

Essentials

the CSS newsletter. December 2005, v. 6, no. 4

in this issue ...

20 years of ICAEN/CSS, pg. 4
additional disk storage, pg. 4
December downtime pg. 3
email 30MB message, pg. 3

meet the CSS staff, pg. 2
Unix local storage, pg. 1
wireless access in SC, pg. 3

New Procedure for Unix Local Storage (/var/tmp)

Beginning this semester, CSS will implement new procedures to manage temporary local disk storage, /var/tmp, on Unix workstations. Historically, CSS has required that some packages be run from the local disk storage area because these packages create very large scratch files which do not fit within quotas and slow network performance when run from your H: drive. The local storage area must be cleaned out when system upgrades occur or when the disk fills up. In the past, cleanup occurred about once a year during the summer system-upgrade cycle. Increased use of this space, ever-increasing file sizes, and user support issues have prompted CSS to institute a regular clean-up schedule along with a recovery grace period.

At the end of each semester (including the summer term), CSS will clean files from /var/tmp and move them to temporary secondary storage. Barring hardware failure, these files will be recoverable for one month. If we have to clean out /var/tmp in the middle of a semester because of unavoidable circumstances, e.g., the disk fills up, we will move files to temporary secondary storage first. These files

will be recoverable for one month following the cleanup. This is not a backup service and will not protect against disaster recovery (e.g., hardware failures) or user error. It will safeguard your files when we must clean out /var/tmp for system upgrades, performance issues, or a full disk.

Schedule

/var/tmp will be cleaned out the first working day after grades are submitted to the Registrar for the fall, spring, and 8-week summer sessions. The grade due date is published in the University [calendar](#).

New service

CSS is also offering a new service to students for local file storage. For \$10 per semester, CSS will create a directory on alternate local disk storage on every Unix machine. This file storage is ONLY for class or research use. The space will remain available on local storage for the duration of the fee period. Think of it like a locker rental. At the beginning of each semester, you can arrange to rent local disk storage (or continue your rental from the

previous semester). Rental requests can be processed anytime during the semester. Renewal notices will be sent 2 weeks before the end of fall and spring semesters; the deadline for renewal is Friday of the first week of classes the following semester. Rental space not renewed will be copied to temporary secondary storage and be recoverable for one month. Fall semester rentals will expire the first week of spring semester; spring semester rentals will expire the first week of fall classes. Summer semester rentals will expire the first week of spring semester.

CSS can also arrange to backup up your rental space at the rate of \$10 per gigabyte written to tape. For more information, contact the CSS main office, 1256 SC, 335-5751, to use this service.

--Susan Beckett

Meet the CSS Staff Some Celebrate 20 Years

Most people who get consulting help know the CSS staff who help them. But much of what other CSS staff do may seem invisible. Here is a bit about all of the CSS staff. We hope you get a glimpse of each person's role within the group by reading this article.

I asked each person when they started working in ICAEN/CSS, what would users notice if their job didn't get done, favorite accomplishment, best aspect of your job, biggest disappointment, and biggest constraint. The first thing that most staff said about their role within CSS is that if they were gone, most people wouldn't notice for a while because there is backup from other CSS staff. Most of the staff pointed to the people, solving problems, and the challenges of a constantly changing field as the best aspect of their jobs. The biggest constraint for most was too little time, resources, and money to accomplish everything we have in mind doing.

Doug Eltoft

Start date: 6/1/77 (that was before ICAEN existed). Doug was hired into the Engineering Electronics Shop and was asked to head ICAEN in 1984.

If no one did his job, there would be no long-term planning or equipment purchases. He's pleased that computing and CSS is now a part of the College landscape. During the early years, ICAEN equipment was used by only a few curious or motivated faculty. Now no one can imagine getting an engineering degree without using computers as part of the course work. His favorite accomplishment is that most of the people he has hired to work in ICAEN/CSS are still working here; only two have left in 20 years.

Dave Funk

Started in ICAEN 7/29/85. Dave was Doug's first hire to the ICAEN group.

If no one did his job, there would be no access to the Internet from the college. His favorite accomplishment is making the network work. (Editor's note: *This is something he gets to do over and over as hardware, software, and the reality of computing change. How lucky to get to accomplish something many times over.*)

His biggest disappointment is that most people don't take time to understand the computing environment in which they work.

