

# Software Requirements for Accessing a Linux server using a Windows PC

- PuTTY



- SSH and telnet client
- Download and installation instructions @  
**<http://www.chiark.greenend.org.uk/~sgtatham/putty/>**

- Xming

- Software port of the X-Windows server to Windows
- Download and installation instructions @  
**<http://www.ece.uvic.ca/computing/win-xsessions.shtml>**

# What is PuTTY ?

- PuTTY is run on a Windows machine, and used to connect to a Linux machine (i.e, Aeolus or Breezy)
- Anything you type (i.e. commands) into the PuTTY window is sent straight to the Linux machine
- Everything the Linux machine sends back is displayed in the PuTTY window
- So you can work on the Linux machine as if you were sitting at the Unix machine's console while actually sitting somewhere else!



# Xming

- Used to forward X11 sessions from Linux machines
  - Produce x11 terminal windows in your Windows PC
  - Useful for software such as Matlab, PAVE, etc.

# Set-up Instructions (after installation of both)

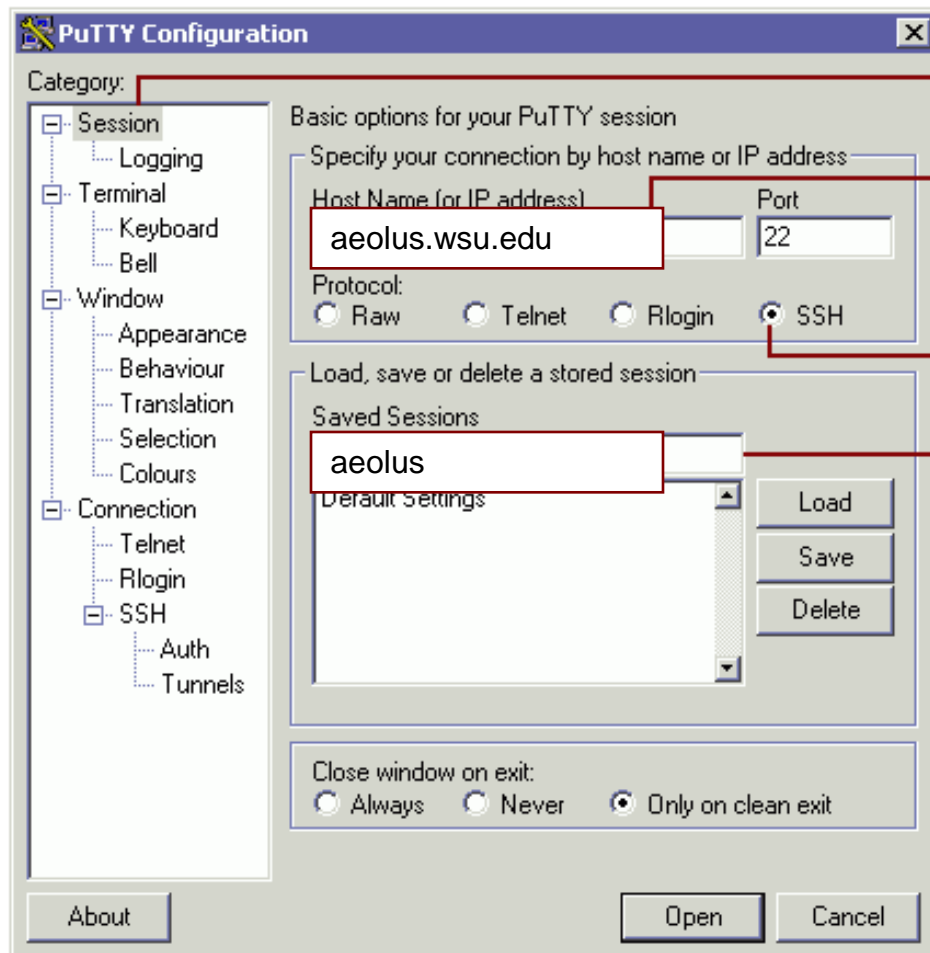
- Start Xming (**Start --> All Programs --> Xming --> Xming**).

