANPHEAR

The minutes of the September 19, 2000 meeting were approved as distributed.

Communications Program Group

Paul Schlieve reported for the Communications Program Group and distributed copies of a document which outlined an action item that group wishes to recommend to the IRC, concerning the implementation of an Internet Caching Server. The group believes that an Internet Caching Server would improve internet connectivity. Recognizing that UNT cannot buy unlimited internet bandwidth, it will be necessary to make the best use of what is

available. The Program Group believes that transparent caching could be accomplished with the purchase and maintenance of such a server. The group recognizes that there are some security issues that are raised by the use of a caching server, but they plan to take up those issues with the University Attorney. This recommendation will be brought back to the IRC at the November meeting. In the discussion that followed, Bill Buntain explained that a caching server would increase the availability of bandwidth by reducing the traffic, and also if someone is accessing a local caching server instead of a remote web site, response time would be faster. Paul Schlieve explained that there will be an acquisition cost of a specifically configured Compaq server that works off the network, which will require staff time to monitor it. Maurice Leatherbury raised the question of logging hits on UNT's central Web server when the caching server is in place and it was stated that such logging could and would continue after the new device is installed. Mike Maner added that some areas of the University already use caching servers; it is hoped that by this action, it will make that usage more wide-spread.

Administrative Program Group

Joneel Harris reported for the Administrative Program Group that a group of their members just returned from a trip to California where they visited the Oracle development site to gain more information about their student product and their position on other products that are soon to be released. A smaller group attended an EDUCAUSE conference last week where they were able to talk with the vendors UNT has been looking at as well as with users of those vendors' products. Some of the conversations they had with PeopleSoft users was discomfiting, especially finding out that some users had to increase their administrative programming staff considerably. There was not as much negative feedback from Oracle users, mostly because Oracle is about 5 years behind PeopleSoft in their development of these administrative applications. They found that SCT has lengthened the target time for completion of development of their products by 4-5 years. Joneel pointed out that both of the solutions they are seriously considering are browser-based solutions, and consequently will add to the load on the internet.

Joneel also announced that another vendor presentation is planned this week by SAP. That vendor does not have a student systems module yet, but the Program Group believes SAP will at some point have a viable solution. Joneel stated that the group is not any closer to making a decision, but still hopes to have a recommendation for the IRC prior to the February Regent's meeting. She also stated that the group believes it has underestimated the total cost to implement a complete solution, although no hard quotes have been received from the considered vendors.

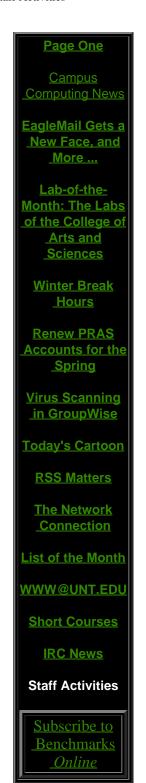
Distributed Learning Team

Patrick Pluscht reported for the Distributed Learning Team that they just completed a very successful WebCT Conference, with 150 guests in attendance. They are planning a WebCT institute to train trainers at other institutions. Plans are underway to have video-conferenced classes at Collin County College in the Spring semester, with more classes planned for Fall of 2001. A third site is planned for video-conferenced classes in Spring 2001 at the Systems Center in Dallas. Patrick also announced that they have applied for another TIF grant.

IRC Meeting Schedule

 ${f T}$ he ${f IRC}$ generally meets on the third Tuesday of each month, from 2-4 p.m., in the

Administration Building Board Room. From time to time there are planned exceptions to this schedule. The December meeting has been changed to the second Tuesday, December 2. All meetings of the IRC, its program groups, and other committees, are open to all faculty, staff, and students.



Staff Activities

Transitions

The following are new employees:

- Alana Baker, Programmer on Voice and Strategic Applications Team.
- **Heather Drennan**, Programmer Analyst, Voice and Strategic Applications Team.
- Earl Garden, Programmer Analyst, UNT/HSC Fiscal Data Systems Team.
- **Howard McCormick**, computer equipment operator in Computer Operations.
- Gary Lakhmanchuk, I/O Consultants(part-time).
- **Kristine Young**, I/O Consultants(part-time).

