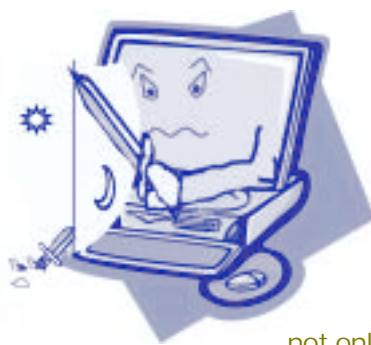


ecomunicator

Do Your Share in the War on Viruses

This summer, the Northwestern community, along with the rest of the world, was affected by some nasty computer viruses. Blaster hit in early August, and just as everyone was recovering from that along came SoBig.



It seems as though new viruses are being unleashed every day. This may seem overwhelming, and you may think you have to be a technical wizard to avoid these threats, but there are some things that you can do to prevent the spread of viruses.

Remember, where virus protection is concerned, "failure is not an option." It's not only your computer that's at risk if you don't have the latest virus definitions and operating system patches; it's the entire NU network.

A few simple steps can help protect your workstation against potential attacks. If you have a computer support technician, please consult them before following the advice below.

First and foremost, be sure to install Symantec AntiVirus software on your computer. The software is available free through the University. Visit the NUIT Services site at aquavite.northwestern.edu/it-services/ for information on how to download and install this software.

Installing the software is a good start, but you must also keep the virus definitions up to date. When a new virus is discovered, antivirus software developers modify their software so that it can detect the new virus. These virus definitions must then be downloaded onto your machine. For instructions on how to update your virus definitions, see www.tss.northwestern.edu/installer/docs/swwinvir.html. You can also set Symantec up so that it automatically updates the virus definitions daily. For information on how to do this, please see the documentation at www.tss.northwestern.edu/virus/nav-win.html.

Most viruses prey on vulnerabilities in the operating system or an application. For that reason, it is also important to arm your computer with the latest software patches and updates from Microsoft. For information on how to scan for updates, please go to the Windows Update site at v4.windowsupdate.microsoft.com/en/default.asp. Machines with newer operating systems can be configured to automatically download and install these updates.

Once you have configured Symantec and Windows Update, you shouldn't have to worry about it again.

Finally, NUIT has a Web site, "Get Control," at www.it.northwestern.edu/getcontrol/ specifically geared towards providing you with information about protecting your machine. This site has information regarding the latest viruses, plus helpful hints about setting up your virus software, what to do about spam, and much more. It also includes recommendations to bolster desktop security. Just click on the "Security Recommendations for Desktop Computers" link located at the bottom of the page. Be sure to visit the site regularly to keep apprised of the latest updates.

Continued on page 3

Welcome to our first faculty-focused issue. NUIT provides services to faculty interested in using technology in teaching and research. Find out more about new projects and technology initiatives on pages 4-6.

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PDA's and Wireless

You can now use your PDA (personal digital assistant) or your Pocket PC to connect to the NU wireless network by using your NetID and e-mail password. PDA's and Pocket PCs are small mobile hand-held devices which have computing and information storage and retrieval capabilities. Recently, NUIT tested third party software that has the necessary tools for connecting with Palm and Pocket PC handheld devices running most operating systems. For a complete list of these systems, go to <www.tss.northwestern.edu/vpn/pda_vpn.html#requirements-pda>. Users now have the capability to access the Web and e-mail at various wireless access points on the Chicago and Evanston campuses enhancing the effectiveness of their mobile devices.

For a list of wireless locations on both campuses, go to <www.tss.northwestern.edu/wireless/locations.html>. To activate this service, users will need to purchase the recommended software directly from the vendor, Movian. Complete set-up instructions for PDA's are available at <www.tss.northwestern.edu/vpn/pda_vpn.html>.

UNITS Needs You

The University relies on UNITS (University Network of Information Technology Specialists), an organization of technical contacts for computer support within University departments, that help staff and faculty maintain their desktops and network security.

UNITS representatives receive the latest information regarding virus outbreaks, NUIT services, and information technology. Because UNITS representatives are employed by many departments throughout campus, they are able to answer end user questions quickly.

If there is someone working in your department that you typically seek out for personal computer advice, please encourage them to join UNITS!

For information about how to join this dynamic group, please visit <www.tss.northwestern.edu/DSS/units/> or call (847) 467-6404.

