



Remotely Accessing UG Astro Servers

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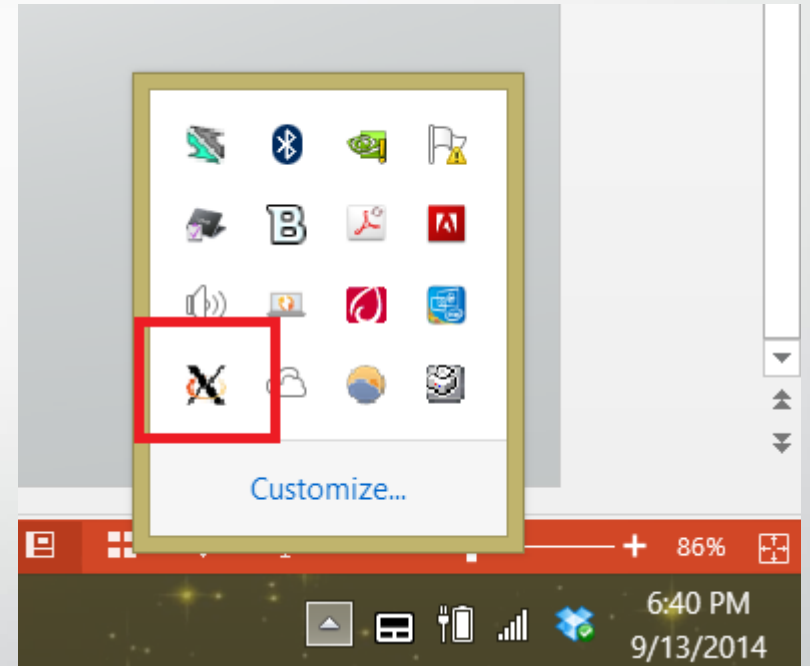


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{1.1} Installing Xming

- Before connecting you must have an Xming server running on your computer.
- Download the Xming installer from <http://sourceforge.net/projects/xming/>
- After installing, clicking on the Xming icon should automatically start a server. (You will see an Xming symbol appear in your system tray)



{1.2} Putty.exe

- Putty.exe is a program that will allow you to access UG astro computers via a terminal /command line window. You can perform all tasks you could in the UNIX environment, such as mv, rm, cp, mkdir, etc.
- Download the standalone putty.exe for your system from:
<http://www.chiark.greenend.org.uk/~sgtatham/putty/download.html>

{1.3} Putty configuration

- You will have to set up putty to connect to the ugaastro servers.
- Fig.1 is the default screen when opening putty.
- Step one is to click on the plus symbol next to SSH , and open the settings for X11. Ensure your settings match Fig.2
- (the display location is localhost:0)

