Running Remote X11 Applications from Windows

One of the nice features of X11 is that you can remotely run X11 applications. To take advantage of this feature we need 2 additional pieces of software.

1. SSH Client

We need a SSH client to tunnel our X11 connection over a secure protocol since X11 transmit in clear-text. We will use Putty as our SSH client, you can download Putty from:

http://www.putty.org

2. X-Server

Naturally, we will also need an X-Server to display our X11 applications. For this setup we will use the Xming X-Server. Download Xming X-Server from:

http://sourceforge.net/projects/xming

Now assuming Putty and Xming are both installed we can now connect to our remote Unix/Linux server and run a X11 application

1. Double click on the **Xming** shortcut on the desktop (see figure below)



Note: If you have a firewall installed on your computer you will need to allow remote hosts access to the X-server

2. After a short while, you will see the X logo in the system tray (see figure below)



3. Launch **Putty** and enable X11 forwarding by enabling *Enable X11 forwarding* under the Tunnels options. The "Tunnels Options" is located at: "*Category* " → "*Connection*" → "*SSH*" → "*X11*".



4. Enter the hostname of the server you want to connect to. Click on **Open** to connect to the remote server.

🞇 PuTTY Configurat	ion	? ×
Category:		
 Session Logging Terminal Keyboard Bell Features Window Appearance Behaviour Translation Selection Colours Connection Proxy Telnet Rlogin SSH Auth Tunnels Bugs 	Basic options for your PuTTY session Specify your connection by host name or IP address Host Name (or IP address) Port econ.yorku.ca Protocol: Raw Ielnet Load, save or delete a stored session Saved Sessions	
	Default Settings Load Save Red resouce Delete	
	Close <u>window on exit:</u> O Always O Never O Dnly on clean exit	
About	Help <u>O</u> pen <u>C</u> ancel	

5. If this is your first time connecting to the server from this workstation, you will be presented with a **Security Alert**, Click **Yes** (see figure below)

PuTTY		
	Putty Security Alert Image: Security Alert	×

6. Next login and run an X-11 application. In this example we will run xterm.



7. Finally, when you are done close all your X-11 applications and type exit in the PuTTY terminal window to log off the server.