

# Essentials



- 1 ... *Connect2 VPN*
- 2 ... *Abaqus Download*
- 3 ... *2301 Lab*
- 3 ... *NX Policy*
- 4 ... *MATLAB Workshops*

## CSS Mission

To provide a secure, reliable, and innovative computer environment that facilitates, supports and enhances the mission of the College of Engineering.

## Hours

**Elder, Hering, and 2301** computer labs are open 24 hours/day, 7 days/week except for cleaning. With an access card, you can enter the building and the labs after the Seamans Center closes.

**Consulting**, 1253 SC, M-Th 8am-9pm; F 8am-5pm; Sun 2-9pm

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

## Engineering College Connect2 VPN Service

*[Editor's note: CSS announces a secure way to get to your home directory and share files using this new Connect2 service. Because Connect2 is a secure connection, your password and the content of your files cannot be stolen in transmissions to and from your computer. The article contains lots of technical terms, but its message is important.]*

### What the VPN Allows

CSS has deployed a new secure connection service for Engineering College computing resources. This virtual private network (VPN) service, called Connect2, provides a secure way to connect to Engineering College resources from outside of the College and off campus. The VPN should be used, for example, when connecting using UI Wireless.

For students who do not have a target computer for remote desktop, the Connect2 VPN provides an easy way to remotely access the home directory. For faculty and staff that have remote desktop enabled on their computer, you must use the VPN and then Remote Desktop for a secure connection to your local hard drive(s). And with this VPN service and the increased network [home drive quotas](#), consider moving more of your files onto the file server, giving you secure access via the web to your files without having to run Remote Desktop.

One of the functions on the VPN is Terminal Session, which allows you to establish an SSH session to [login.engineering.uiowa.edu](http://login.engineering.uiowa.edu); thus you would not need to have SecureCRT installed on your home computer to establish a terminal session with the Engineering Computer Network (ECN).

### How to Start Connect2

Go to <https://connect2.engineering.uiowa.edu>. Use your Engineering account ID and password. Once you are authenticated and logged in, you see a link called "H-drive" that provides webDAV access to your home directory through your browser (see information about [webDAV](#); or look it up at [Wikipedia](#)). There is also a link to My-Documents, which is the Documents folder in your home directory.

### Network Connect

You can launch an application called "Network Connect" to give you access to software that requires a connection on the ECN. To install this application, you must be the administrator on the computer. (Note that Network Connect is a Java application. You must be running a very recent version of Java to install Network Connect.) Once installed, you can run the application after starting Connect2.

Network Connect assigns an Engineering College network address to your computer via the VPN, thus creating a secure connection that makes your (wireless, home, dorm, or on the road) computer appear as if it were physically connected to the ECN.

*Connect2 VPN continued on pg. 2...*

*Connect2 VPN, continued...*

Your computer still has its local IP address and all network traffic not destined for the College network will still use your normal network connection. For example, your browser connection to the Engineering College Network would go through the VPN but your browser connection to YouTube would not. This local-looking connection allows you to run licensed managed software or the full Outlook client (not the OWA).

### Map Home Directory and Shares

If you have a high-speed Internet connection, you can map your home directory or a share through the VPN. Connect to Connect2, launch the Network Connect application, and then open the Map Network dialog box. Use your home directory complete path name for the \\server\share entry. For example, enter \\*name*.drive.engin.uiowa.edu\*name* and use *engin* \*name*, where *name* is your engineering computer account, and use your Engineering password. Make sure that the **Reconnect at login** box is NOT checked. Also ensure that you disconnect the drive mapping before you shut down the VPN, logout, or turn off your computer. If you don't, the connection to your home directory is still hanging open; that open connection can cause problems the next time you use Connect2.

The VPN connection will persist for 12 hours, though after 25 minutes of inactivity, you'll get a pop-up window asking you to respond in 5 minutes or be logged off.

### Help

Read the [Connect2 web page](#) that includes screen shots and information about additional features of the Connect2 VPN. Talk to a consultant in 1253 SC, 319-335-5055, for help setting up Connect2.

## Abaqus Student Edition FEA

### Free Download

The Abaqus Student Edition FEA software is a **free** download for academic students, professors, and researchers. The Abaqus SE is ideal for students using Abaqus as part of their coursework or for those that simply wish to improve their skills with the software. The list price for the Abaqus SE is \$99.00 and we are offering a **free download**.

