

# USING PURDUE COMPUTER RESOURCES FROM OFF CAMPUS

April 6, 2006

# Establishing an Internet Connection

- Purchase internet access from a private internet service provider
  - Verizon, Insight, Netzero, AOL, etc.
  - Either Dial-up, Cable, or DSL service
- Sign up for Purdue's free Dial-up service:
  - <http://www.itap.purdue.edu/resnet/offcampus/dialUpGeneral.cfm>
  - Dial-up is slower than cable or DSL, so it won't work well for applications transferring lots of information
  - 90 minute limit

# Accessing Your Files – SecureFX

- Download and install SecureFX to your off campus computer
- Run SecureFX from the Start menu
- Open the Quick Connect box:  
**File → Quick Connect...**
- Fill in the appropriate information
- Click **OK**

Quick Connect

Session

Protocol: SFTP

Use firewall to connect

OK

Cancel

SFTP logon

Hostname or IP: roger.ecn.purdue.edu

Port: 22 (default SFTP port is 22)

Username:

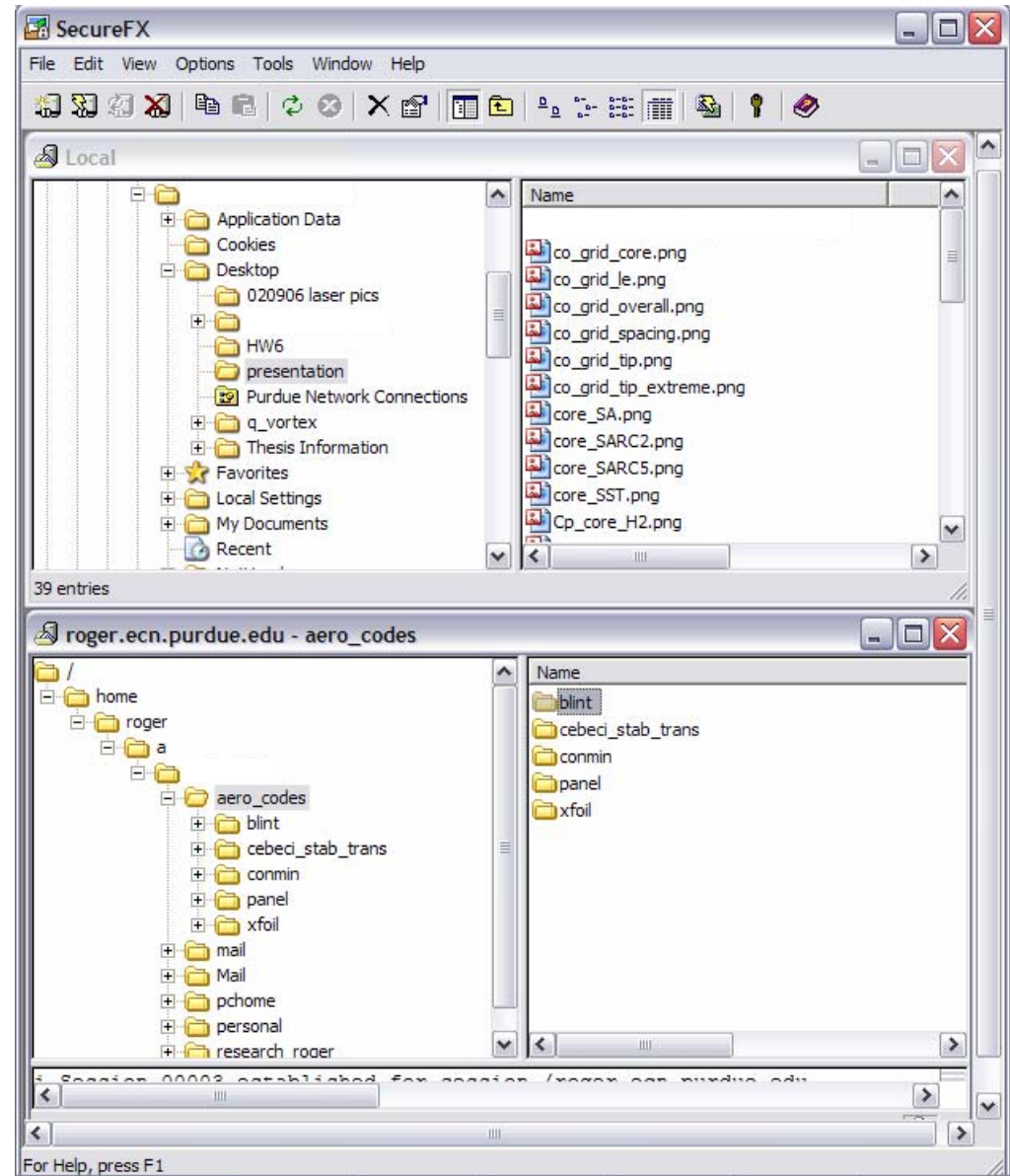
Initial directory

Directory:

Save session

# Accessing Your Files – SecureFX

- Drag and drop files between your off-campus computer and your Purdue accounts



# Accessing Your Files - VPN

- Virtual Private Network
- <http://www.itap.purdue.edu/connections/vpn/>
- “the home user can "put" his home machine on the Purdue network ”
- Allows you to access your files like you are on an ECN machine
- Allows you to access some websites that only Purdue computers can access

# Accessing Your Files - VPN

- Connection via VPN is simple using a dialogue box as shown



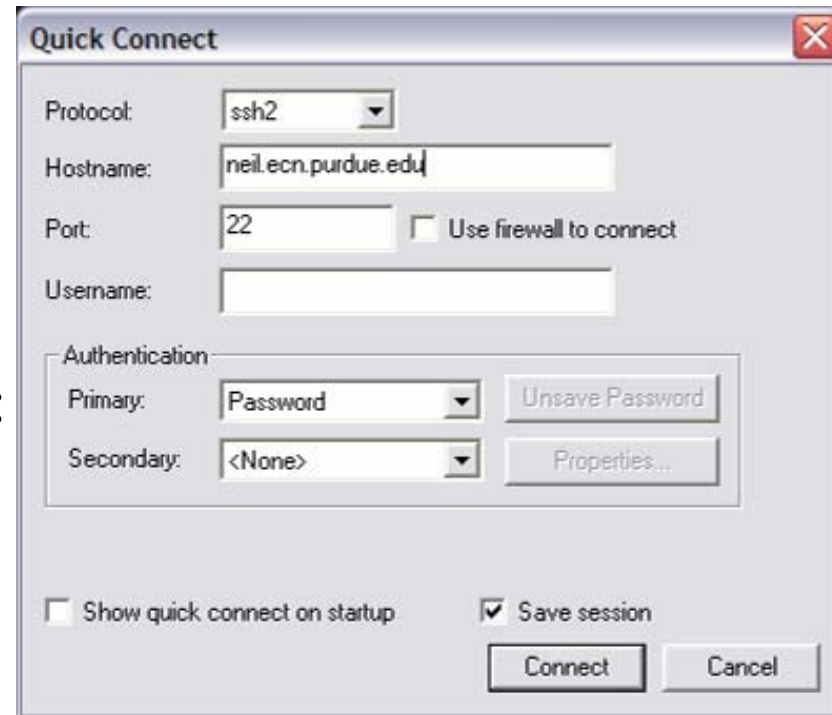
# Accessing Your Files – Mapping a Network Drive

- Once connected by VPN, double click on My computer
- Go to **Tools** → **Map Network Drive...**
- Enter information as shown
- For “Folder”, enter: **\\computer\username**
  - Example: If mapping your drive on **roger**, use: **\\roger.ecn.purdue.edu\username**
  - **username** is your Purdue user name
- Double click on your new drive just like on ECN machines