The following people no longer work in the Computing Center:

- **Sam Goh**, Helpdesk Consultant (part-time)has accepted a part-time position with the COE Tech support group as of January 2.
- Earnest Woodall, Production Services (part-time).
- James Foreman, Production Control Scheduler.

Changes

The following people have changed the status of their employment within the Computing Center:

• **Becky Sue Parton** transferred from the UNT Fiscal Data Systems team to the Student Records Data Systems team.



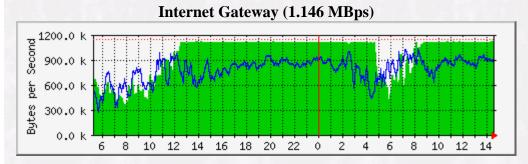


Campus Computing News

By Dr. Maurice Leatherbury, Senior Director of Academic Computing

Internet Bandwidth Issues on Campus

As we near the end of the fall 2000 semester, the campus is experiencing slow communications to the off-campus Internet, affecting our work, studies, and personal use of the World Wide Web. The slowness is a result of the lack of sufficient data communications bandwidth to carry the heavy load of traffic we all generate at UNT. Currently, we have 9 megabits/second capacity on our Internet connection, but that connection is essentially saturated 19 hours a day and especially during working hours when were all trying to get to Web sites to do our business. This chart vividly depicts the problem:



The green-shaded area shows the utilization of our incoming Internet bandwidth as of 2:30 PM on Monday, December 11, 2000. As you'd expect, usage drops during the weekends, but it's clear from the chart that for most of the time, particularly during workdays, the "pipe is full." Outbound utilization, shown by the blue line, also shows that we're nearly filling the 9-megabit capacity available to us now. Bill Buntain, the Director of Networking and Communications Services, recently posted a message on one of UNT's newsgroups explaining how the problem occurred and what we're doing to correct it. I'll plagiarize from his message.

A Bit of History

Recognizing the exploding demand for traffic, UNT initiated looking at alternatives for providing Internet connectivity in November of 1999. Our desire was to find a vendor that would allow us to co-locate equipment in Dallas so that we could put all of our Internet 1 and Internet 2 traffic on a single circuit between Denton and Dallas and split the traffic there. Co-locating hardware would also allow us to interconnect the Health Science Center in Fort Worth (HSC), the System Center at Dallas (SCD), and the Universities Center at Dallas (UCD) more effectively. We were also looking for someone who would give us access to "dark fiber" (unused fiber optics lines) so that we would have greater flexibility in scaling our connections to meet demand. In February of 2000 we sent an RFP to 16 vendors, including Williams Communications Solutions, Intermedia Communications, TXU Communications, Southwestern Bell Telephone, CapRock Communications, Sprint, GTE, AT&T, MCI WorldCom, Qwest, DIGEX, and Verio. Prior to that we had talked to Texas

State Telephone Cooperative, Lower Colorado River Authority, Muenster Telephone, NTS Communications, Peoples Communications, MetroMedia Fiber Systems, CoServ, eSpire, Charter TV, Century Telephone, NextLink, the Texas Department of Transportation, Dallas Area Rapid Transport, Burlington Northern/Santa Fe, Level 3, ICG Communications, Union Pacific, Trinity River Authority, Fiber America, and WinStar.

None of the proposals that came back had better rates than what was available to us through the State of Texas General Services Commission TEX-AN 2000 contracts. By state regulation, we have to purchase phone and data communications circuits/services from the GSC or obtain a waiver from that agency to purchase from some other source. In April we initiated a request for pricing through the GSC. Even with a 4-6 week delay we should have been able to order the circuits we needed by the end of May, giving us approximately three months to get the circuits in place for the start of the fall semester. However, from this point Murphy's Law took over. Due to some coordination problems between the GSC and the phone companies, we did not get the correct pricing firmly established until mid-July. We immediately requested the circuits to be installed and the order expedited. The order form indicated that we should allow 45 days for the installation. However, in mid-August we were informed that the OC-3C circuit (144Mbps) we had ordered between Denton and Dallas and which GTE and SW Bell had priced to us was not available because they did not have an interconnect agreement for an OC-3C. At that point we ordered a DS-3 and again requested that installation be expedited. SW Bell turned up some engineering problems in their Central Offices and they've given us a connection date of January 9, 2000 at which point they'll hook up a line to Verizon, our local phone company, to get us to the Internet backbone.