Susan Beckett

Start date in ICAEN: August, 1985. Susan was the second person Doug hired to be part of the new group.

If no one did her job, accounts would not get created, software licenses would expire, account, license, and Unix software problems would not be resolved. The best aspect of her job is that she loves problem solving and really enjoys helping someone solve a problem they've come up against.

Her biggest disappointment is Apollo computers' demise and the loss of the Display Manager! (The original computers that ICAEN installed ran Apollo Domain (the OS). You'll have to ask Susan to explain because most readers won't remember the Apollos or what was useful for a sysadmin about the Display Manager.)

Her favorite accomplishment in her years here is the development and maintenance of CSS's accounts management system, which interfaces with the University's Enterprise Directory to provide us automated, real-time information on the status of engineering account holders.

Christopher Fomon

Started in the college 7/15/1985 to manage the CAE lab. His first instruction was to move the CAE lab into ICAEN. If no one did his job, there would be no faculty or lab computers upgrades annually, reduced desktop support, the lab computers wouldn't get repaired, and no one would have help with instructional technology.

His favorite accomplishment is designing how space is used (CSS labs, CSS offices).

The best part of his work is incorporating new technology into the college environment.

Sheila Britton

Started August, 1990, the first day of classes!

If no one did her job, equipment and software wouldn't get ordered.

Her favorite accomplishment is being promoted to a Secretary III.

The biggest disappointment is seeing the student helpers graduate and leave; several students have worked in the office for 3 years or more.

Matt McLaughlin

Started 8/92.

If no one did his job, there would be no new or repaired network ports, software such as Webmail wouldn't get repaired or restarted. And if there were a system failure and all of CSS disappeared, there would be no access to files or applications on the servers.

His favorite accomplishment is managing the HP-UX load. (Matt is very good at testing, tweaking, and installing the Unix load. Unfortunately for him, CSS is moving off HP-UX for workstations and on to Linux.)

His biggest disappointment is having to work with Windows. (It is not nearly as well-behaved an operating system as HP-UX, for example.)

CSS Staff...

Jim Cramer

Started 11/1992.

If no one did his job, there would be no EASY surveys, no ID cards would be issued or replaced, no Engineering Electronics Shop point-of-sale and inventory control system to sell parts, and no system for web-based, fast response changes to SC door access.

His favorite accomplishment is his redesign and reimplementaion of the UI ID card system.

The best aspect of his job is the ability to be creative and to concentrate primarily on data base development and administration, and to investigate and obtain software tools that help him with these tasks.

Diana Harris

Started 8/1998.

If no one did her job, you would not get updated information on the CSS web pages, no newsletter, not much support for ICON.

Her favorite project was the transition from Open Mail to IMAP (1999-2000).

Dan Mentzer

Started 11/2001.

If no one did his job, there would be no new Windows software. Or updates to Windows software.

His biggest disappointment/frustration is badly written software and the resulting difficulty getting it installed. *(Don't let the shortness of this fool you. Installing Windows software takes more effort and time than most Unix or Linux installs. See this [newsletter article](#).)*

Sarah Williams

Started 7/1/2004.

If no one did her job, many user questions and difficulties would not be answered and solved.

Her favorite accomplishment is finding solutions to people's problems. *(Lucky Sarah, getting to do something that she enjoys over and over.)*

Wireless Access

In SC

This fall CSS changed some things on the wireless network in the Seamans Center. We now support the 802.11g standard, as well as the a and b standards. We have not changed the SSID to use to access the wireless network in the Seamans Center: **engr-wireless**. But the specific configuration of clients may be different. CSS has documented how to set up [wireless access](#) using Aegis, Windows Wireless, and Intel Proset clients.

On Campus

In August ITS changed several things about the campus wireless network including the SSID; now you should use UI-Wireless-WEP. The TTLS and LEAP protocols are no longer supported; the supported authentication protocol is PEAP-MS-CHAP v2 (for PCs) and PEAP for Macs.

In the past if your wireless setup worked with the campus network, it would work in SC. That is no longer true. You'll need to configure access specifically for engr-wireless, but the settings that ITS uses for the Aegis, Windows Wireless, and Intel

Proset clients are the same as what are needed in SC.