# Accessing Compute Servers – SecureCRT

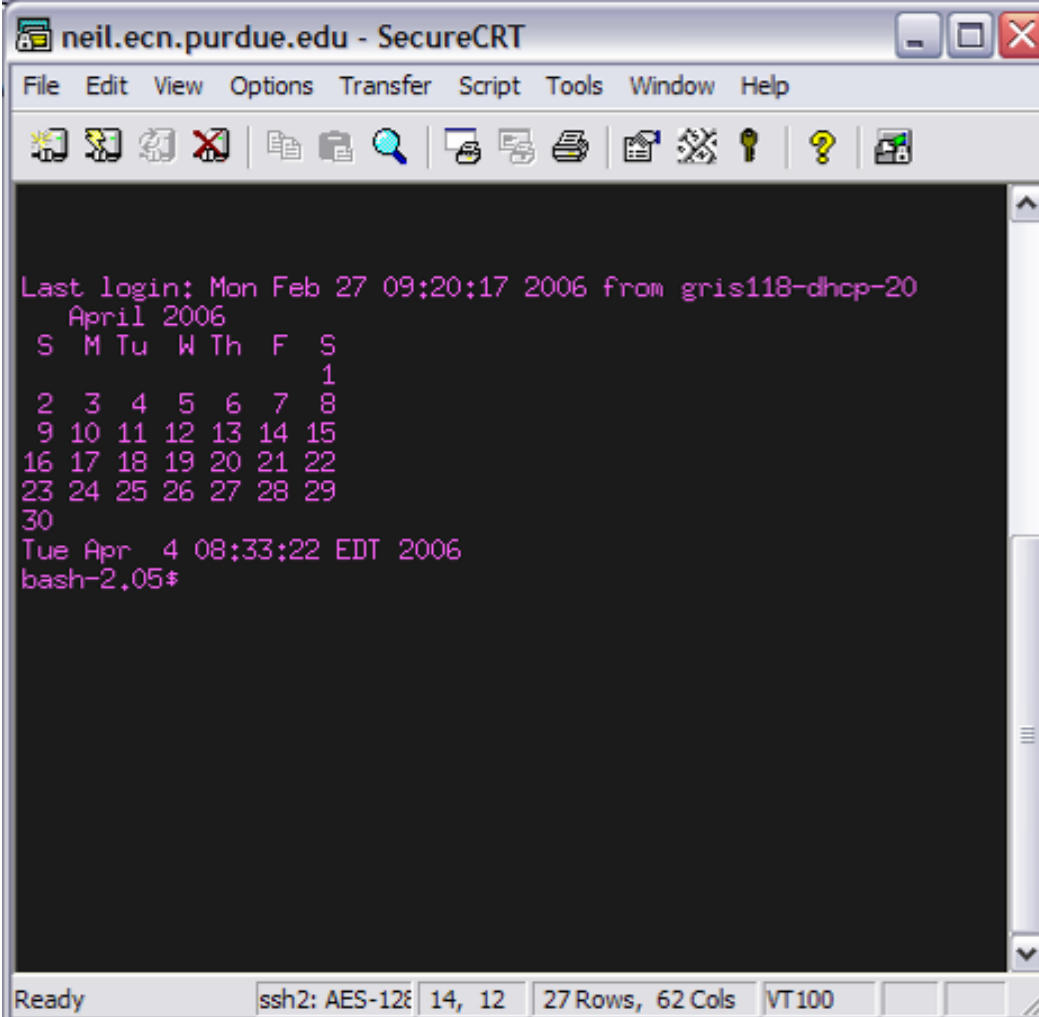
- Download and install SecureCRT to your off campus computer
- Run SecureCRT from the Start menu
- Open the Quick Connect box:  
**File → Quick Connect...**
- Fill in the appropriate information
- Click **OK**





# Accessing Compute Servers – SecureCRT

- A Unix command window will open




The image shows a SecureCRT terminal window titled "neil.ecn.purdue.edu - SecureCRT". The window has a menu bar (File, Edit, View, Options, Transfer, Script, Tools, Window, Help) and a toolbar with various icons. The terminal output is as follows:

```
Last login: Mon Feb 27 09:20:17 2006 from gris118-dhcp-20
April 2006
S M Tu W Th F S
                1
 2 3 4 5 6 7 8
 9 10 11 12 13 14 15
16 17 18 19 20 21 22
23 24 25 26 27 28 29
30
Tue Apr  4 08:33:22 EDT 2006
bash-2.05#
```