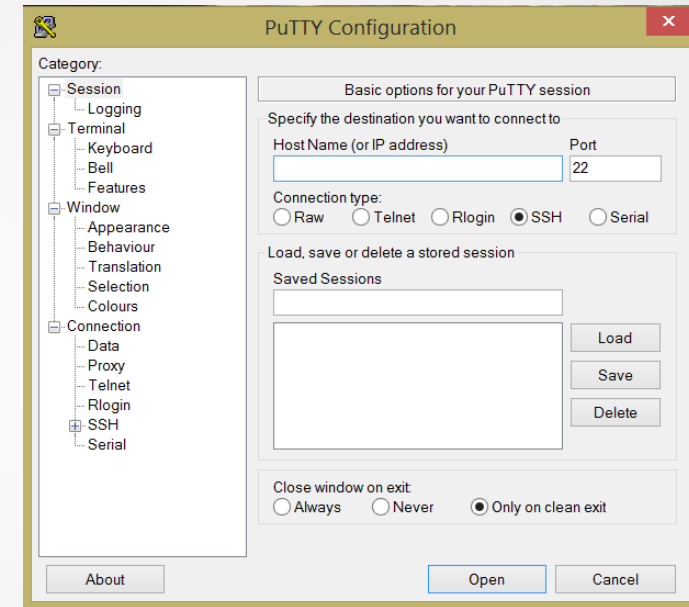


Fig. 1

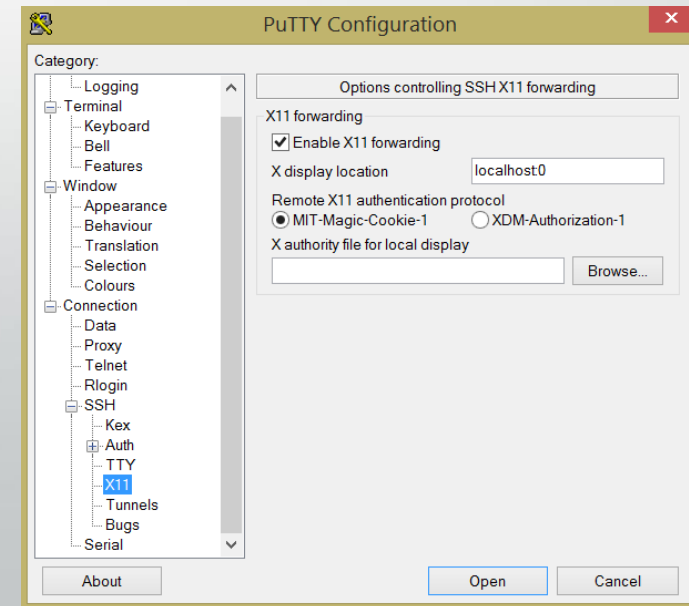
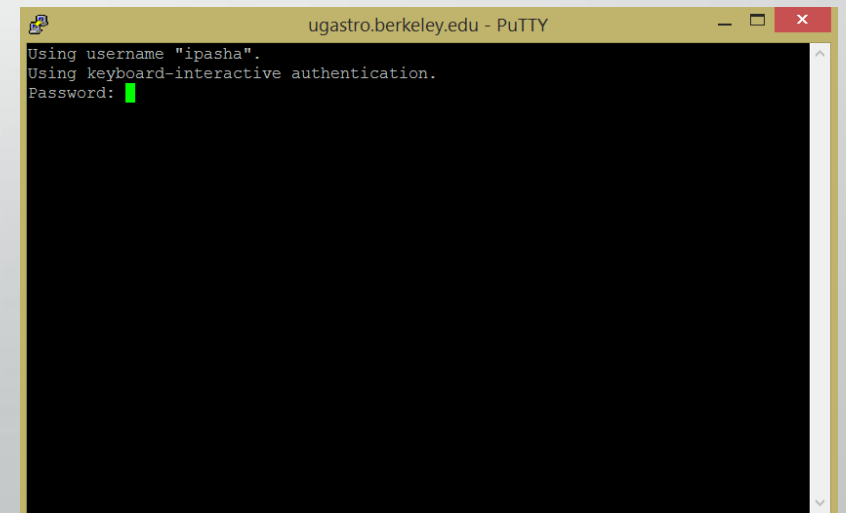
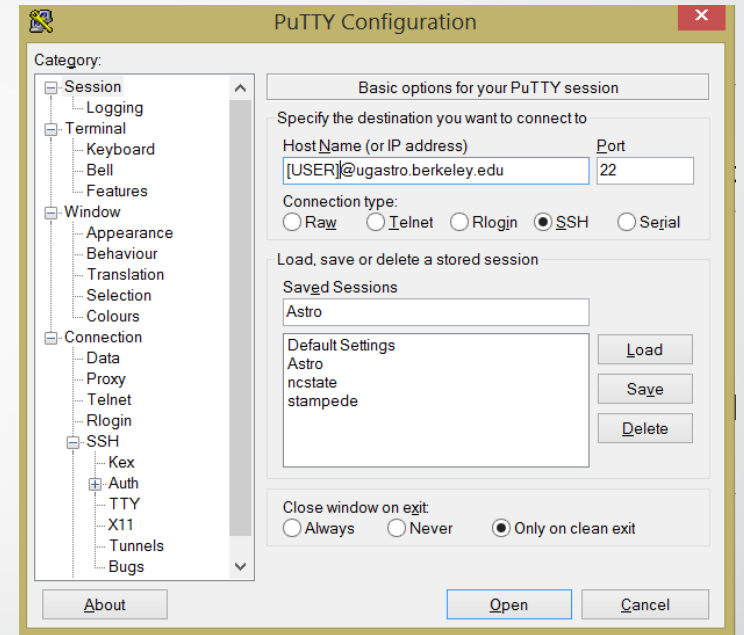