New Tools for E-mail Management

NUIT recently implemented several new features and tools to improve e-mail management and security. As previously announced, a new and improved **WebMail** <www.northwestern.edu/webmail/> service was launched to enhance mobile user access to e-mail. The folder management feature which allows users to create and manage mail folders on each of the four central e-mail servers, is now accessible to WebMail users. All central e-mail account holders are allotted 50MB of online folder space. To utilize this folder space a user must activate **IMAP** (Internet Message Access Protocol) on his or her account. Information about how to do this and whether or not this is right for you can be found at <www.it.northwestern.edu/introductions/pop_imap.html>.

To facilitate their teaching and research efforts, faculty can purchase an additional 50MB of folder space for \$3.00 per month. To do this, faculty should contact the person in their school who is responsible for managing NetID charges.

Every e-mail account on the NUIT mail servers (merle, hecky, lulu, casbah) has an inspool (server side inbox) quota of 50MB. The majority of users who regularly check e-mail with Eudora

or Outlook and move their mail to their local machine do not get close to exceeding this quota. Those who leave mail on the server or do not check their e-mail on a regular basis are notified regularly as they approach their inspool quota limit. If you reach that limit, your mail is archived and a fee of \$100 is charged to restore it. Find more information about the quota policy at <www.it.northwestern.edu/policies/email/inspool.html>.

Eudora 6.0 is now available to NU faculty, staff, and students. This version of Eudora has a number of new features, including SpamWatch for automatic filtering of junk e-mail and Content Concentrator for grouping and viewing threaded messages (a series of messages following the same topic). The software can be downloaded from the IT-Services site at <aquavite.northwestern.edu/it-services/browse.cgi?s=Eudora>. Faculty, staff, and students can use Eudora on University-owned or personally-owned computers for the purpose of accessing the University network. For assistance with software installation, please consult your local support technician, your UNITS representative, or the NUIT Information Center (1-HELP).

Goodbye Kerberos, Hello SSL

In the interest of creating a more secure and convenient e-mail environment at Northwestern, NU Information Technology has implemented SSL (Secure Sockets Layer) encryption technology on its main e-mail servers. SSL is a commonly-used protocol for managing the security of a message transmission on the Internet. SSL encrypts passwords, making them extremely difficult to decode. Previously, unless Kerberos was used, passwords were sent in clear text. In addition, messages received by a user's e-mail software will be transmitted from the e-mail server encrypted.

To help ease the transition for the University community, NUIT is phasing out Kerberos and Kerberized POP (Post Office Protocol) over the next 12-15 months, as well as plain text password processing. As part of the process, NUNet account holders may need to upgrade their e-mail software to the latest versions of Eudora or Outlook to assure compatibility with SSL. SSL software configuration instructions can be found at <www.it.northwestern.edu/email/config/>. Please check with your computer support person to ensure that this is done or call 491-HELP (491-4357) for assistance.

NUIT Controls Latest Round of Virus Outbreaks

With the first reports that the Blaster worm had hit campus in August, NUIT took control and made sure the community was aware of the danger, began fixing the damage that had been done and took steps to keep the intruder from spreading any further.

Technical staff and UNITS representatives, the technical departmental volunteers at the University (see "UNITS Needs You," page 2) exchanged information via the UNITS listserv, allowing them to troubleshoot and fix machines expediently. Information was also available on the NU-CERT, the University Internet Security Group mailing list (see sidebar on Internet Security System Scans). Departments contractually supported by NUIT's Distributed Support Services (DSS) were either not infected or not impacted as dramatically as those departments without support.

A bulk e-mail was sent to the University community pointing them to the NUIT Get Control Web site for information and fixes. Patches were made available at this site because Blaster stopped machines from running Windows Update. Windows Update is the Microsoft Web site that allows users to download operating system patches and updates. In addition, NUIT worked with University Relations and placed a link to the information on the NU home page.

NUIT security staff blocked **all** infected traffic, at the border. Blocking prevented infected machines from infecting additional machines. Owners of hosts that were infected were notified and given instructions to clean the machines. Their ports were also turned off to prevent further spread of the virus.

NUIT and University IT support staff had seemingly contained the problem when SoBig, the next virus, made its appearance and protective measures were implemented yet

Viruses, continued from page 1

If your computer is sending viruses across the Northwestern network, NUIT will turn off your network connection to ensure others' safety until your machine is virus-free. If this happens, or if you think your computer has been infected, contact the technical support person in your department or school or call the NUIT Help Line at (847) 491-HELP (4357).

We need to work together to protect the University's information and network.

again. Notification was immediately posted on the Get Control site. NUIT was able to filter a good deal of these messages before they got to the servers, thereby curtailing the potential impact of the second virus.