What We Are Installing

When all of the circuits we have ordered are installed, we will have two DS-3s between Denton and Richardson. We will have a switch located in Richardson which will split our traffic into Internet 1 traffic, Internet 2 traffic, and traffic bound for the HSC, SCD, and UCD. The circuits to Internet 1 and Internet 2 will both be DS-3s, each of which provides 45 Mbps of bandwidth. Our Internet 1 provider will be Qwest, which is a Tier 1 ISP. Our Internet 2 connection will be to a router managed by the Alliance for Higher Education which in turned will be connected to the Qwest Abilene network via an OC-3.

We are already investigating alternatives for leveraging what bandwidth we have now and will have after the upgrade and are planning for the next iteration of upgrading our network. We are concerned about the increasing demand and the costs associated with it. Just FYI, the total cost of our Internet connectivity is over \$300,000 per year, not counting our participation in the AHE consortium or Internet 2.

What You Can Do to Help

If everything goes as planned, UNT will have a five-fold increase in our Internet connection speed by mid to late January of next year. In the meantime, there are some things that each of us can do to minimize the impact our Internet use has on the rest of the campus:

Don't listen to streaming audio, etc. from off campus (e.g., don't run Real Jukebox to listen to your favorite radio station in Oklahoma City.)

- Don't do personal shopping or recreational Web browsing during your breaks (it goes without saying that you shouldn't be doing this during work hours!)
- Don't download large files during work hours unless they're really needed immediately for your work. This would include such things as upgrades to your Web browser, software that you want to try out on your computer, or audio/video files you want to listen to or view.



EagleMail Gets a New Face, and More ...

By Ryan Hickey, UNIX Systems Administrator, Student Messaging Systems

This spring will bring changes in the EagleMail Web interface to student E-mail. Over the course of this past semester, we have been diligently working to provide to you a robust, high-availability student mail service to meet the demands of the University population.

Why are we changing?

We have several reasons for changing. First, as many of you may have noticed, the current EagleMail site is down a lot. Every 8-12 hours, the backend software powering EagleMail (*CMGI Solutions Mailspinner*) mysteriously stops responding, consequently, "hanging" EagleMail. Attempts to log in are met with either errors, or long waits followed by a timeout. This not only results in frustration, it prevents students from effectively completing assignments, communicating with professors, or just letting off steam in E-mail to friends. Since many students use EagleMail from campus computer labs, having a reliable system in place is extremely important.

Second, limitations in *Mailspinner*'s design prevent us from adding new features or changing existing ones. The current software we have in place is a commercial package provided to us as a pre-compiled Web application and server. This means we have no access to the program code to make improvements or changes. We are at the mercy of the software's creator, *CMGI Solutions*, to provide the software updates, bug fixes, feature enhancements, etc.

Third, vendor support in regard to the above two items was severely lacking. Our requests for support with the aforementioned issues were met with very little response from the software vendor. Over the course of two months, we diligently tried to get the vendor to provide answers to our problems with the software. In total, six email messages and numerous phone calls went unanswered. Whether completely ignored or not, we knew that this level of service was unacceptable, especially with the problems we were having with the software. It was at this time that I decided to evaluate a new product to replace *Mailspinner*.

In comes IMP...

Internet Messaging Program (IMP) is an open source Web mail package that has garnered the support of many institutions around the world. It supports 23 languages, and is completely customizable and configurable. It is written in PHP, which makes it platform independent. For example, we are running the IMP software on two independent Linux PIII-800 PCs, load-balanced by our RadWare WebDirectors. This configuration allows almost infinite scalability and redundancy.