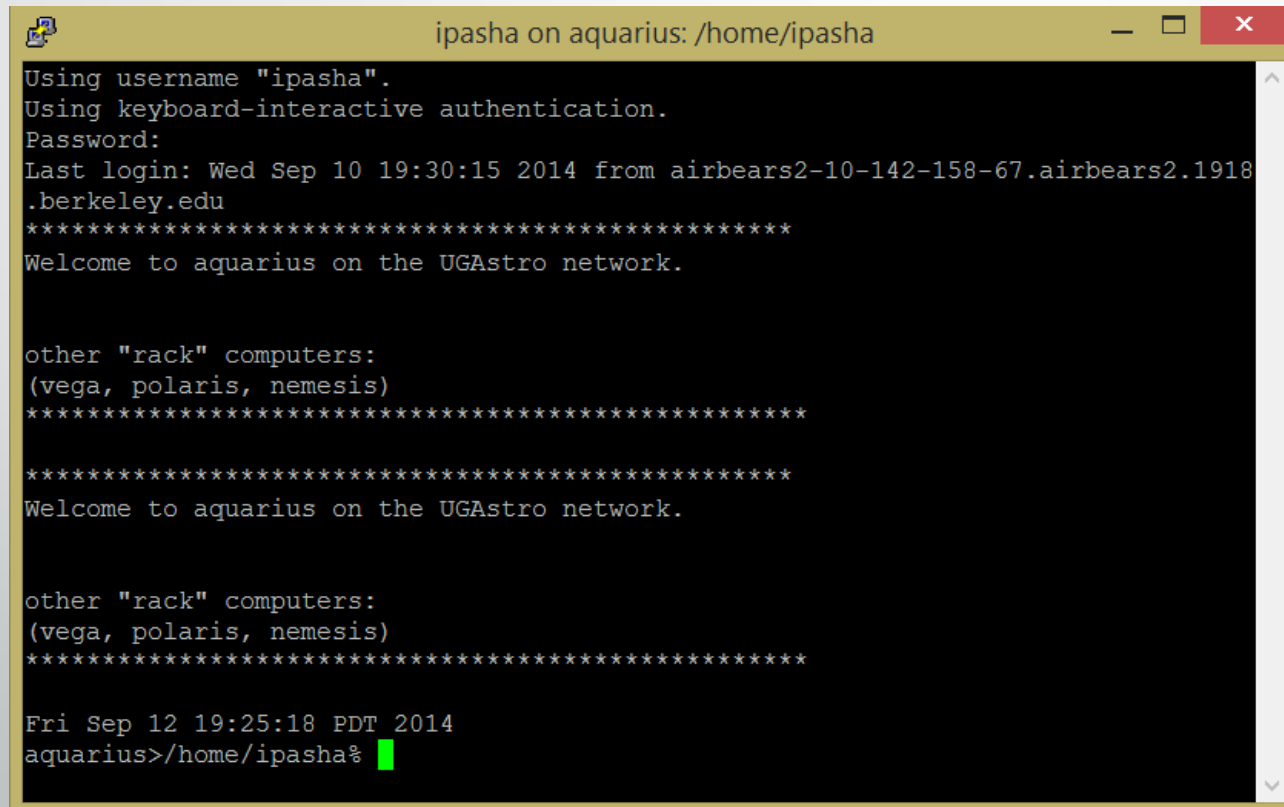
Fig. 2

{1.3.1} Putty configuration (continued)

- To make your life easier, you are going to want to save this setting, along with your login info, so that logging in is as painless as possible. Configure your home screen to look like mine, and then hit save, and give it a title (like ugastro).
- (Replace [USER] with your username, which should be of the form [first initial][lastname])
- Upon opening putty, you should be able to click on your ugastro tag in the list and hit "load" which will load up all your settings. Then just hit open.
- This should pop up a window like the one seen below. Enter your password (the cursor won't move), and hit enter.