**\*\*This will start up as a button on your taskbar and no window will open**

**\*\*Nothing else needs to be done with Xming.**

# Basic set-up Instructions (after installation of both)

- Start PuTTY



**Start by selecting the Session tab.**

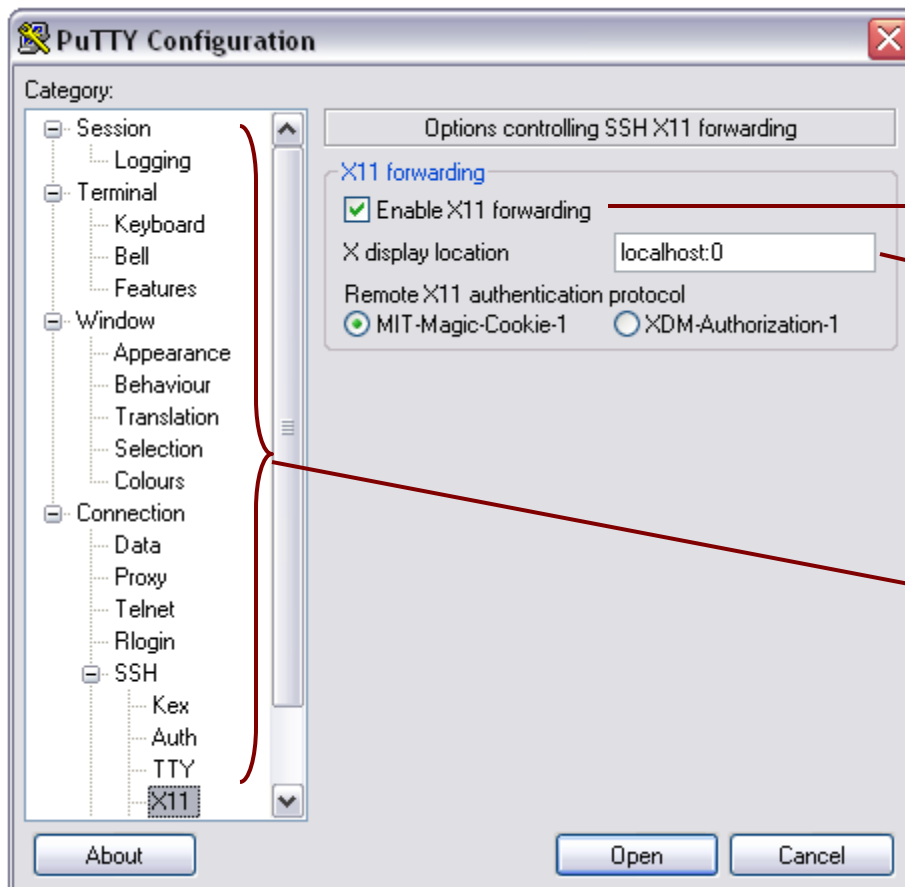
**Enter the name of the machine you wish to connect to here. You can also specify an IP address, which would be something like: 111.222.333.444**

**Select the SSH Protocol. Note that the 'Port' field changes to port 22. This is the normal port that the SSH Server 'listens' on.**

**Give these session settings a name here. We will save the settings using this name when we have finished making changes.**

# Basic set-up Instructions (after installation of both)

- Under *Connection* → *SSH* → *X11\**, check “Enable X11 forwarding” and type “localhost:0” in the appropriate space