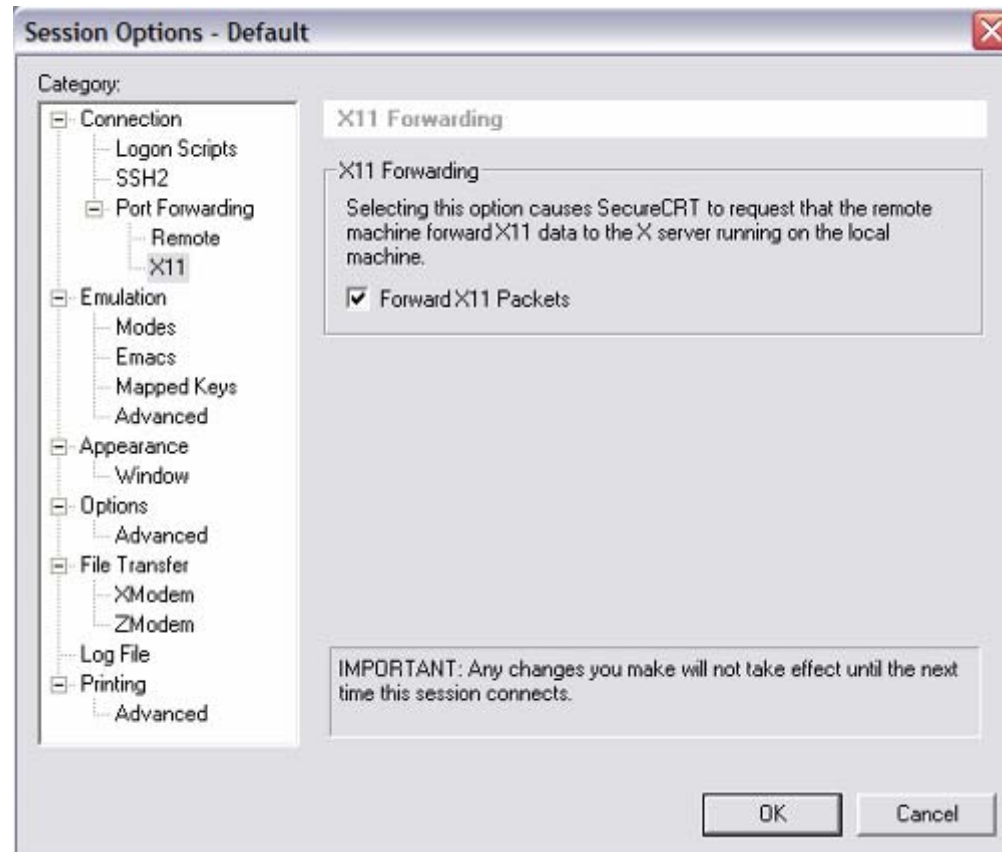
The status bar at the bottom of the window displays "Ready", "ssh2: AES-128", "14, 12", "27 Rows, 62 Cols", and "VT100".

# Running Graphical Unix-based Programs from Off Campus

- This allows students to run programs on Purdue compute servers while graphics appear on the screen of you off campus computer
- Download and install Hummingbird Exceed
- Run Exceed from your Start menu
- There will be an Exceed button on the task bar, but no window will open yet. The image shows a taskbar button for the 'Exceed' application. It features a small icon on the left and the text 'Exceed' in a sans-serif font to its right. The button has a light blue gradient and a thin border.
- Run SecureCRT from your Start menu and log onto the Purdue computer from which the Unix based program will be run

