

# Essentials

## from the Dean ...

*"It is clear that the Engineering College has fared better than other units on campus in regard to the recent spate of Internet viruses. We've been spared much of the havoc reported by other units because the College computer staff believes that maintaining a secure computing environment is essential. Though their measures have seemed to me severe, I now appreciate that stance."*

*P. Barry Butler*

I've never gotten to start a newsletter with a quotation like that. Thanks, Barry.

Read "Virus Fact" below and the article on page 2 "New Anti-virus Email Service" for information about the most recent thing CSS has done to protect our users.

~ the editor

## What's Keeping Us Busy



The CSS systems staff is involved in several on-going projects. Here's a brief summary of those that our users are most likely to care about.

- **Public network ports.** Users can soon use the ports in the 2<sup>nd</sup> floor entry area, the classrooms, and the student commons. For details on using these ports, read the article "Public Ports" on page 6 of this issue.
- **Active Directory.** We are deeply involved with the University-wide active directory authentication project that uses the Active Directory part of Windows 2000. This project has the potential to unify several disparate login IDs and passwords. It would be great to have to remember only one login ID and password to authenticate to the different University accounts. At the moment, students have a different account and passwords for their Engineering account, HawkID, and ISIS ID.

## Virus Fact

*"CSS Busy..." continued on page 2*

Do you want to know what you are missing because of the security on our network?

We had another attack of attachments infected with the SirCam virus on Tuesday, 23 October. At 1pm when CSS identified the identifying IP address of the sender, we blocked incoming mail from that address. Within 6 hours more than 8000 messages had **not** been delivered to people who read their mail on the Engineering College email server.

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## New Anti-virus Email Service: Attachment Renaming

Because of the increased number and intensity of viruses being received and spread through email, on 31 October 2001 CSS implemented an email anti-virus service for users of the Engineering mail system.

Many viruses are spread via attachments with extensions like .exe, .vbs, .bat, .com, .doc, .sys, .bin. If you double click on an infected attachment, the infecting program launches automatically and does its dirty work. Now the mail server renames any email attachment that has an extension known to be problematic by adding the extension **virus-scan-me**. Thus you cannot double-click to automatically open such attachments. You'll need to download the attachment first, scan it, rename it, and then you can open it.

We know that this change may mean more work on your part. But we are certain that the time spent fixing problems and the number of viruses not spread will decrease dramatically.

To download an email attachment, right click on the attachment name; from Eudora select **Save Attachment As ...** and from Netscape and WebMail select **Save Link As...** Once the attachment has been saved to a file, launch the virus scanning utility by highlighting the document or the folder it is in, right clicking, and selecting **Scan for Viruses** from the resulting menu. After the scan completes and you get the message that "No infected items were found", right click on the file and select **Rename** to change its name. You need delete only the part of the name that says ".virus-scan-me" to restore the document's original attributes.

Please note that this service works only on email delivered to users of the Engineering mail system. If you read your email from some other server (such as Blue, HotMail, or the ECE mail server), you will not have this protection.

If you have questions or need help managing this change, please contact the consultants, 5-5055, 1253 SC. See also the web page announcing this service at <http://css.engineering.uiowa.edu/services/email/attachments.html>; this page contains this information in a slightly different format.

~ Dave Funk

"CSS Busy..." continued from page 1

- **Wireless network.** CSS will have the wireless network operational by January 2002. At the moment we are waiting for the installers to schedule installation of the final access point. To use the wireless network, you'll need a wireless network card for your computer, and you'll have to register your computer with the CSS office in order to get the College encryption key installed. There will be an article in the next issue of *Essentials* and information on the web before then.
- **Windows 2000.** We are also hard at work crafting the environment for Windows 2000 in the College. Part of this new environment will be a new way for faculty and staff to configure software for their local computer. See details in the article "Windows 2000: When and What" on page 7 of this issue.
- **New web server.** We plan to have a new Windows-based web server with FrontPage extensions operational when Spring 2002 classes start. The new web server will augment, not replace, our existing Unix Apache web server. There will be more information in *Essentials* in the future.
- **Email virus protection.** An idea we borrowed and mutated from another Big Ten engineering college will protect you from inadvertently receiving viruses via email. If you read your email on the College email system, see the article "New Anti-virus Email Service" in the other column for details.