Since *IMP* is open source (meaning we have full access to the program source code), we can customize it to meet our needs any way we see fit. We can add new features or change existing ones. Some of the changes we have already made are integrating problem reporting with our *Remedy Action Request System*, and integration with our <u>UNT Bulk Mail system</u>.

We feel that *IMP* is superior to *Mailspinner* as a Web mail platform. Over the course of this past semester, we have had our *IMP* development system in limited production for testing. This system has performed very well under high load and has proven to be extremely reliable. Over this time period, we have invited comments and input from the students who have been using it. Most of the comments students have submitted have been very positive. In a survey taken earlier in the semester, 85% of the respondents preferred *IMP*, 8% favored *Mailspinner*, 6% had no preference, and 1% gave no opinion.

Some differences...

Upon first glance, *IMP* is quite different from *Mailspinner* as far as looks are concerned. Both use an entirely different color scheme and layout. Most differences between *IMP* and *Mailspinner* are simply cosmetic. Both products offer the same set of features essentially, just in different ways. One thing users will notice is the difference between the address books. *Mailspinner* separates the personal address book from the directory address book, while *IMP* combines the two into one screen. Also, *IMP* "pops open" a new window for the address book (called "Contacts"), while *Mailspinner* loads them into the main frame. These sorts of things are minor, and can be quickly adjusted to as you use the new system.

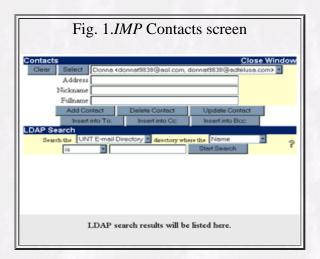
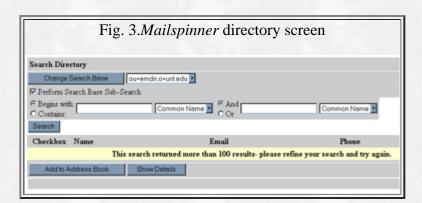


Fig. 2.Mailspinner address book screen

	Full Name:	Email Address:	Telephone:	Nickname:	Comments:
0	Chris Cofer	cofer@unt.edu		cofer	blah
	Darin Newsome	darin newsome@telops.gte.com		darin	blah
	Jason Wood	jwood@assisted.com		jason	blah
	Lora	leiler@cmaeti.com		lora	blah
	Nicole Hice	niki681@netscape.net		nicole	blah
	Paul Landes	plandes@alignsc.com		paul	blah
Add	l Address				
Full	Name:				
Full					
Full Ema	Name:				
Full Ema	Name:				
Full Ema Tele Nici	Name:				



The plan...

Our current plan calls for full deployment of *IMP* by January 6, 2001. The server hardware has been delivered and we are currently making preparations for the switchover. We will maintain the *Mailspinner* installation until the end of spring in case unforeseen problems arise.

Students should feel at ease about this transition. Their mail will not be manipulated in any way, and all personal address books that are stored in *Mailspinner* will be transferred to the new *IMP* system. If anyone has any concerns, please feel free to contact the <u>Helpdesk</u>, who can answer most questions about the new system.

BulkMail/EagleMail Maintenance Schedule

- From December 19 22 we will reorganize the IMAP server mailstore. System performance may be degraded during this week. To keep the level of degradation to a minimum, all UNT BulkMail/Official Mail deliveries will be suspended from December 19-22.
- On Wednesday, December 20, all student mail services (IMAP, EagleMail) will be unavailable from 8:00 AM until 10:00 AM to reconfigure a disk array.





Lab-of-the-Month: The Labs of the College of Arts and Sciences

By Dr. Elizabeth Hinkle-Turner, Student Computing Services Manager

With the largest number of offered credit hours on the UNT campus, the College of Arts and Sciences (CAS) hosts a network of General Access Labs with a special emphasis on the computing resources needed for the fulfillment of its academic requirements. Covering the needs of majors in such diverse areas as psychology, computer science and aerospace studies, these labs contain a large inventory of hardware and software and feature almost every aspect of computing service.