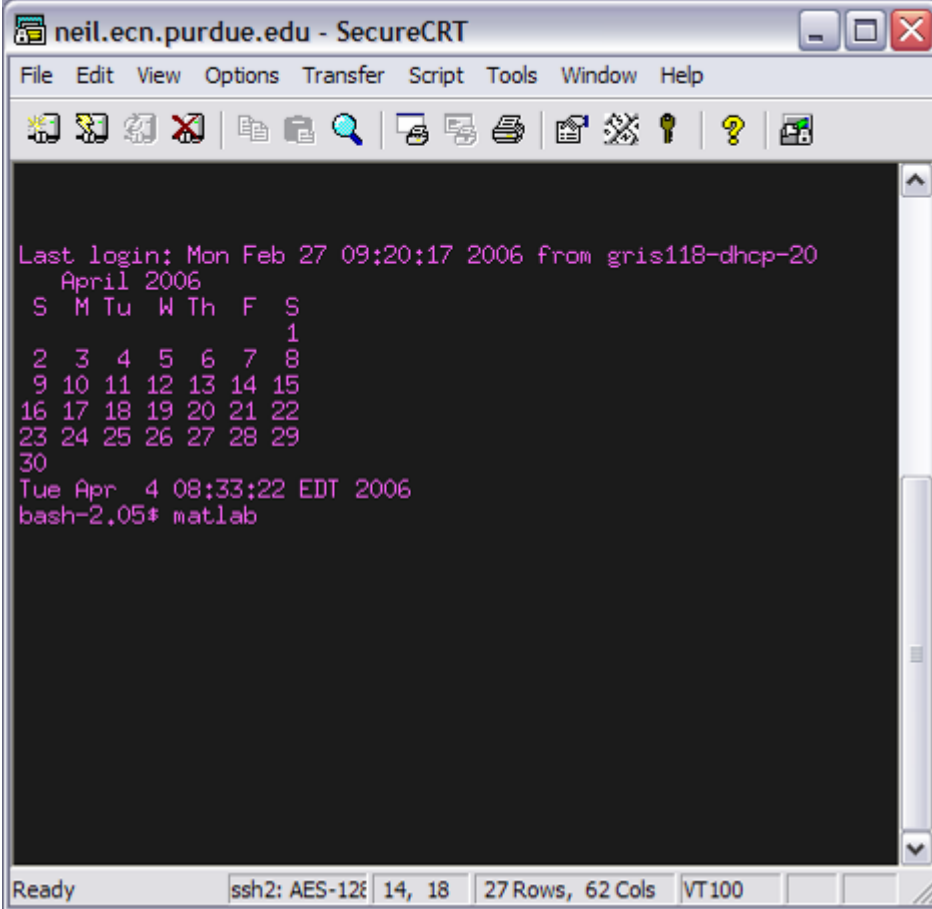
# Running Graphical Unix-based Programs from Off Campus

- In SecureCRT, click on **Options → Session Options...**
- Then in the dialogue box that appears, choose **X11** from the left hand side categories
- Check the **Forward X11 Packets** box
- Click **OK**



# Running Graphical Unix-based Programs from Off Campus

- Now, type the name of the program to run at the command prompt
- The program will open in an Exceed window
- The Unix version of Matlab can be run this way, for example
- Running programs this way is slow and choppy from off campus, even with a fairly fast internet connection



```
neil.ecn.purdue.edu - SecureCRT
File Edit View Options Transfer Script Tools Window Help
Last login: Mon Feb 27 09:20:17 2006 from gris118-dhcp-20
April 2006
S M Tu W Th F S
2 3 4 5 6 7 8
9 10 11 12 13 14 15
16 17 18 19 20 21 22
23 24 25 26 27 28 29
30
Tue Apr 4 08:33:22 EDT 2006
bash-2.05# matlab
```

# Running Graphical Unix-based Programs from Off Campus

- Before you choose a compute server to log in to, check the loads on the department computer servers at:  
[https://engineering.purdue.edu/AAE/help/server\\_status](https://engineering.purdue.edu/AAE/help/server_status)
- Click on the desired set of servers, most likely **Compute Servers' Status**
- **DON'T USE ROGER!**

**PURDUE UNIVERSITY**  
AERONAUTICS AND ASTRONAUTICS

PURDUE » ENGINEERING » AAE » HELP » STATUS OF AAE SERVERS

Welcome  
AAE History  
People  
News/Events/Lectures  
Publications  
Research  
Facilities

Academics

### Status of AAE Servers

- Parent Folder
- A Cluster Status
- B Cluster Status
- **Compute Servers' Status**