~ Doug Eltoft

## Disk Usage Graph

As we have written in past issues of *Essentials*, CSS has been tracking disk usage to get an idea of usage trends and network-wide storage needs. Here is the current graph showing average daily disk use from January - October 2001. It is too big to reproduce in the printed version of the newsletter, but if you are reading this online, click on this [link](#) or go here (<http://css.engineering.uiowa.edu/nl/essentials/Oct2001DiskU.pdf>) now. You can see all of the disk usage graphs on the CSS Information [page](#).

## Registrar's Data

*In the last issue of Essentials, we reminded you that Carrie Hogarty, 4-0812, can help you with college databases, the Office applications, and the EASY survey tools. Here's an example of what Carrie has done to give you ready and easy access to data you didn't have last year.*

As a University cost savings project the Registrar's Office has discontinued sending several hard copy reports containing information about currently enrolled students to Colleges and departments. Instead they have made available, via a permission/ confidentiality form, access to their data warehouse. This access allows individuals to extract data using various database tools, such as Microsoft Access or Seagate Crystal Reports. The College of Engineering purchased Crystal Reports software a few years ago and Crystal has been used to run reports for EASY (read the article, "It's So EASY" in the August 2001 issue, page 6). This summer I completed reproducing the discontinued hardcopy reports using Seagate Crystal Reports. These reports can be saved to disk in Adobe Acrobat format or Excel, eliminating the need to print, file, and store paper copies. The data are refreshed by the Registrar's Office every Tuesday morning.

Jim Cramer has installed Crystal Reports and configured the database connection (ODBC) software for all departmental secretaries and those in the Student Development Center. The reports have been placed on a shared drive for all to access as needed. One of the things that can be done with this information is to create mailing lists of students by department, by major, etc. Call me for more information about the registrar data and how you can use it.

- Carrie Hogarty

**20 November 2001  
10:30-noon,  
open house in  
Desktop Services,  
1253 SC**

Come meet Dan Mentzer,  
newest addition to CSS staff,  
member of Desktop Services

## Disk Quota Increases Coming

Between fall and spring semesters, we will increase disk quotas by 30% for all engineering students, faculty, and staff. The new quotas will be:

faculty	450mb
staff	225mb
students	130mb

By the end of spring semester we will have installed and tested a new disk storage system that will approximately double our disk capacity. We are evaluating a number of options that will allow us to increase individual quotas as well as address specific class needs for increased quotas.

- Susan Beckett

## New File Server and What It Means



The first step of a series of planned server upgrades has quietly taken place. The old file server, the computer on which your home directory files live, was getting overwhelmed by all the demands we all make on it. Recently it had locked up due to insufficient memory resources.

The transition went very smoothly. Matt McLaughlin did a great job of swapping out and installing the new server; it all happened without a hitch. The new file server is physically smaller, faster, has more memory, and costs less than its predecessor. But it is only one of two. Its twin will be installed during the winter break. After the second file server is operational, half of the users' files will be moved to it. Having user files split over two servers will make it easier and quicker to recover from server problems. (This has to do with how the servers are set up to know about each other and what lives where.) CSS will also be able to do server upgrades — to add memory, disk, upgrade the operating systems — with fewer hours of downtime. This second server will also enable us to increase disk space allocations. See the "Disk Quota Increases Coming" article just above on this page.

- Doug Eltoft



## Nimda

Although most of the hullabaloo caused by the Nimda virus has died down, it is still around.

### What is Nimda?

It is "admin" spelled backward. It is more dangerous than other viruses because it is more than a virus: it is a virus, a worm, and a Trojan horse.

from <http://www.f-secure.com/v-descs/nimda.shtml>

Nimda is a complex virus with a mass mailing worm component which spreads itself in attachments. ... Nimda is the first worm to modify existing web sites to start offering infected files for download. Also it is the first worm to use normal end user machines to scan for vulnerable web sites.

### What's a Virus? a Trojan horse? a Worm?

from <http://www.tf.hut.fi/cgi-bin/jargon>

**virus** n. [from the obvious analogy with biological viruses, via SF] A cracker program that searches out other programs and 'infects' them by embedding a copy of itself in them, so that they become Trojan horses. When these programs are executed, the embedded virus is executed too, thus propagating the 'infection'. This normally happens invisibly to the user.

**Trojan horse** n. [coined by MIT-hacker-turned-NSA-spook Dan Edwards] A malicious, security-breaking program that is disguised as something benign, such as a directory lister, archiver, game, or a program to find and destroy viruses! [ ed. named after an event in Homer's *Iliad*]

**worm** n. [from 'tapeworm' in John Brunner's novel "The Shockwave Rider", via XEROX PARC] A program that propagates itself over a network, reproducing itself as it goes.