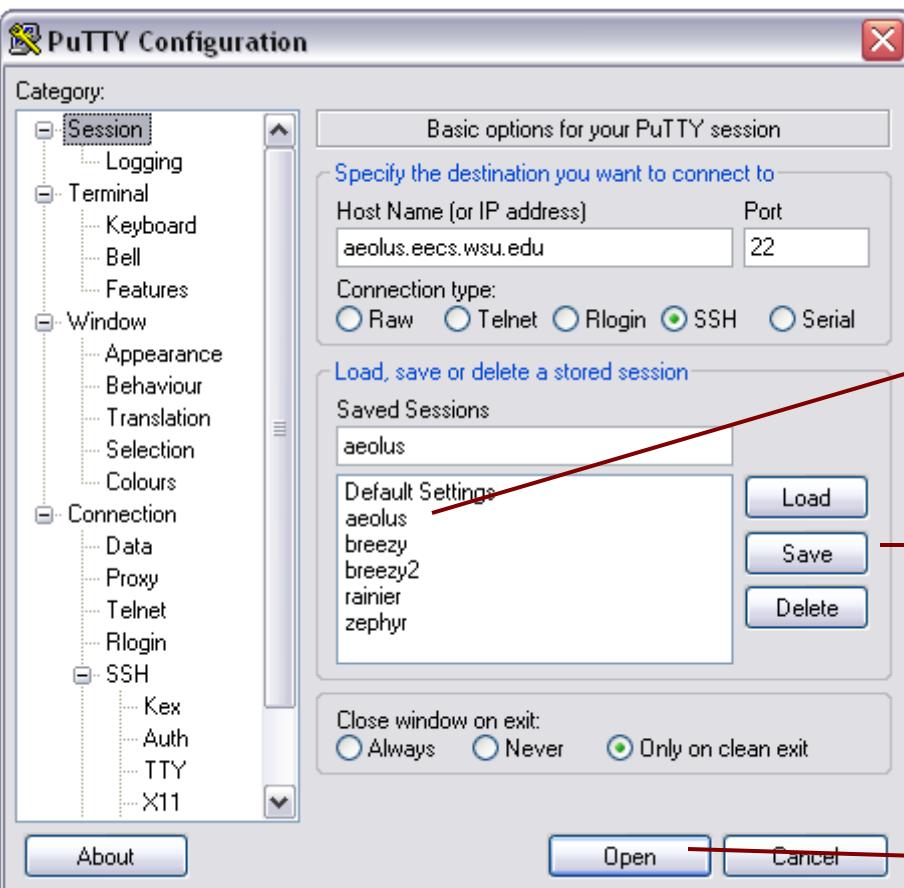
Check this option

Type here : “localhost:0”

\*In this presentation,  
*Italized* means on the left  
hand menu

# Basic set-up Instructions (after installation of both)

- Save and open the session under *Session*



Saved Sessions

-Click to load

--Double-click to open

Click to save this configuration

Click here to open the session

# Basic set-up Instructions (after installation of both)

- Verify your DISPLAY environment variable
  - type “**echo \$DISPLAY**” at the command prompt in the PuTTY terminal
  - the result should be something towards the effect of “**localhost:n.0**” \*\*
  - “-bash: echolocalhost:10.0: command not found”
- If not, use command
  - “**setenv DISPLAY localhost:n.0**” \*\*
  - “-bash: setenv: command not found”

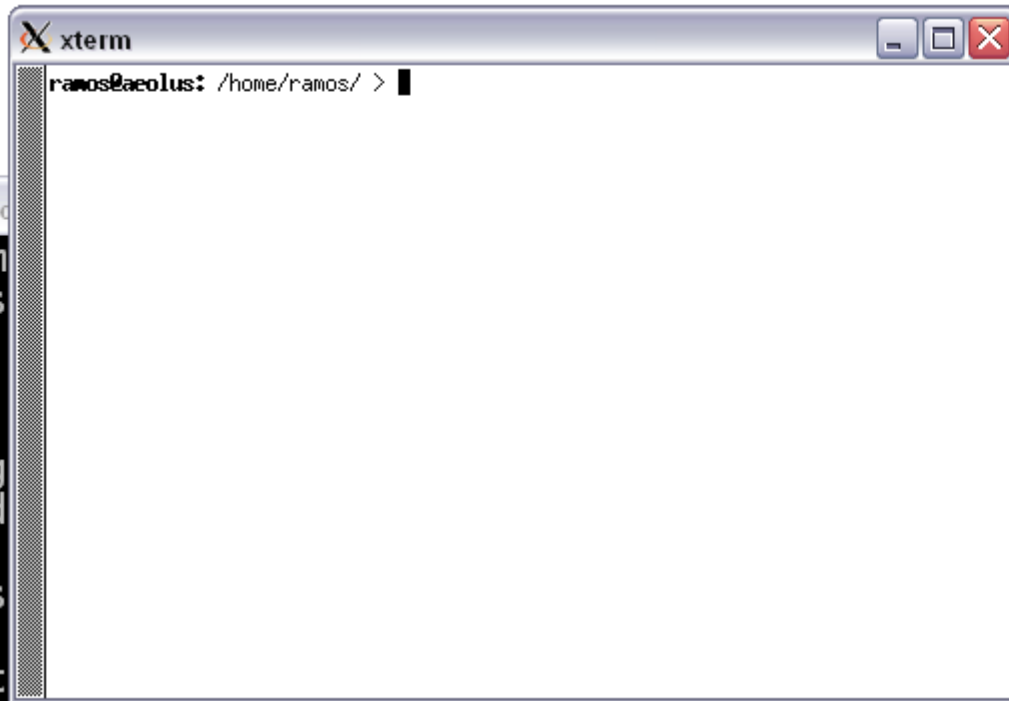
\*\*where n is a whole number greater than or equal to 10