The CAS labs located in the General Academic Building





Terrill Hall lab and the Wooten Hall lab

The CAS General Access Labs (CASGAL) are located in four areas throughout the UNT campus: two are found in the General Academic Building (GAB 330 and GAB 550) while the remaining are in Terrill Hall Room 220 and Wooten Hall Room 120. The locations feature slightly different hours with the Terrill Hall and GAB 550 facilities open from 8:00 a.m. - 10:00 p.m. Monday through Thursday and 8:00 a.m. - 5:00 p.m. Friday and closed on Saturday and Sunday while the Wooten and GAB 330 rooms remain open until midnight Monday - Thursday and have additional hours on Saturday (noon - 8:00 p.m.) and Sunday (noon - midnight). The manager of the CASGAL system is James Strawn and he is kept busy making sure his distributed facilities are running smoothly!

The number of computers available to students in these four labs is significant: over 150 PCs (PII 400s) running Windows 2000 are available as well as 32 new G4 Macintosh towers. The majority of these machines are located in the GAB labs and all of the Macintoshes are found there. The Terrill and Wooten Hall facilities are cozier with 28 and 19 PCs respectively. All four facilities feature flatbed scanners and laser printers and the GAB 330 area has a color printer also.

Each long semester, an average of 7,000 individual students visit the CAS General Access Labs at least once. This equals one-fourth of the entire UNT student population! Counting all their repeat visits, CASGAL provides service to over 75,000 patrons each long semester. With a large staff of qualified monitors and tech personnel, visitors to the CAS labs will find well-equipped areas with friendly service for much of their general computing needs.

Additionally, the CASGAL network has an informative Website with a thorough overview of its policies and procedures at www.cas.unt.edu/gal/.



Online

Winter Break Hours

By Claudia Lynch, Benchmarks Online Editor

Following are the hours for Computing Center-managed facilities during Winter Break. All staff offices will be closed Monday, December 23, 20000 through Monday January 1, 2001.

- **Print Services** (I/O): Regular hours (6 a.m. 2 a.m. M-F, 8 a.m. Midnight Saturday, and 10 a.m. Midnight Sunday) will remain in place for the Winter Break except for the week of Christmas/New Years. Print Services will be **closed** December 24 & 25. They will be open 8 a.m. 8 p.m. each day from December 26-30. On Sunday December 31 they will be open from 10 a.m.- 4 p.m., and will open at 8 a.m. on New Year's Day (1/1). The regular schedule resumes at that time. There is no planned deviation from this schedule for MLK Day (1/15).
- The **Helpdesk** (<u>ISB 119</u>) will be open for normal business (walk-in support, phone and E-mail support), December 18-22 and January 2-15. Hours normally are 8:00 a.m. 8:00 p.m., Monday Friday, and 9:00 a.m. 2:00 p.m. Saturday.

The Helpdesk will be **closed** Christmas Day, December 25, and New Year's day, January 1. They will be open for phone and E-mail support **only**, December 26-December 29, 8:00 a.m. - 8:00 p.m., and December 30, 9:00 a.m. - 2:00 p.m.

The ACS General Access Lab (ISB 110) will be open Monday - Friday, December 18-22 9:00 a.m. - 5:00 p.m.; closed December 23-January 1; open Tuesday - Friday, January 2-5, 9:00 a.m. - 5:00 p.m.; closed January 6-7; open Monday - Friday January 8-12, 9:00 a.m. - 5:00 p.m. Regular hours will resume Monday, January 15.

Hours for Other Campus Facilities

The University is <u>officially</u> closed Monday, December 23, 2000 through Monday, January 1, 2001. In the event of **severe weather**, check the UNT Website, <u>www.unt.edu</u>, to see if the University will be closed. More weather closing information is available in *Inhouse*:

http://www.unt.edu/inhouse/weather.htm The University policy on closing due to extreme weather conditions can be found here:

http://www.unt.edu/planning/UNT_Policy/volume2/10_2.html.

