

How to Remotely Access Java Tools for CSE 1030

By Steven Castellucci (v2.2, April 2013)

You don't always need to be in the PRISM lab to work on your 1030 assignments. Working on your own computer is convenient if the lab is busy, closed, or if you live far from the University. To do so, you must first install software on your computer. Which software you install depends on how you wish to work.

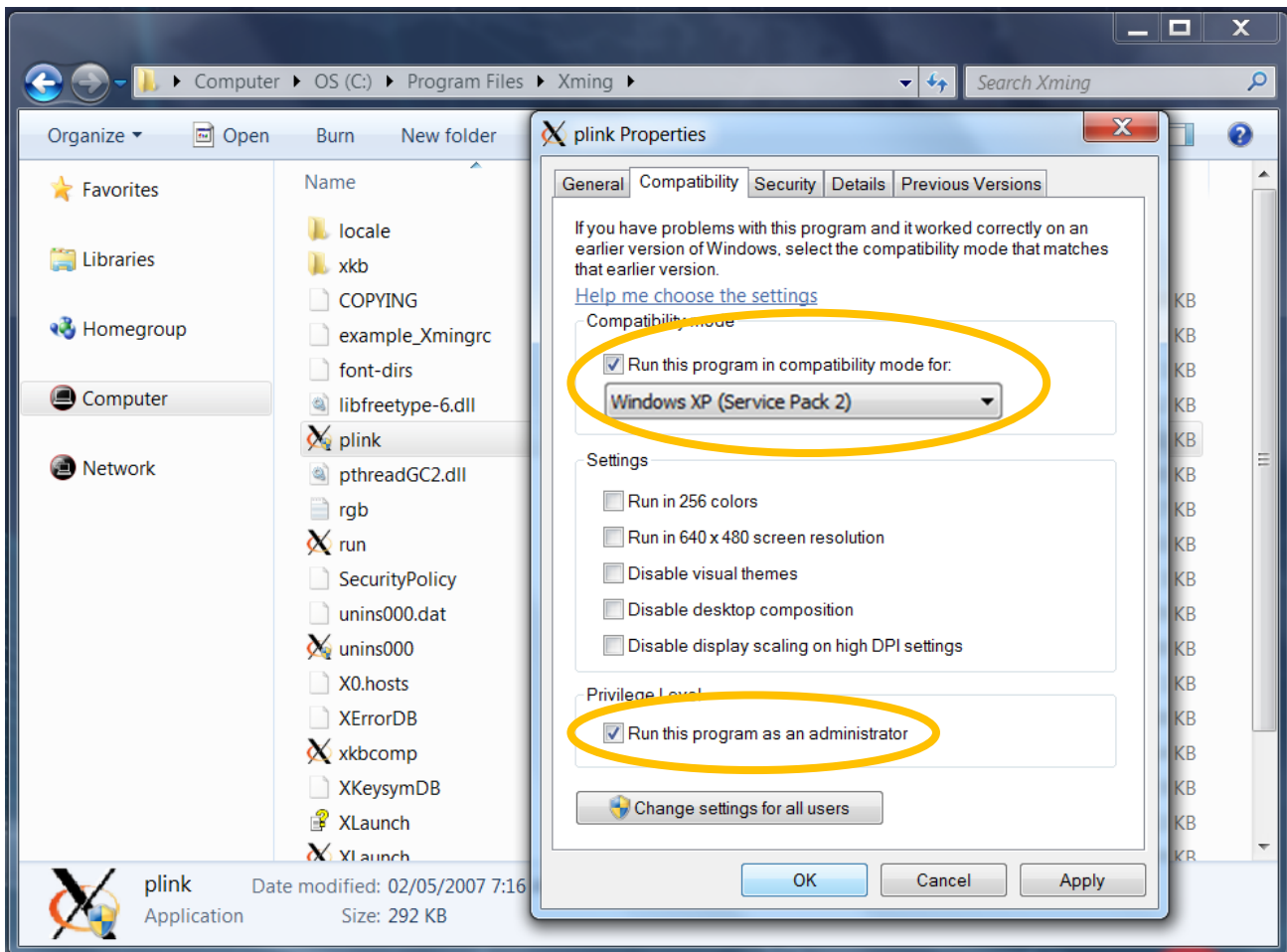
Using an Internet Connection

By connecting via a high-speed internet connection, you will be able to use the resources of the CSE server remotely.