### Who Should be Concerned?

Anyone running a Windows computer should be aware of the possibilities of infection. You should be particularly alert if you have self-administered Windows 95/98/ ME/NT 4/2000 computer or a Microsoft web server. Computers in the college as well as those in your dorm room or at home may be vulnerable. Even though the Windows NT computers administered by the college have the McAfee VirusScan

software installed, if you open an infected email attachment, files you have write access to (your files on the E:\ or H:\ drives and file shares) can be damaged.

### Why be Concerned?

Just by browsing an infected web site without having sufficient protection can result in infection. Having an infected machine means that it has been trashed and you must reload it to make it usable. If files stored on the file server get damaged, CSS will need to restore them from backup tapes. (We cannot restore local files.)

### What Happens?

If your computer or web server is identified by the ITS security office as infected or vulnerable to infection, that office informs CSS, which disconnects said computer from the network. When CSS can verify that you have cleaned the infected computer and installed the needed security patches, the computer is reconnected to the network.

### Questions?

If you have questions about Nimda or any other virus, please talk to the consultants in Desktop Services, 1253 SC, 5-5055.



## Charge Printing to U Bill

As of 10 October, students can use either cash or credit to add money to their print quota. To set up credit printing, come to the CSS main office, 1256 SC, to authorize the amount. For example, if you authorize a \$10.00 credit limit, after you have spent the \$6.00 added at the beginning of the fall and spring semesters, any printing you do, up to \$10.00, will be charged to your U bill for that month.

To authorize a credit printing, to add money to your print quota the old-fashioned way with cash or a check, or to ask questions, come to the CSS Main office, 1256 SC. Next semester look for announcements about being able to set a monthly limit for credit printing to your U bill.

## It May not be Beautiful But the Information Is There

CSS tries to post most of the information relevant to using and understanding our services on our web pages, <http://css.engineering.uiowa.edu>. Check those pages regularly to see what is new and what's been updated. This newsletter (<http://css.engineering.uiowa.edu/nl/essentials/index.html>) is always published on the web before the print form is available in the computer labs 1220 and 1231 SC, the CSS main office 1256 SC, and the CSS consulting office 1253 SC.

The August 2001 issue of *Essentials* had a front-page article "**Survival Tips** for New Students." Starting with that information, one of the CSS consultants created an on-line Survival Guide. Read it at [http://css.engineering.uiowa.edu/Survival\\_Guide/index.html](http://css.engineering.uiowa.edu/Survival_Guide/index.html).

So that you can know more about the computer **hardware** in the lab, and so choose wisely which machine at which to sit down, read the lab Hardware Guide at [http://css.engineering.uiowa.edu/labs/hardware\\_page.html](http://css.engineering.uiowa.edu/labs/hardware_page.html).

I have now taught two different **Eudora classes**; one was an introduction and the other on creating Eudora mailing lists and using the on-line directories. Both of those class handouts are available in pdf format on the reorganized email page at <http://css.engineering.uiowa.edu/services/email/dhindex.html>.

Several of the **e-tudes** — short, technical electronic/engineering-based articles — have been updated recently. See all of them at <http://www.icaen.uiowa.edu/e-tudes/index.html>.

~ Diana Harris



## HP Web Sites

The labs and the offices in the College of Engineering have Hewlett Packard computers, both Unix workstations and Windows computers. The CSS staff frequently gets information about those computers from the HP web sites. Here are addresses you may find useful:

## Desktop Services

The Computer Systems Support user consulting group has been reorganized and is now named "desktop services". I feel that the "desktop services" name reflects the mission of the consultants: to help students, faculty, and staff in the college use computers in the Elder and Hering Labs, the classrooms, and in offices. The structure of that group has changed, but the CSS consultant phone number, 335-5055, email [consultant@engineering.uiowa.edu](mailto:consultant@engineering.uiowa.edu), and office location, 1253 SC, remain the same.

Dan Mentzer has been hired to provide desktop services and to manage the students in that group. Dan will start with the College on November 15<sup>th</sup>, and his office will be in 1253 SC. Chris Fomon now directs the Desktop Services group. Until Dan arrives, call Chris, 5-5750, with desktop services issues. Or visit his office in 1253 SC.

Diana Harris, working on all sorts of communications projects (this newsletter, the CSS web pages, updating the *CSS User's Guide*, etc.), now works in 1249 SC.

Look for further changes over the next months as our temporary offices are remodeled to become our permanent location.

~ Doug Eltoft

See also the announcement on page 3 about the Desktop Services open house on 20 November.