The Abaqus Student Edition includes:

- Abaqus CAE, Abaqus/Standard, Abaqus/Explicit, and Abaqus/CAE
- Perpetual License (no term, no license manager)
- Run on Windows Vista and Windows XP
- HTML documentation set
- Maximum model size is set to 1000 nodes

For more information, see the [Simulia web site](#).



*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.

Back issues of *Essentials* are [on-line](#).

### Mail Quota Increase

Mail quota increase coming:

to 1GB for staff/faculty  
to 500MB for students

## 2301 Computer Lab Open

When classes began in August 2009, the college opened a student computer lab in 2301 SC. Like the Elder and Hering labs on the first floor of the Seamans Center, this lab is available 24 hours/day and 7 days/week except when it may be closed for cleaning or maintenance. The door to the 2301 lab is on automatic, electronic hold open Monday through Friday from 7:30am until 5:30pm. To enter the lab outside those times, use your SC access card. If you do not have an SC access card, come to the Computer Systems Support main office, 1256 SC, between 8am-noon or 1-5pm Monday through Friday. Bring your student or University ID card with you.

The 2301 lab has 34 Windows Vista computers and 6 Linux workstations, as well as a laser printer. To read about the equipment in that lab, see the [lab hardware guide](#).

This lab was created as a direct result of student input via the Engineering Student Council. Infrastructure funding for the lab was provided by Dean Butler. The computers and security equipment were purchased with student computer fee funds.



2301 now



2301 SC this summer

## NX Policy Changes

### For L-LNX000-015

*NX Client for Windows allows you to use the Linux graphical user interface from a Windows computer. The NX client is installed on all Windows computers in the 1245, 2301, Elder, and Hering labs.*

Beginning this fall there are only two (2) NX sessions available on each of the Linux workstations you can log into remotely. In the past we had a license to allow unlimited connections to the Linux machines. While you can connect directly to those workstations, L-LNX000 through L-LNX015, using the NX Client for Windows, we recommend that you configure the NX client to connect to **desktop.engineering.uiowa.edu**. That address has been configured to select the least busy Linux workstation available.

CSS now allows each user to have only one (1) NX session at a time, and that session can last only 24 hours, after which time it will be automatically terminated.

If you do not need the Linux graphical environment, use SecureCRT or the VPN Terminal Session [see VPN article on page 1 of this issue] to establish an SSH session.

On-line information about [NX](#). On-line information about [SecureCRT](#).

## MATLAB Seminars at UI

### October 6, 2009 in UCC and MERF

The MathWorks, the creators of MATLAB, will hold two free, technical seminars on campus. The information about the seminars below comes from the MathWorks. Note that you need to send email to [Ken.cleveland@mathworks.com](mailto:Ken.cleveland@mathworks.com) to register for the sessions.

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These free technical sessions will demonstrate how you can use MATLAB® as a flexible platform for technical computing and application development in engineering, math, and science curricula and research.

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### Speeding Up MATLAB Applications

When: Tuesday October 6<sup>th</sup>, 9:30 AM to 11:45 AM

Where: University Capitol Centre Seminar Room (UCC 2520D)

Who Should Attend: Professors, researchers, and students

Please email [Ken.cleveland@mathworks.com](mailto:Ken.cleveland@mathworks.com) if you plan to attend. Please indicate if you'll be at this session, the afternoon session, or both.

Presenter: Todd Schultz, Ph. D., MathWorks Application Engineer

9:00 – 9:30 AM Registration and sign-in

9:30 – 11:45 AM Speeding Up MATLAB Applications

11:45 Q&A

Highlights include:

- Understand memory usage and vectorization in MATLAB
- Address bottlenecks in your programs
- Optimize file I/O to streamline your code
- Transition from serial to parallel MATLAB programs
- Execute applications on a single multi-core or multiprocessor desktop
- Applications of parallel computing

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### Introduction to Scientific Computing with MATLAB

When: Tuesday October 6<sup>th</sup>, 2:00 PM to 4:00 PM

Where: Medical Education and Research Facility (MERF) 2189

Who Should Attend: Professors, researchers, and students.

Please email [Ken.cleveland@mathworks.com](mailto:Ken.cleveland@mathworks.com) if you plan to attend.

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Presenter: Todd Schultz, Ph. D., MathWorks Application Engineer

1:45 – 2:00 PM Registration and sign-in

2:00 – 4:00 PM Introduction to Scientific Computing with MATLAB

Through product demonstrations you will learn how to:

- Accessing data from various sources
- Analyzing and Visualizing data
- Reporting and Publishing results
- Organize and manipulate image data for exploration and visualization
- Building GUI-based applications