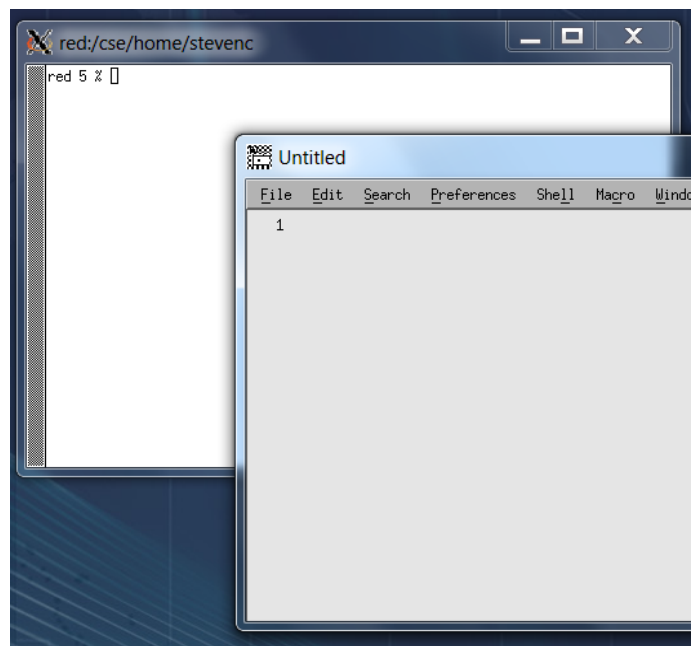
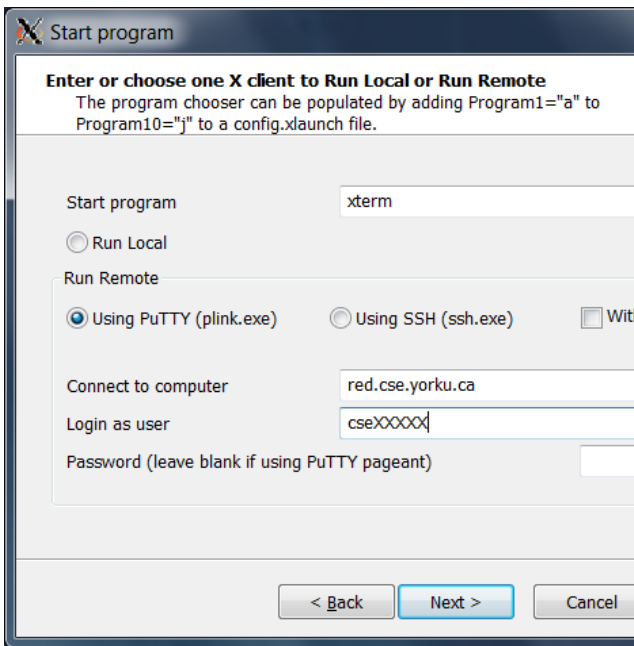
Windows

Download and install [Xming](#), then perform the following:

1. Navigate to the installation directory (C:\Program Files (x86)\Xming by default). Right-click on `plink.exe` and select "Properties". Select the "Compatibility" tab and enable the option "Run this program in compatibility mode for" and select "Windows XP (Service Pack 2)". Also enable "Run this program as an administrator". These two options are required to prevent Xming from crashing.