UNT Libraries

Click here to find out the library hours in effect for December 15, 2000 through January 14, 2001.

General Access Labs

• WILLIS:

Friday, 12/15 Close at 5:50 p.m.
Saturday, 12/16 9:00 a.m.-5:50 p.m.
Saturday, 12/17- Tuesday, 1/2 **Closed**Wednesday, 1/3- Thursday, 1/11 8:00 a.m.- 5:50 p.m.
Friday, 1/12 8:00 a.m.-3:50 p.m.
Saturday, 1/13 9:00 a.m.-5:50 p.m.
Sunday, 1/14 Open at 1:00 p.m.(back to 24 hrs)

• <u>SLIS</u>:

Saturday, 12/16- Monday, 1/8 **Closed** Tuesday, 1/9 Resume normal hours

• MUSIC:

Saturday, 1/16- Sunday, 1/14 **Closed** Monday, 1/15 Resume normal hours

• <u>SCS</u>:

Open Friday, 12/15 8:00 a.m. - 5:00 p.m. Saturday, 12/16 - Monday, 1/15 **Closed** Tuesday, 1/16 Resume normal hours

• <u>COE</u>:

Open Friday, 12/15 8:00 a.m. - 6:00 p.m. Saturday, 12/16 - Monday, 1/15 **Closed** Tuesday, 12/16 Resume normal hours

• <u>COBA</u>:

Friday, 12/15 8:00 a.m. - 4:00 p.m. Saturday 12/16 - Monday 1/15 **Closed** Tuesday, 1/16 Resume normal hours

• <u>CAS</u>:

Schedule for all labs

Friday, 12/15 close at 5 p.m. Saturday, 12/16 - Monday, 1/15 **Closed** Tuesday, 1/16 Open at 8 a.m., Resume normal hours

• <u>Art:</u>

Saturday, 12/16 - Monday, 1/15 **Closed** Tuesday, 1/16 Resume normal hours



Renew PRAS Accounts for the Spring

By Claudia Lynch, Benchmarks Online Editor

If you purchased a Premium Remote Access Service subscription for the fall semester -- or had paid through the fall -- and you want to keep it, you will need to renew it. You may also need to take action to ensure the continuation of your UNT Internet Account, under certain circumstances. Details for renewal of both these services follows.

Premium Remote Access Service Renewals*

Renewals may be purchased in person or over the phone at the software department of the Union Bookstore (940/565 3185). Basic subscriptions for the spring are \$45. ISDN (128K) subscriptions cost \$90.

These subscription renewals will become active Friday, 12 January 2001. All subscriptions that have not been renewed by Friday, 12 January 2001 will be deactivated on Tuesday, 16 January 2000. Please E-mail any questions regarding renewal to pras@unt.edu

Internet Service Account Renewals

People who are no longer associated with the University lose their eligibility to have access to many services, including various computing services. If you have been notified that your account is going to be disabled and you are still associated with the University, please contact the Computing Center Helpdesk at (940) 565 2324 or to helpdesk@unt.edu. Retirees may continue to have a UNT Internet Service account, however these accounts must be renewed annually. You may be asked to provide documentation of eligibility for this service due to the absence of available data on retirees at this time.

*Questions about PRAS? We answered some common ones in our <u>August 1998</u> PRAS renewal article. The <u>Remote Access</u> area of the Helpdesk Website is also chock full of information on that topic.



Virus Scanning in GroupWise

By Claudia Lynch, Benchmarks Online Editor

According to Andrew McGregor, the "Tips on GroupWise" guy, and Jason Myre of the CWN Messaging Support Group, a new virus scanning E-mail server has been implemented for GroupWise. Called Iatro (pronounced ya-tro -- the Greek word for doctor), it is currently checking all incoming E-mail destined for GroupWise mailboxes. All outgoing GroupWise E-mail is also being scanned. According to the CWN folks, this is necessary because of the unique way GroupWise encrypts its E-mail and handles attachments.