Complete documentation on HP languages: <http://docs.hp.com> (and from the doc icon on the HP workspace menu as well.)

Latest information on HP languages and tools: <http://www.hp.com/go/languages>

Latest documentation on HP C: <http://www.hp.com/go/C>

Latest documentation on HP C++: <http://www.hp.com/go/c++>

Latest documentation on HP Fortran 90: <http://www.hp.com/go/hpfortran>

If we talk to you and you don't understand what we say, here is a place to look up computer jargon. <http://www.pchell.com/acronyms/index.shtml> For example, I know that I sometimes say to someone to put a document in pdf format. What does that mean? Here's the definition from that site:

### PDF

Portable Document Format. A document format read by Adobe System's Acrobat viewer. This format is excellent for displaying instruction manuals and other large documents in a "web-ready" state.

This isn't the only jargon site on the Internet, but it is easy to read. Not every term you hear is on this site, nor is pronunciation given for some terms (SCSI, for example). But the site contains more than jargon, and you might find some other interesting things to read.

If this site doesn't have a term you are looking for, there are lots of other places to look. Here are two others that I like: <http://www.webopedia.com/> and <http://www.netlingo.com/>. My favorite site and favorite word are here: <http://www.tf.hut.fi/cgi-bin/jargon?search=mung>

~ Diana Harris

## X-WinPro Update

X-WinPro is a display emulator, a program that enables a computer to display a program from another type of computer. In this case, X-WinPro allows a Windows computer to display the HP Common Desktop Environment that you use on the CSS Unix computers. From the user's standpoint, X-WinPro turns a Windows computer into a Unix computer.

The e-tude about X-WinPro has now been updated to include instructions on downloading and installing the program for use on home computers. The files to download are at <http://imap.engineering.uiowa.edu/download.html>. The complete e-tude is available at [http://css.engineering.uiowa.edu/e-tudes/xwinpro\\_1001.pdf](http://css.engineering.uiowa.edu/e-tudes/xwinpro_1001.pdf).

~ Diana Harris

Because of the questions we've gotten for a couple months, we know that you know about the computer ports at the bar in the 2<sup>nd</sup> floor entry area and in the Engineering Student Commons. Look for student use public Internet ports to become available during November. To find an active port, look for a bright green dot, which will be placed on the ports as they are activated. To use these ports you need a computer, a network card and cable, SSH software, and an engineering computer account.

### Follow These Steps

1. Set up your computer to use DHCP (Dynamic Host Configuration Protocol). See the instructions for your Windows computer on the CSS Support page (<http://css.engineering.uiowa.edu/support/genhelp.html>). Begin at **Start | Settings | Control Panel | Network | Configuration**.

If you have a Linux laptop, contact the Linux vendor for information on setting up DHCP.

If you have a Macintosh laptop, from the Apple menu, go to **Control Panel | TCP/IP | DHCP** | then click **OK**.

2. Find a public port marked with a bright green dot, plug in your computer, and turn it on.
3. Start your SSH client (SecureCRT is an SSH client). If you don't have an SSH client on a Windows computer, go to <http://imap.engineering.uiowa.edu/download.html> to download SecureCRT. Linux and Mac users must also have an SSH client installed.
4. Connect to **gatekeeper.engineering.uiowa.edu**. Enter your engineering account login ID and password to authorize getting beyond the gatekeeper. This connection turns on the port you are using and lets you into the Engineering Computer Network (ECN).

Once connected to the ECN, you'll have access to web servers in the college and beyond, you can map your home directory, and you can read your email.

Talk to the consultants, 1253 SC, if you have questions.



## Windows 2000: When and What

The process of designing the College of Engineering Windows 2000 environment so that we can move from Windows NT to Windows 2000 continues to be slow. Part of the reason is that with Windows 2000, the college is working with other computer groups on campus, notably ITS, to configure our Windows 2000 computers in a way that works well with the other Windows 2000 computers on campus. At the heart of this cooperation is Active Directory. Here's what Microsoft says about Active Directory: "[It] allows organizations to centrally manage and share information on network resources and users while acting as the central authority for network security....A directory service provides a place to store information about network-based entities, such as applications, files, printers, and people. It provides a consistent way to name, describe, locate, access, manage, and secure information about these individual resources."

CSS plans to have Windows 2000 installed in the labs at the beginning of summer 2002 classes. We will work out any problems over the summer, and be ready to begin the fall with a robust and well-behaved Windows 2000 environment. Before then, CSS will work with some early adopters, faculty and staff, to install, test, and use Windows 2000. With the early adopters' experience, the installation in the labs should be easier and quicker.