- This should culminate in a command line terminal identical to one you would be using on the astro computers.



```
ipasha on aquarius: /home/ipasha
Using username "ipasha".
Using keyboard-interactive authentication.
Password:
Last login: Wed Sep 10 19:30:15 2014 from airbears2-10-142-158-67.airbears2.1918
.berkeley.edu
*****
Welcome to aquarius on the UGAstro network.

other "rack" computers:
(vega, polaris, nemesis)
*****

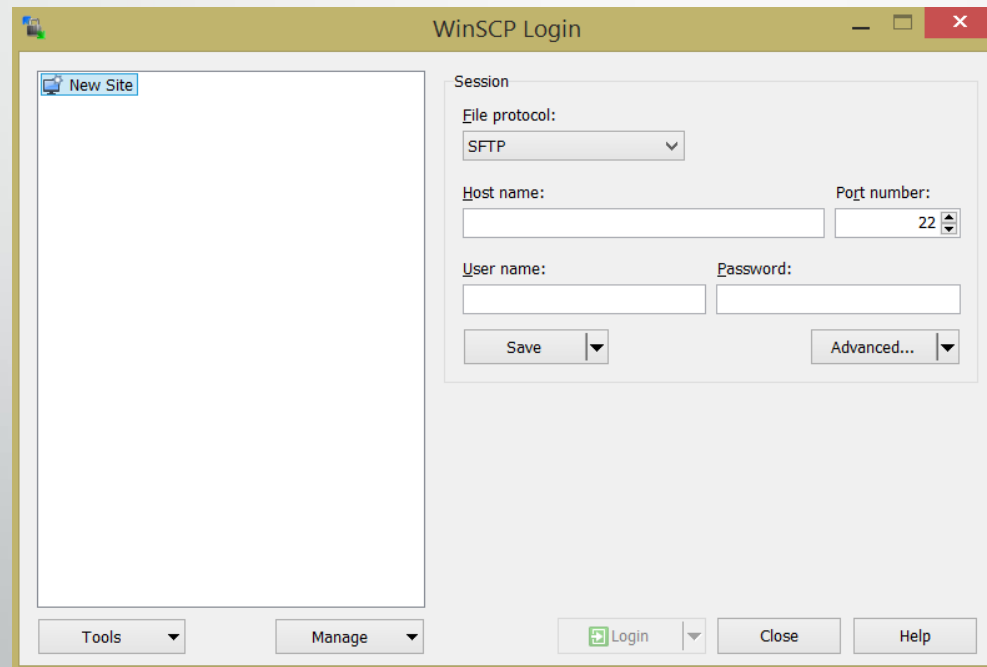
*****
Welcome to aquarius on the UGAstro network.

other "rack" computers:
(vega, polaris, nemesis)
*****

Fri Sep 12 19:25:18 PDT 2014
aquarius>/home/ipasha% █
```

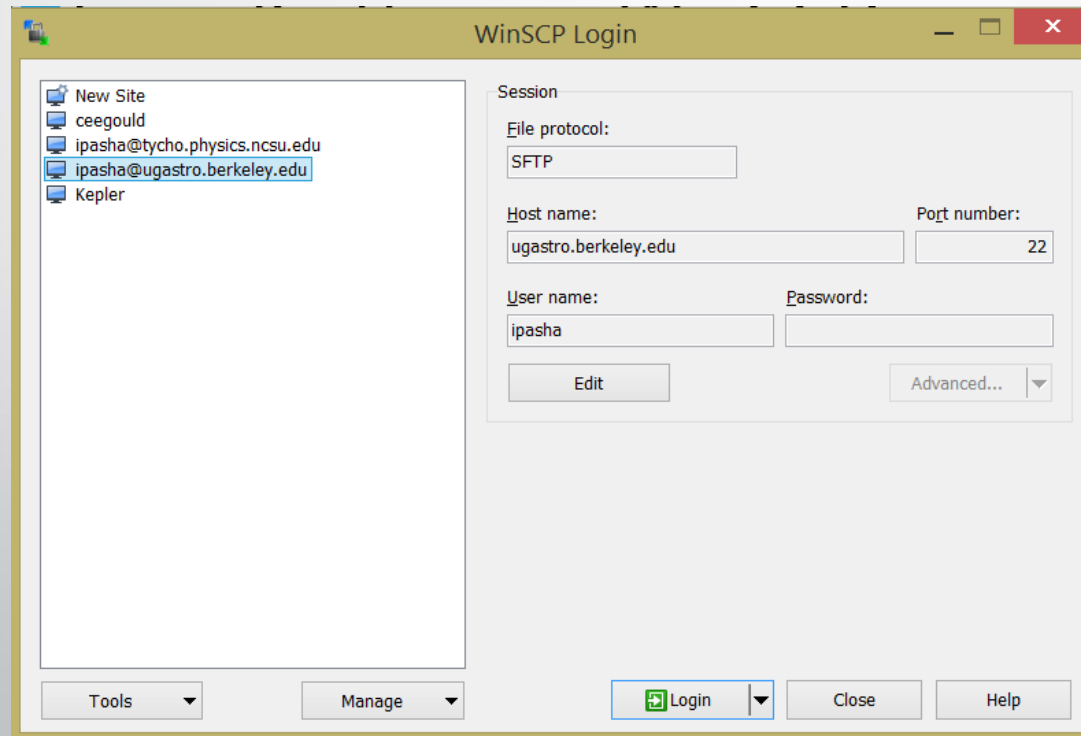
{1.4} WinSCP

- Command line access to the astro network is great, but putty does not have an integrated system for SCP (secure copying) files back and forth between your computer and the server.
- Luckily, there is a program called WinSCP that does this effortlessly, in a familiar gui style.
- Download it from <http://winscp.net/eng/index.php>
- Once installed, the opening screen should look like the one seen here.