How can you tell your mail is being scanned by **Iatro?**

If your mail is being scanned, you will notice an additional hop in the mime header. For example:

==

Received: from iatro.unt.edu

by gwia.unt.edu; Tue, 31 Oct 2000 09:21:18 -0600

Received: from Mercury.acs.unt.edu (mercury.acs.unt.edu

[129.120.220.1])

by iatro.unt.edu (8.9.3/8.9.3) with ESMTP id JAA19306

for <lynch@cc.admin.unt.edu>; Tue, 31 Oct 2000 09:21:38 -0600

==

What if a virus is found?

If Iatro finds an infected E-mail message, it will not route it, but rather send a notification to both the sender and recipient (Note: An intended UNT recipient will not be notified if the sender's address is also from UNT). Below is an example of the notification message that the sender receives:

VIRUS ALERT

A virus was detected in an email message sent by you. We stopped delivery of this email!

Recipient: <tbr/> <tbr/> <tbr/> <tbr/> du>

Subject: EICAR TEST

Virus: Found: EICAR test file NOT a virus.

The recipient was notified. Please scan your computer before you resend the message.

This is an automated message produced by UNT's antivirus gateway. If you have any questions, email the postmaster at postmaster@iatro.unt.edu

Similarly, if someone attempts to send you an infected message, you will receive something like this:

VIRUS ALERT

A virus was detected in an email message sent to you. We stopped delivery of this email!

Sender: <tkmail@yahoo.com>

Subject: EICAR TEST

Virus: Found: EICAR test file NOT a virus.

The sender was notified.

This is an automated message produced by UNT's antivirus gateway. If you have any questions, contact your network manager or email the postmaster at postmaster@iatro.unt.edu

Finally, here is the message you will receive if you attempt to send an infected file, via the Internet, to someone else on campus:

VIRUS ALERT

A virus was detected in an email message sent by you. We stopped delivery of this email!

Recipient: <tbrown@cc.admin.unt.edu>

Subject: eicar test

Virus: Found: EICAR test file NOT a virus.

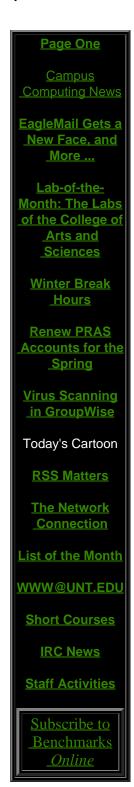
Please scan your computer for viruses and correct the problem before you resend the message.

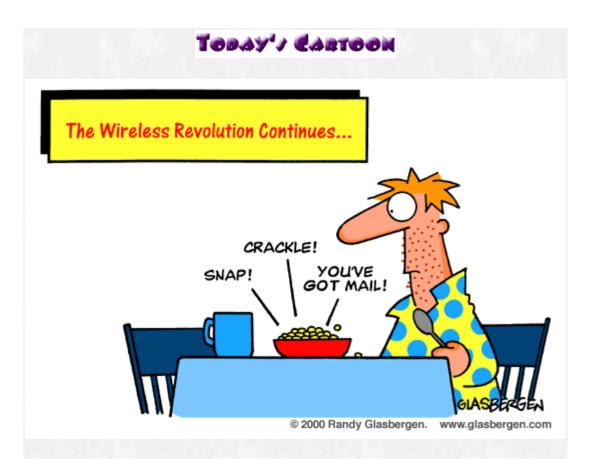
This is an automated message produced by UNT's antivirus gateway. If you have any questions, contact your network manager or email the postmaster at postmaster@iatro.unt.edu

No more virus worries then, right?

Although this adds another layer of protection to the University's network, Iatro is not the be-all and end-all solution. It will not intercept viruses that are propagated by removable media or from downloading files from the Internet. Iatro only scans E-mail that comes in from or goes out to the Internet. **Internal**

GroupWise mail is not scanned. You are urged to continue to run virus detection programs and maintain up-to-date virus signature <u>files</u> on your machine (this should be done automatically, see your <u>network manager</u> for more details).





From "Today's Cartoon by Randy Glasbergen", posted with special permission. For many more cartoons, please visit www.glasbergen.com.