The arrival of students at the beginning of fall quarter was a potential risk, so NUIT implemented processes to stop infected student machines from connecting to the Northwestern network. Patches and fixes were made available to the students so they could make the necessary repairs before arriving on campus. NUIT's Residential Networking consultants were on hand during New Student Week to assist students. As a result of these proactive efforts, over 3,600 student machines were stopped from further infecting the NU community with these viruses.

Future Plans

NUIT is evaluating several ways to prevent future virus threats. Continued communication and increased participation within the technical groups on campus and the user community is an important element (see "Viruses," page 1). NUIT will also be turning off compromised computer network jacks in a more expedient manner and is investigating software that enables technical support personnel to push necessary updates directly to user machines.

Viruses are becoming more sophisticated, aggressive, and their methods of attack are increasing. The NU Community must be relentless in its efforts to protect computing assets. NUIT is committed to protecting the Community and continuing its search for improved security measures that can be leveraged across the University, but we need your help. The NU community should continue to install and upgrade their virus protection software, as well as apply necessary operating system patches.

Internet Security System Scans Now Available

With the recent outbreak of viruses around campus, NUIT acquired a new tool, System Scanner, that will help detect system vulnerabilities.

System Scanner allows NUIT to scan an IP address for known vulnerabilities. When a technical support person suspects that an IP address or computer has been compromised, they can contact NUIT with the IP address at <security@northwestern.edu> and request that the network port and computer be scanned. NUIT will then run a scan and report the results back to the technical support person. This service is free for the University community.

To minimize the possibility of exposing a machine's vulnerabilities, only verified technical contacts may register for scans. This helps to ensure the security of the network.

NUIT also offers several ways to keep the community apprised of security issues. On request, NUIT security staff will come to schools and departments and address various security issues. To request a presentation, contact <security@northwestern.edu>.

The Northwestern University Computer Emergency Response Team (NU-CERT) meetings, seminars and listserv keep members apprised of the latest threats and methods to address these threats. To subscribe to the list, send an e-mail to <security@northwestern.edu> and ask to be subscribed. More information about NU-CERT is available through this list and you can contact NUIT with additional network security questions at this same e-mail address.

Modem Pool Retirement

NUIT central modem pool services will be phased out by August 2005. This will affect services delivered through the following telephone numbers: (847) 467-2300, (847) 467-6000, (847) 467-7569, and (312) 503-0391. Network security concerns, declining modem pool usage, and low-cost alternative access were factors in the decision. A Web site describing details is at <www.it.northwestern.edu/reference/modem/retirement.html>.

NU modem pool users are encouraged to secure DSL or cable modem Internet access; information about these options is available at <www.it.northwestern.edu/dsl-and-cable/>. Additional information about this transition can be found at <www.it.northwestern.edu/transitions/end_modems.html>.

Academic Technologies Busy with Upgrades

If you've noticed computers running faster in the NU Smart Classrooms, it's because the network ports and much of the hardware in the classrooms have been upgraded. The ports were upgraded to Switched-100 Mbps, allowing for faster delivery of digital media and data.

In addition, a new laptop-based Smart Classroom was created in Searle Hall in a special partnership with the School of Communication. In still another endeavor with the Kellogg Graduate School of Management (KGSM) and the Weinberg College of Arts and Sciences (WCAS), a move toward a Flexible Classroom model also took place. Flexible classrooms are designed to be configurable in a variety of ways and utilize space to accommodate different size groups. The room was used for classes in Biochemistry, Political Science and Decisions Analysis.

New security has also been installed in the Smart Classrooms to protect the equipment.

Faculty surveys of instructors that have used the Smart Classrooms not only reveal a high utilization rate of the technologies available, but also show that the upgrades over the past two years have resulted in fewer technical problems and improved teaching experiences. Increased faculty training in the use of the classrooms has helped to increase the comfort level of the faculty using these facilities.

In addition to Smart Classroom upgrades, NUIT worked with individual schools to design and deploy technology-enhanced classrooms on campus with special capabilities for videoconferencing and Webcasting. The newly renovated Ward Conference Room in the Feinberg School of Medicine now serves as a Life Science seminar room. This room and Weinberg's new Pancoe Auditorium have been outfitted with the latest in video conferencing technology.

For more information about how to use any of the services mentioned in this article (Smart Classrooms, Webcasting, Video conferencing) contact Bob Davis of NUIT Academic Technologies at <b-davis@northwestern.edu>.

The Chicago Homer: A Technology Odyssey

Martin Mueller, a professor of English and Classics at the Weinberg College of Arts and Sciences, is using technology to improve access to classic literature. He learned about relational databases and the type of questions that could be asked and answered using this technology. He reasoned that the same logic that answered the question "How many customers own houses in California and Vermont?" could also be applied to philological problems. And so the idea for the Chicago Homer was born.