# Basic set-up Instructions (after installation of both)

- Verify your X session is going through the secure tunnel
  - Try to start up an x-terminal by typing “***xterm***” at the command prompt
  - If an x-terminal appears on your screen, you have properly set the display variable, otherwise go use  $n = n + 1$  (ie. 11, 12, 13, ...) in the DISPLAY variable

# A Successful Configuration of \$DISPLAY



The image shows a screenshot of an xterm window. The title bar says 'xterm'. The terminal content shows the prompt 'ramos@aeolus: /home/ramos/ >' followed by a cursor. To the left of the xterm window, a portion of another window is visible, showing text like 'ram', 'Las', 'wel', 'If', 'sug', 'and', 'Ins', 'htt'.

```
lar-4.ce.wsu.edu
ng & Archetecture Cluster!

ing list, I STRONGLY
.wsu.edu, select "cluster"

at:

ub.txt
```

(2/14) Fluent is installed and running. Load the fluent module to use: module load fluent

(2/18) outbound e-mail is now working! Use the #PBS designators for e-mail as shown in the example above to receive e-mail notification of job status (start, finish, abort)

--Jim (kuszniir@eecs.wsu.edu)

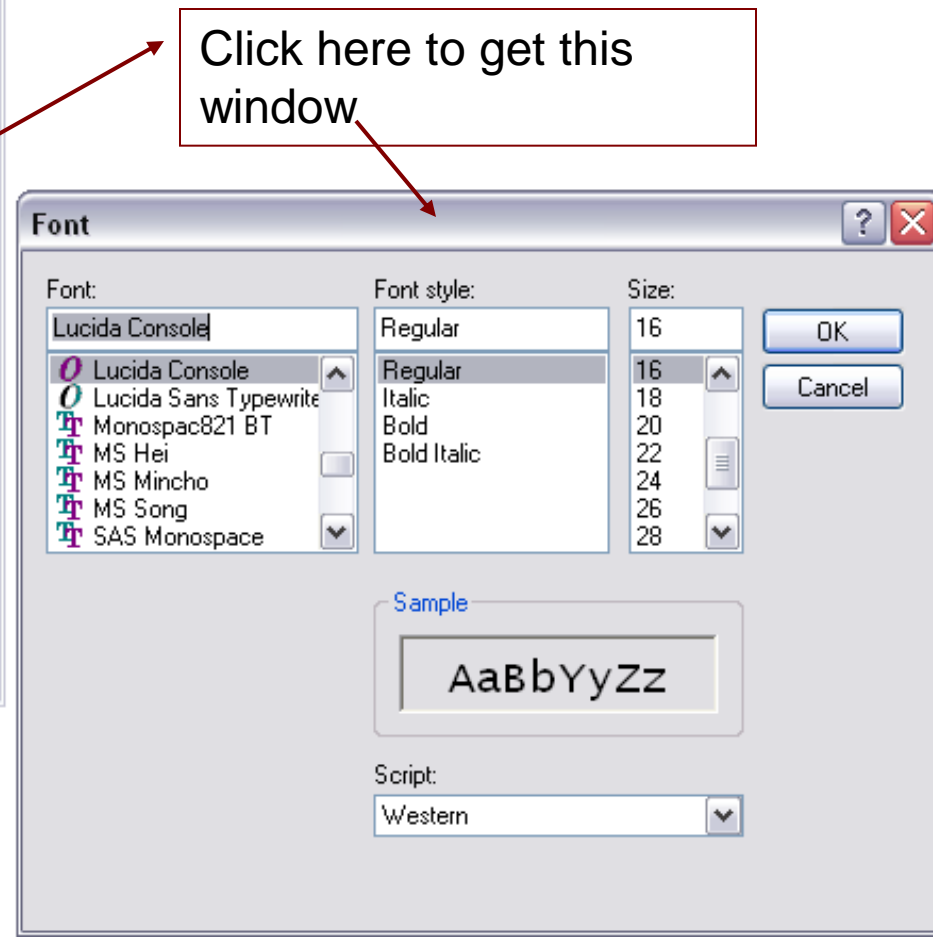
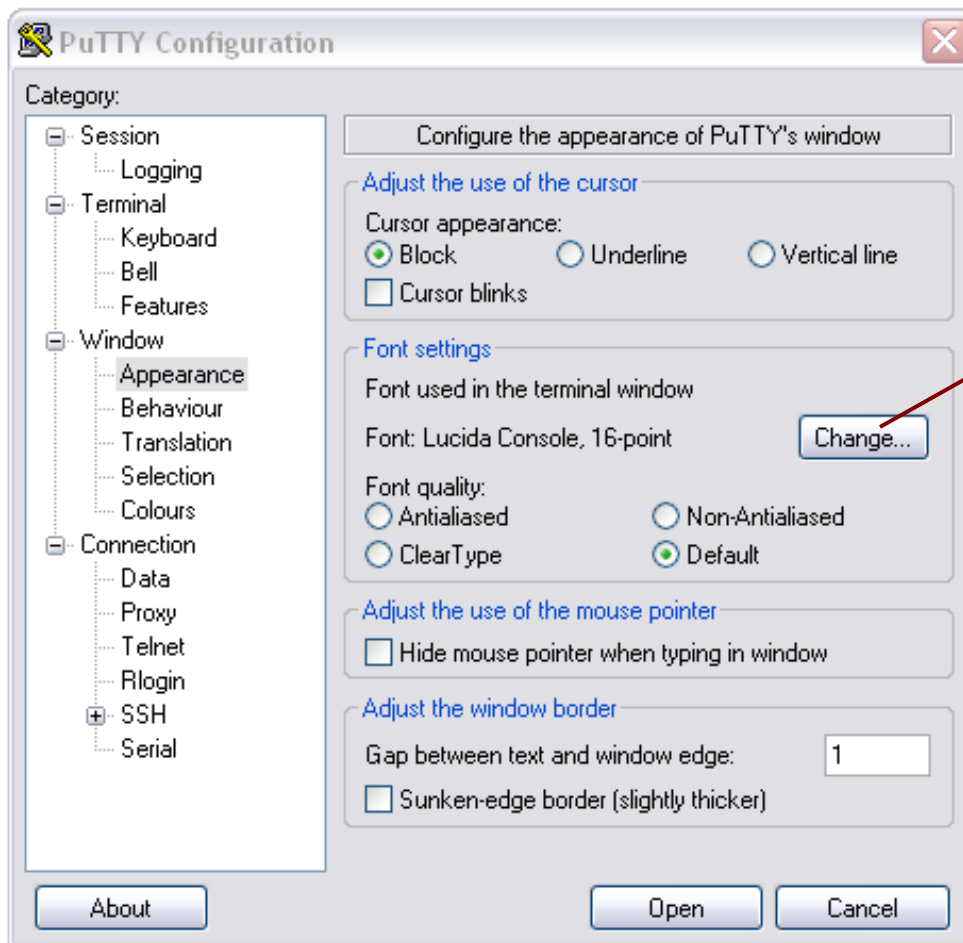
```
ramos@aeolus: /home/ramos/ > echo $DISPLAY
```