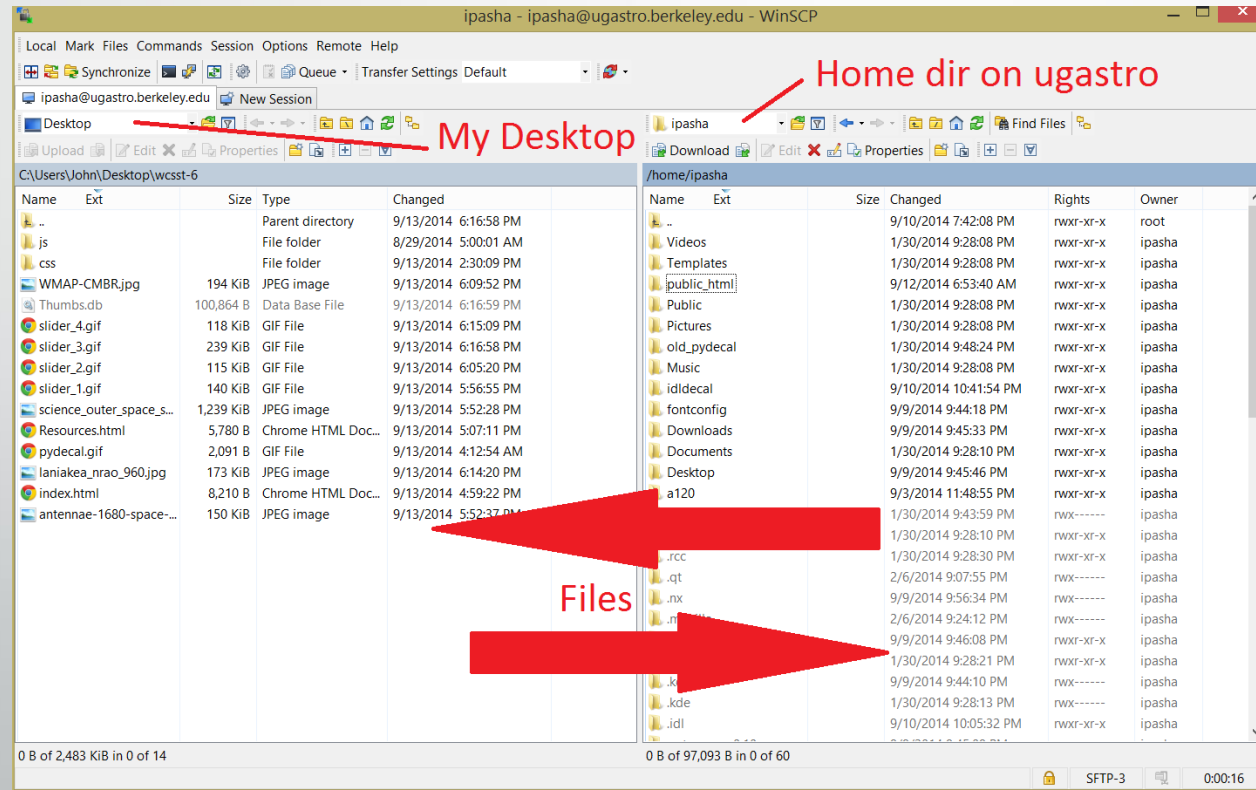
{1.4.1} Setting up WinSCP

- Setting up WinSCP is remarkably easy. Simply copy the image, using your own user id.
- Like with Putty, you can save your login info to various places (mine include servers in North Carolina and Texas) and log into them with ease.



{1.4.2} Using the WinSCP interface

- WinSCP is fairly self explanatory. On the left is a panel of files on your personal computer (you should recognize the directory tree as your own) and the panel on the right is your directory on ugastro. From here you can simply drag files back and forth to copy them from one location to the other.



{2.1} Mac/Ubuntu Login

- Because macs/ubuntu are built on linux, they have a terminal built in. This means logging into ugastro computers is as simple as opening terminal and typing

```
ssh -X [userid]@ugastro.berkeley.edu
```

- And then entering your password when prompted.

{2.2} SCP on a Mac/Ubuntu

- Follow this syntax to copy a file from the server to your computer (once logged in):
`scp user@ugastro.berkeley.edu:/home/user/filepath .`
- The space and period after the file location/name is important, it specifies that you want to copy the file to "here," here being your current directory on your mac. You will be prompted for your password.
- To copy a file from your mac to the server, type:
`scp /filepath/on/mac/file.blah user@ugastro.berkeley.edu:/home/user/final_location`