Help

As always for help getting your wireless connection working in the Seamans Center, please see the consultant in 1253 SC.

New 30MB Limit for Email Messages

Email messages including attachments can be as large as 30MB as of October 2005. You can both send and receive messages of that size within the College of Engineering. CSS has requested that ITS raise its maximum message size to allow mail of that size to pass through their equipment on the way out or the way in.

If you have questions about mail attachments, please talk to a consultant in 1253 SC.

System Downtime Thursday, 22 December

PLEASE do not plan to be computing on 12/22. All computing services (files, applications, email, web) will be unavailable from 7am until 7pm on Thursday, 22 December 2005. If the work CSS is doing goes quickly, services may be available before 7pm.

If you have questions about the downtime, please call the CSS consultant, 335-5055.

20 Years of ICAEN/CSS

Bright Idea

In 1983 ECE Professor Jon Kuhl published an educational proposal for an innovative system of interconnected computers that would be available to all engineering students. Dean Robert Hering liked the proposal and provided over \$400,000 of start-up funding; he also obtained additional state, University, and Engineering College student computer fee funding to cover the operational and replacement costs of the proposal. The department and the computer network were both named ICAEN, the Iowa Computer-Aided Engineering Network. The start up funds were spent starting June 1984 through July 1996 in order to create that network. In fall 1986 Engineering classes first used the ICAEN the network of 110 computers, 65 Apollo workstations, and 45 Macs, and ICAEN the department had two systems administrators (Dave Funk and Susan Beckett) and a department head (Doug Eltoft). Thus we mark this as our 20th year of providing computer equipment, software, and support to the students in the College of Engineering at the University of Iowa.

In the Beginning

For the first 10 years ICAEN ran a network of Apollo workstations and Apple Macintosh computers. Users needed an account to login and use the Apollo machines, but not the Macs; we devised access control methods to keep non-engineering students from using the Engineering computer labs and the Macs. Students used dot matrix Apple printers or a high-speed line printer. Engineering applications ran on the Apollo workstations; the Macs ran productivity software. The original Apollo workstations had:
 Motorola 68010 CPU, 1MB RAM, 40 MB hard drive (some were diskless booting over the network), 8" floppy drive, 19"

monochrome graphics CRT, 3-button mouse. Cost ~\$15,000 each

The 128K Macintosh computers had:
 Motorola 68000 CPU, 128K RAM, 3.5" floppy drive (no hard drive!), 9" monochrome screen, 1-button mouse. Cost ~ \$2,500 each

Firsts

Because of ICAEN, the Engineering College was the first college at the University of Iowa to provide email to all its faculty, staff, and students. In the 1980s the College put a Macintosh in every faculty member's office, making us the first College on campus to provide all of our faculty with an on-line computer. ICAEN also installed staff computers in the 1980s.

Change

Following HP's purchase of Apollo Computer in 1989 and the introduction of Windows NT, ICAEN shifted from Apollo's Domain OS to HP-UX and from Macs to Windows. By the late 1990s ICAEN had retired our last Macintosh and we completed our migration to Windows NT-based PCs. In 2001 CSS began limited Linux support, and this fall we added 10 Linux computers to the labs.

In August 2000 we changed our name to Computer Systems Support (CSS) and moved from the 3rd floor to the 1st floor of the Seamans Center. When ICAEN was established, we emphasized providing the networking, hardware, and software. CSS still does all that, but we also provide consulting, desktop support, software installation, database administration and programming, ICON support, access control management, research systems administration and consulting support for students, staff, and faculty. We expect the future to mirror the past: the computing environment will change and we will adjust. Change is the only constant.

--Doug Eltoft

Cost of Additional Storage Space

Faculty and staff who need more disk space or mail storage than your quota allows can purchase extra disk storage at a cost of \$10.00/gigabyte/month. Contact the CSS main office, 1256 SC, 335-5751, to use this service. (The price went down on 1 September 2005.)

Essentials is a publication of Computer Systems Support (CSS) in the College of Engineering at the University of Iowa.

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Back issues and the current issue of this newsletter are on-line:

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

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

Web Sites

This newsletter is published first to the CSS web pages at

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