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Research Computing Services

RESEARCH GRID

The X Window System

The X Window System allows you to work interactively with research software through a graphical user interface (GUI). Please see our list of grid commands for a list of software that can be run interactively with X11. Instructions for connecting via a PC or Mac are below.

PC:

1. Download XMing (a free X Window application): http://sourceforge.net/projects/xming
2. An SSh client, SecureCRT, is installed standard on all HBS PCs. If you are on a personal machine, click here for instructions on how to download SecureCRT.
3. Open SecureCRT and go to file > quick connect. Enter the hostname "researchgrid.hbs.edu" and your username, then click "Connect." A dialogue box may come up where you need to press "yes" or "allow." You will then be directed to a dialogue box where you will enter the password provided to you by RCS.
4. Go to Option > Session Options > Remote X11 > make sure "Forward X11 packets" and "Enforce X11 authentication" are checked and press OK.
5. You need to close your session for the X11 settings to take effect. Type "exit" at the command line and press return. Finally, close the SecureCRT window by clicking the "x" in the upper right hand corner.
6. Go to the "Start" menu and to "Programs" and choose "Xming." A traditional application will not open. The Xming icon should appear somewhere on your task bar (usually at the bottom of your screen), which indicates it is open and you can now connect to the research server using SecureCRT.
7. Open SecureCRT, you will see a box that says "Connect." Always double click on the existing "researchgrid.hbs.edu" to connect so you retain your X11 settings.
8. You are now at the command line in your home directory (/export/home/local/username). Type the appropriate interactive with X11 command and press return and a graphical user interface for the software will pop up.
9. When you're done working, right click on the "X" icon on the task bar and select "Exit" to close the program.

Mac:

1. Open the terminal on your Mac. The terminal is usually found on your dock or under the Application directory inside the Utilities folder. You can also search for Terminal using Spotlight clicking on the magnifying glass icon in the upper right corner of your screen and typing "terminal" into the search bar that appears.
2. To use X on a Mac, you will need to have open source X11 software installed on your machine. In OS X 10.7 Lion, the X11 application is installed by default. If you are using OS X 10.8 or 10.9, please download XQuartz.
3. Once Terminal is open type:

   ssh -X *username*@researchgrid.hbs.edu

4. Enter your password when prompted (Note: as you type, your password is being entered even if the cursor does not blink or move).
5. You are now at the command line in your home directory (/export/home/local/username). Type the appropriate interactive with X11 command and press return and a graphical user interface for the software will pop up.
6. When you're done working, sign out of X11.

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