The Chicago Homer is a bilingual database which allows distinctive features of Early Greek epic accessibility to readers, displaying the text with and without the Greek translation. In particular, it allows users to display repeated words and phrases that occur across various texts such as the Iliad, the Odyssey, and the Homeric Hymns.

Being able to track the repetitions in these texts was no small feat. NUIT's Academic Technologies unit, the University Library and Professor Mueller worked closely together. "It was a very collaborative and cooperative relationship. The programmers didn't just implement the project. They were crucial in helping to shape it," said Professor Mueller.

The project was challenging on many levels. The database had to be built and populated, a method to identify the repetitions in the source text had to be developed and a clever way to display the text established. In addition, browser technology and standards at the time hadn't quite caught up to the technology used on the project. However, each of those challenges was overcome. The application can be used on both Macintosh and Windows operating systems.

For students of Greek classics, the Chicago Homer is an invaluable tool. "It does something extremely difficult in seconds by graphically displaying the use of these repetitions," said Prof. Mueller. "It would otherwise take months to find the repetitions by hand if you could do it at all."

The latest version of The Chicago Homer is available at <www.library.northwestern.edu/homer/>.

NUIT supports Northwestern faculty in the areas of instructional and research computing. It provides services to faculty interested in using technology in their learning and teaching, including development of software projects, instruction in the use of computer technologies, and consulting on teaching techniques which involve computing. For more information, visit the NUIT Academic Technologies Web site at <www.at.northwestern.edu>.

Depot (Xythos WebFile Server)

A new Web-enabled enterprise pilot level storage solution for instruction and research at Northwestern University is being made available for the 2003-2004 academic year via a partnership between NUIT and the Northwestern University Library. "Depot," Northwestern's branded implementation of Xythos WebFile Server, provides a secure, central location that allows faculty and students to store and share important documents and files such as syllabi, homework, notes, papers, theses, dissertations, graphics, and other types of digital information.

The initial implementation will provide three terabytes of secure storage space available for a variety of faculty projects. Depot allows users to save files on a server that can be easily accessed from anywhere online. Each user can share files or folders with others who are designated access.

Depot can also be accessed via a Web interface that allows easy file access from any Internet-connected computer with a browser, and supports basic Web publishing. You can access Depot using your current NetID and password, but you must be authorized to use the system before you can utilize its storage space. The tool can also be used as a "Drag & Drop" folder via WebDAV (Web-based Distributed Authoring and Versioning), a set of extensions to the HTTP protocol that allows for collaborative editing and management of files on remote Web servers and will allow reusability across courses.

Faculty are invited to visit Academic Technology's Depot site at <www.at.northwestern.edu/depot/> for more information and a list of current Depot projects. If you are interested in using Depot please contact Bob Davis at <b-davis@northwestern.edu>.

Academic Technologies Announces Fall Workshops

Each quarter NUIT Academic Technologies and the Collection Management and Digital Media Services of the University Library, jointly known as "2East," present a series of workshops for NU faculty who want to take advantage of the teaching and research capabilities of digital media, the Course Management System, online archives, advanced visualization technologies, electronic journals, and other emerging technologies. Following is a list of upcoming presentations for interested faculty:

Copyright and Intellectual Property

Date: October 28 **Time:** 12:00 p.m. - 1:00 p.m. **Place:** Forum Room

The use of the Web by faculty for instruction, publication, and research presents new copyright issues for the University. Redistribution of information on the Web and digitization of paper documents are some of the copyright questions that will be examined in light of recent developments in U.S. Copyright law.

Bibliographic Resources: A Closer look at RefWorks and EndNote

Date: November 11 **Time:** 12:00 p.m. - 1:00 p.m. **Place:** Forum Room

Learn how NU's two bibliographic software tools, RefWorks and EndNote, can allow you, as a researcher, to quickly gather data from libraries and databases and annotate the information so you can efficiently create bibliographies, prepare or format manuscripts and organize your research.

DEPOT: File Storage and Sharing for your Teaching and Research

Date: November 25 **Time:** 12:00 p.m. - 1:00 p.m. **Place:** Forum Room

Learn how Depot, NU's new Web-enabled file storage and sharing solution, can be used in your instruction and research. Depot provides three terabytes of online secure disk space that allows faculty and their students to store and share copies of important documents such as syllabi, homework, notes, papers, theses, dissertations, graphics, and other types of digital files.