Tue Apr 4 08:46:14 2006

Host	1 min	5 min	15 min
avian	0.02	0.01	0.01
drag	5.21	6.72	7.48
fbd	0.00	0.00	0.00
gemini	0.00	0.00	0.01
gene	0.88	0.86	0.88
gus	0.01	0.02	0.02
lift	0.00	0.00	0.01
neil	0.00	0.00	0.01
thrust	0.00	0.00	0.01
yaw	0.00	0.00	0.00
yuri	0.08	0.02	0.01

In this case, **drag** is being used a lot, so choose another server to log in to

# Running DACS Programs

- DACS is Distributed Academic Computing Service
- This allows students to run common programs from off campus via the internet using Citrix Client
- Program runs on computers at school, and graphics appear on your screen
- Access DACS at:

<https://goremove.ics.purdue.edu/Citrix/MetaFrame/auth/login.aspx>

**Software Remote** 

ITaP Home > Teaching & Learning > Software Remote | About Software Remote | Software Remote HelpDesk |

**Authorized Users Only** 

User name:

Password:

Advanced Options >>>

**Software Remote**

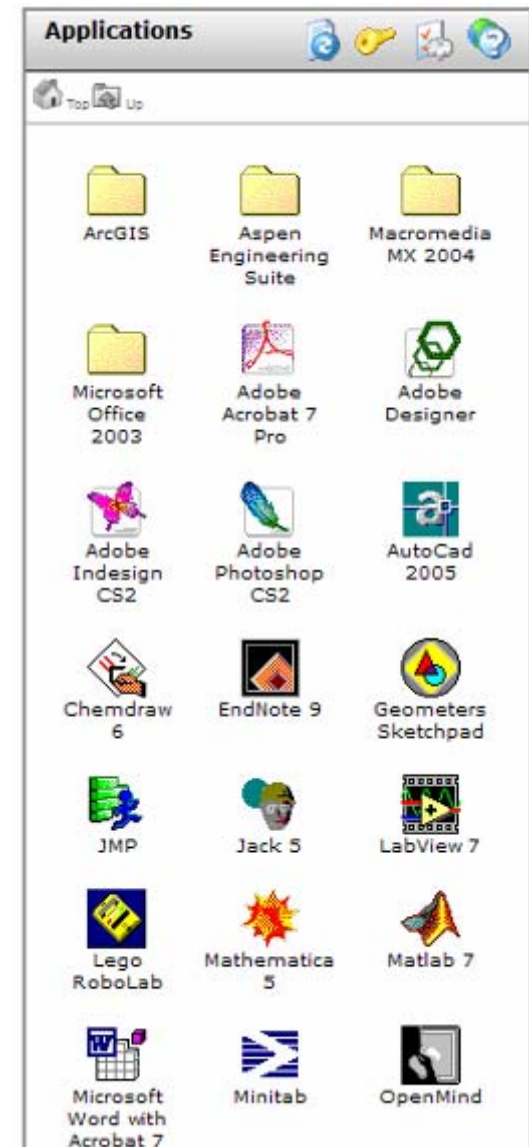
In order to use the Software Remote service, you must have the Citrix client installed on your computer (PC, Mac, Linux, UNIX). If the software isn't currently installed on your computer a link is provided below to download the required software.

**Message Center**

The Message Center displays any information or error messages that may occur.

# Running DACS Programs

- Download and install Citrix for first use of DACS
- Log in
- Choose the program to run
- Programs seem to run smoothly, but slow down if accessing data on your off campus computer



# Where To Download This Software

- <https://engineering.purdue.edu/PULS/>
- <http://www.itap.purdue.edu/shopping/online/software/>
- Map a network drive to <//roger.ecn.purdue.edu/micro> for access to various programs such as Matlab. Make sure to read the README.txt files for licence instructions if applicable
- Buy discounted software at the Boiler Copy Center in the Purdue Memorial Union. Microsoft Office is roughly \$13; Windows XP is roughly \$10



# Other Useful Web Resources

- <https://engineering.purdue.edu/AAE/help>
  - Using the Compute Servers
  - AAE New User and General Information
  - Status of AAE Servers
  - Printing
  - Surveys
  - Zope and WebDAV help