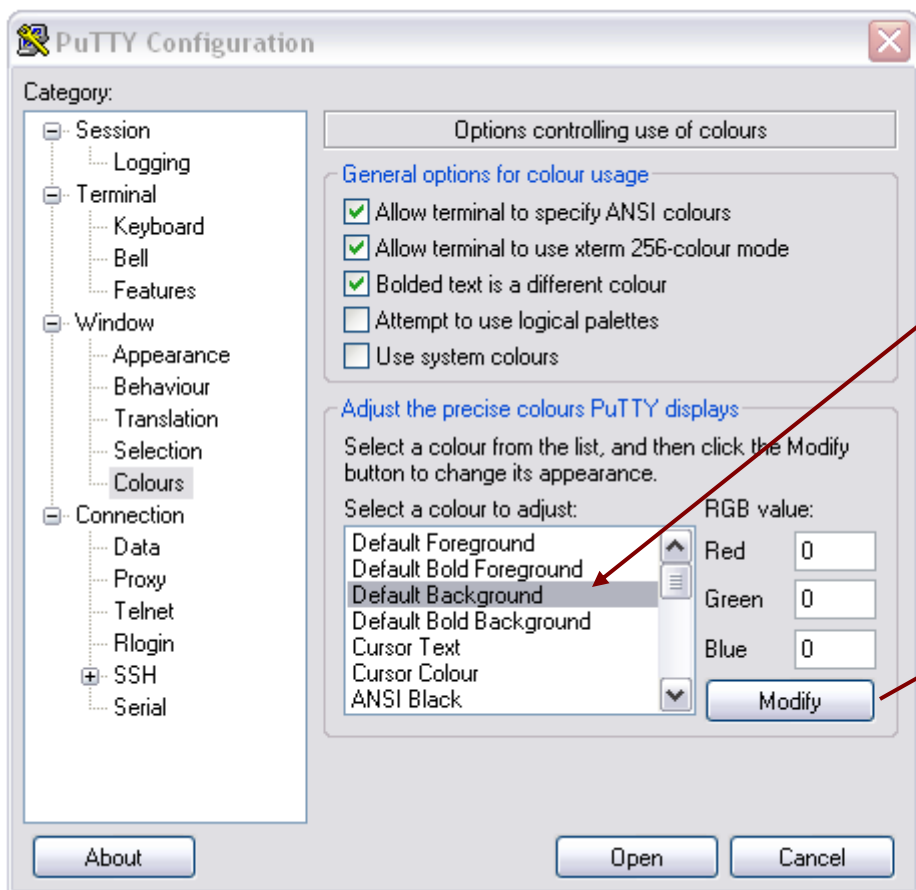
```
localhost:16.0
```

```
ramos@aeolus: /home/ramos/ > xterm
```



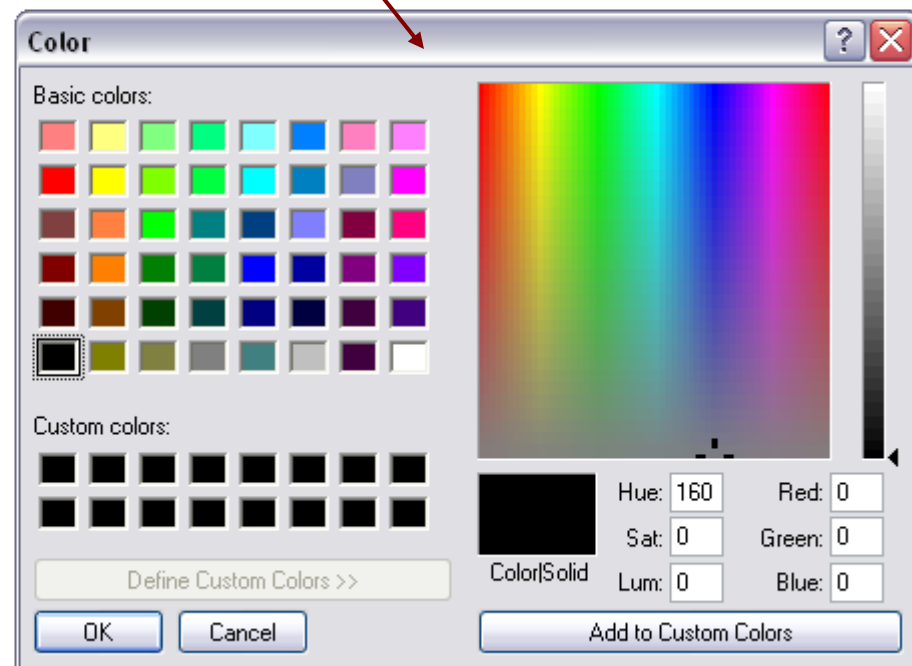
# Change the font, font style, and font size under *Window* → *Appearance*