Educational Uses of Blogs

Date: December 9 **Time:** 12:00 p.m. - 1:00 p.m. **Place:** Forum Room

Weblogs, or "blogs," have become an extremely popular mode of micropublishing on the Web. NUIT Academic Technologies and the Library have been testing blog software and will share their results, demonstrating how some educators have chosen to use this tool for student communication and publishing.

For more information, check out the 2East Web site at <2east.northwestern.edu>.

Other Free Educational Opportunities from NUIT

One of the goals of NUIT is to provide information to the community about new technologies being offered and discuss important technological issues that improve the every day work environment of the University. Offerings for Fall Quarter include:

Get Control

Learn what you can do to protect your computer from viruses, bugs, hackers and crackers.

Date: November 13

Place: University Library, Forum Room, Evanston Campus,

Video Conference at Wieboldt Hall, Room 421, Chicago Campus

Time: 12:00 p.m. to 1:30 p.m.

PDA/Pocket PC Wireless

Learn how you can use your PDA to access the Web and e-mail at various wireless access points on the Chicago and Evanston campuses.

Date: December 11

Place: University Library, Forum Room, Evanston Campus

Time: 12:00 p.m. to 1:30 p.m.

The seminars are open to the entire NU community. There is no charge to attend, but registration is requested at <www.it.northwestern.edu/events/>.

Learn what NUIT can do for you.

Teaching, Learning, and Technology Workshop is a Big Hit With Faculty

"This has truly broadened my own understanding and awareness of the possibilities inherent in the use of appropriate technology."

This was just one of the comments heard at the close of the annual "Teaching, Learning, and Technology" (TLT) faculty workshop held September 8-12 at the Technological Institute. Jointly produced by the Searle Center for Teaching Excellence and the Academic Technologies unit of NUIT, the TLT workshop is supported with funding from the Searle Center through a gift from an anonymous donor. This year, ten faculty from four of Northwestern's schools attended. Working in either one of the NUIT computer labs or Smart classrooms, faculty built Course Management System sites for upcoming courses, learned PowerPoint, Dreamweaver (a Web site development tool), and Flash (a tool to create animation for the Web), and had hands-on experience with scanning and digital video editing.

Searle Center Director Greg Light was joined by Associate Director Vicki Fleming to lead discussions on learning theory. Scott Lipscomb, Associate Professor of Music Cognition and Music Education, and Claire Stewart of Digital Media Services, also contributed considerably to the workshop's success as did NUIT staff, Brian Nielsen and Jonathan Smith. The workshop was enlivened by faculty presentations of technology in action from Rick Gaber (Biology), SheriAnn Pfitzmann (Spanish), Cynthia MacGregor (Music), Sue Piagentini (Music), and Jillana Enteen (English).

At the end of the week-long workshop, participants gained valuable knowledge and skills in designing, implementing and evaluating courses using technology which will allow them to develop more effective learning environments for their students.

If you'd like to be considered for next year's event, participation is by appointment. Please contact the Searle Center for Teaching Excellence at <learn@northwestern.edu>.

NUIT Helps Researchers with New Inter-Campus Link

A new two-gigabit Ethernet connection between the Chicago and Evanston campuses was implemented in August. The inter-campus link provides ten times the previous bandwidth, allowing for high performance and high-speed transfer of large amounts of data. The upgrade was made as NUIT continues to meet the high-speed research and educational needs of the University.

Mathematica Site License Now Available

Northwestern faculty and staff can obtain a subsidized one-year site license for Mathematica 5.0 under terms of a recent agreement between NU Information Technology and the vendor, Wolfram Research.

Mathematica, used for technical computation and data analysis, is available for Windows NT 4.0 Workstation, Windows 2000 Professional, Windows XP, and Mac OS 9 or later. Unix and Linux versions are also available to eligible users.

Site-licensing provisions for Mathematica cover University-related business or research. Home use licensing is also available. Interested users can find ordering instructions at: www.it.northwestern.edu/introductions/mathematica-lite.html.

The site-license period coincides with the University's fiscal year (September 1 through August 31 of the next calendar year). The software cost is subsidized by NUIT until August 31, 2004, with a projected annual price of \$99.00 for the following year.

Information about ordering Mathematica is available from the NUIT software site at software.northwestern.edu.

Questions can be directed to questions@software.northwestern.edu.



NORTHWESTERN
UNIVERSITY

Published by the Northwestern University
Information Technology,
Training & Communications Department,
Technology Support Services (TSS).

Laurie Glaser, Web Designer
Helene Simon, Editorial Consultant and Editor
Audrey Rosen, Senior Publications Editor

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