- Doug Eltoft

## User Forum Results

CSS sponsored a forum on 3 October to hear from the user community what we could do to serve you better. Fred Streicher graciously agreed to moderate the forum. I'm certain he did a masterful job because the attendees stayed and talked for more than an hour.

I have briefly reviewed the notes from that meeting. Here are the main categories of issues raised. In the next issue of *Essentials*, I'll report what things CSS is doing to address these issues.

- There were many positive statements made about CSS's support. Thanks. The point of the forum was to find out what we are not doing well so that we can do better. But we are always happy to hear good things about our service.
- CSS does not support the **research** efforts of students and faculty in the college.
- CSS does not always **respond** quickly enough to requests.
- People don't know how or why **software** gets purchased or installed.
- CSS needs to let everyone know what its **mission statement** is and live by it. See the back page for our mission statement.

If you didn't come to the forum but have comments, concerns, or questions for CSS, please send those to me or, if you prefer to remain anonymous, to Fred Streicher.

- Diana Harris

## New Scanners and More

There are two new HP Scanjet 4470c scanners in the Elder (1231 SC) lab. There is another one in the CSS consulting office, 1253 SC. These scanners feature high resolution 1200 dpi with 48-bit color and a 13-second scan preview. The convenient, one-button scan function automatically activates the Precisionscan Pro software and starts the first scan. You can send your scan directly to a file, a printer, or into another application such as MS Word or Netscape Messenger.

Come to the lab or the consulting office to use these new scanners. If you have questions about using the scanners, talk to a consultant in 1253 SC, or call 5-5055.

### CD Writer

There is now a CD writer in the consulting office, 1253 SC. Anyone can use the writer, but you must provide the CD. There is no charge for this service. You can buy CDs from the Engineering Electronics Shop, 2018 SC.

- Chris Fomon

## Spring Software Requests

Do you already have or will you be purchasing software that you want to use for Spring 2002 classes? If so, please submit your software install requests for spring semester at least one month prior to 22 January 2002 when classes start. In fact, we encourage you to talk to us now about your software needs for spring semester. The more time we have to prepare, the more likely it is we will have software installed and ready to go on time. Windows software loads are taking anywhere from one to six weeks, depending on how well the software is written and operates in a client-server environment. Factors that contribute to a longer time frame include:

- poorly documented installs
- lack of technical documentation to resolve problems with the software

- inadequate time for testing by those familiar with the software
- re-installs when features or components are missing from the base install
- investigation of bugs or problems with a client-server installation
- creation of a robust image of the package that enables remote installation of software

A recent meeting of Big 10 Engineering IT centers indicated that our colleagues at other institutions wrestle with the same challenges installing Windows packages in a secure, client-server environment. So, please help us out by talking to us as soon as possible about your spring software needs.

~ Susan Beckett

**Essentials** is a publication of Computer Systems Support (CSS) in the College of Engineering at the University of Iowa. **Essentials** is published during the year whenever there is sufficient news to report to the user community. You have permission to reprint all or part of this newsletter for nonprofit purposes if you 1) acknowledge this source, and 2) send a copy of your publication with the reprinted material to: Newsletter Editor, Computer Systems Support, 1249 SC, University of Iowa, Iowa City, IA 52242.

### This issue:

Editor: Diana Harris. Contributors: Susan Beckett, Doug Eltoft, Christopher Fomon, Dave Funk, Diana Harris, Matt McLaughlin



**Jargon Rating:** 0-2 tongues. No tongues means there is no jargon and it should be easy to read and understand. Two tongues mean lots of jargon. One tongue falls between. All 2-tongue articles include a no jargon summary at the top.

### Hours

Computer Labs — The Hering (1220 SC) and Elder (1231 SC) labs are open 24 hours/day, 7 days/week. With an access card, you can enter the building and the labs after the building closes.

Consulting, 1253 SC — M-Th 8am - 5pm, 6-9pm; F 8am - 5pm; Sun 6pm - 9pm

CSS Main Office, 1256 SC — M-F 8am - noon, 1-5pm

### Web Sites

This newsletter is published first to the CSS web pages at

<http://css.engineering.uiowa.edu/documentation/essentials>

The CSS pages are found at

<http://css.engineering.uiowa.edu>

The College of Engineering pages are at

<http://www.engineering.uiowa.edu>

The University of Iowa pages are at

<http://www.uiowa.edu>

**CSS mission:** to provide a secure and productive computer environment that supports the ability of the College of Engineering to achieve its educational mission.