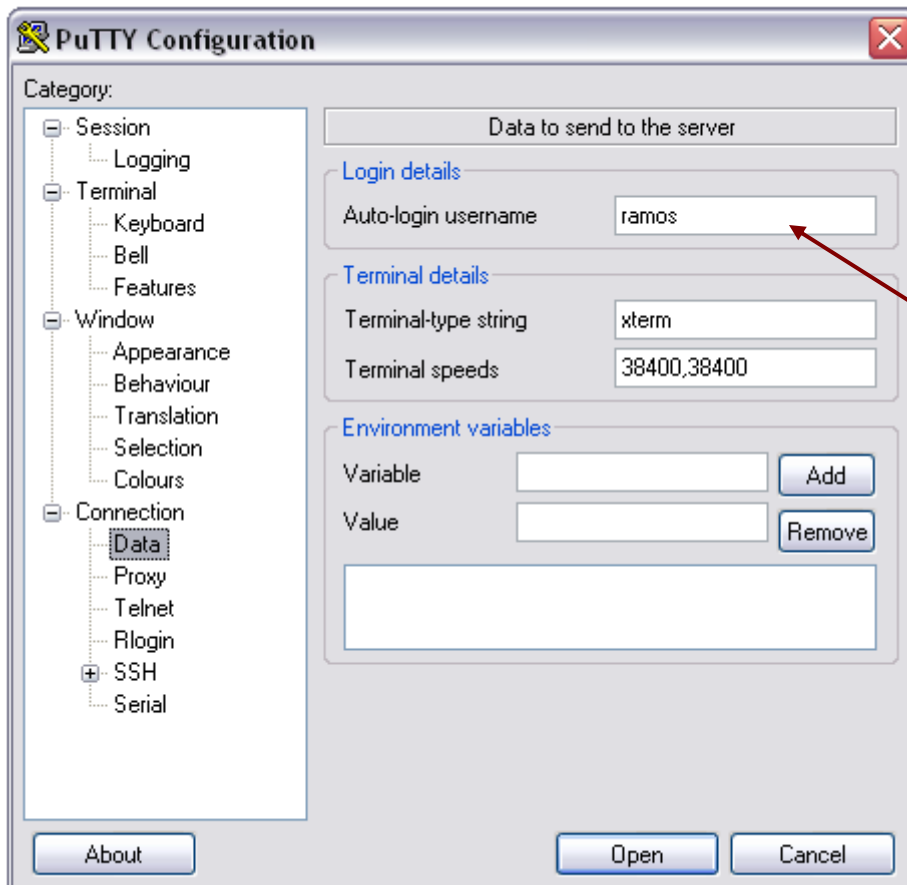


Change the color schemes (i.e. background color, text color, etc.) under *Window* → *Colours*

Click here to get this window



Set Automatic Login  
Name under  
*Connection* → *Data*



Put Login Name Here

# Last Notes

- Use PuTTY to connect from school computers to AEOLUS or BREEZY
- Can connect **from outside school network** (i.e. your house or internet café) by using wireless internet then connecting VPN (Check <http://www.wsu.edu/vpn/msPPTP.html> for more details on the VPN setup and use)