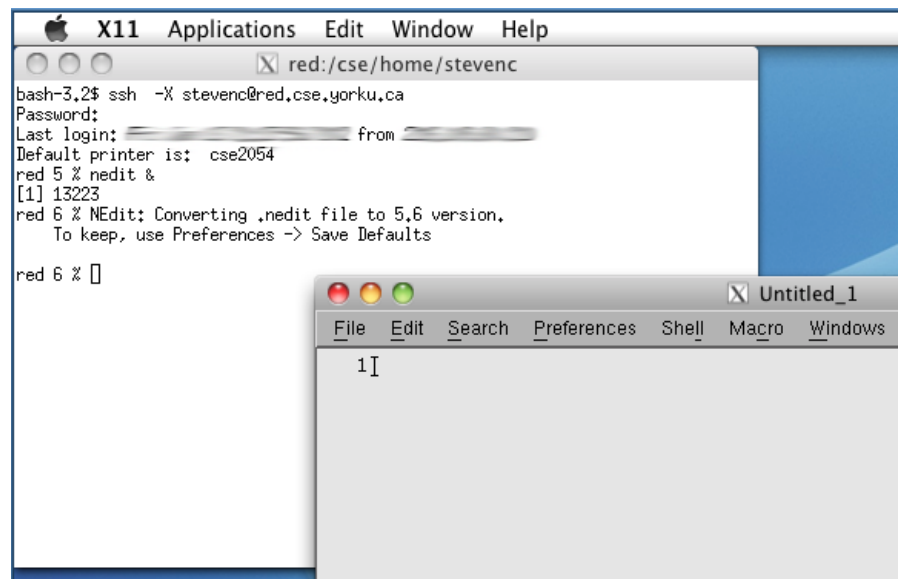


2. Create an Xming connection to the CSE server. Start XLaunch from the Xming program group. Select “Multiple windows”, then click “Next”. Select “Start a program”, then click “Next”. Select “Using PuTTY”, enter **red.cse.yorku.ca** as the server and your username, then click “Next”. Click “Next” again. Click “Save configuration” and save the file “CSE.xlaunch” to your desktop. Double-click the file to connect to the CSE server. If you are prompted to save the server’s key certificate, type “yes” and press Enter.



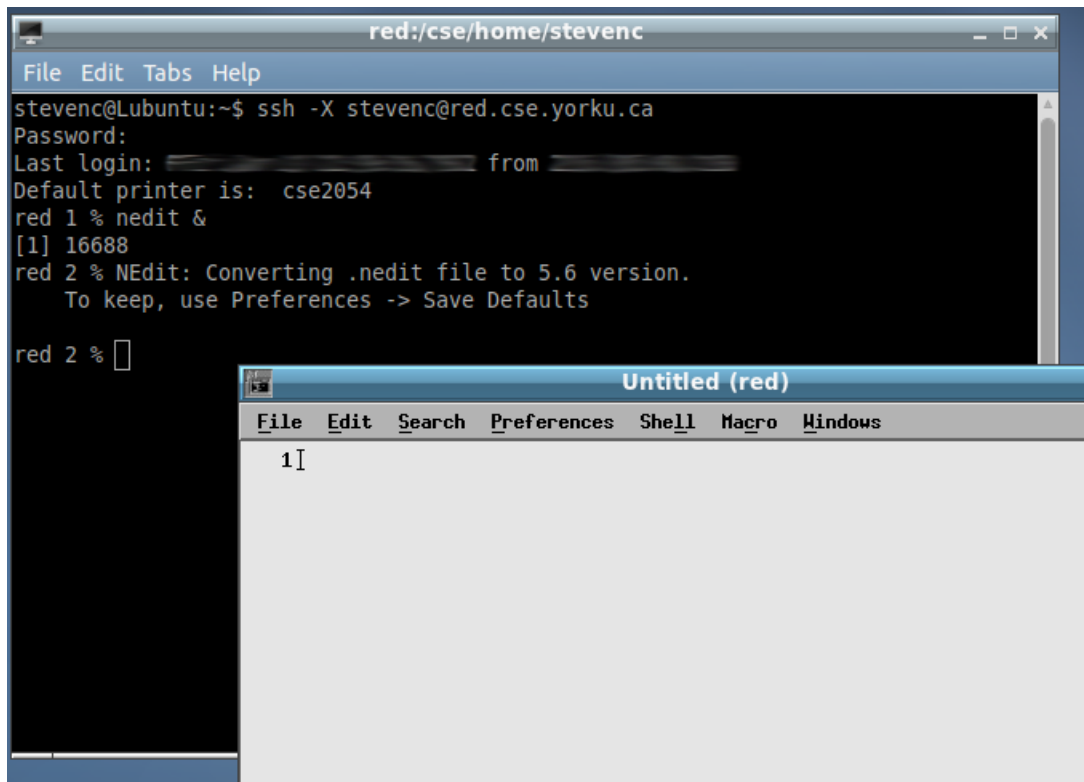
OSX

Start the X11 client found in the Utilities group in Applications. In the terminal window that appears, type `ssh -X cseXXXXX@red.cse.yorku.ca`, replacing “cseXXXXX” with your CSE login. If you are prompted to save the server’s key certificate, type “yes” and press Enter.



Linux

Open a terminal window and type `ssh -X cseXXXXX@red.cse.yorku.ca`, replacing “cseXXXXX” with your CSE login. If you are prompted to save the server’s key certificate, type “yes” and press `Enter`.



The image shows two overlapping windows from a Linux desktop environment. The top window is a terminal window titled "red:/cse/home/steven". The terminal output shows a successful SSH connection to a server named "red". The user "steven" logs in and runs the command "nedit &". The terminal shows the process ID [1] 16688 and a message from NEdit: "NEdit: Converting .nedit file to 5.6 version. To keep, use Preferences -> Save Defaults". The terminal prompt is now "red 2 %".

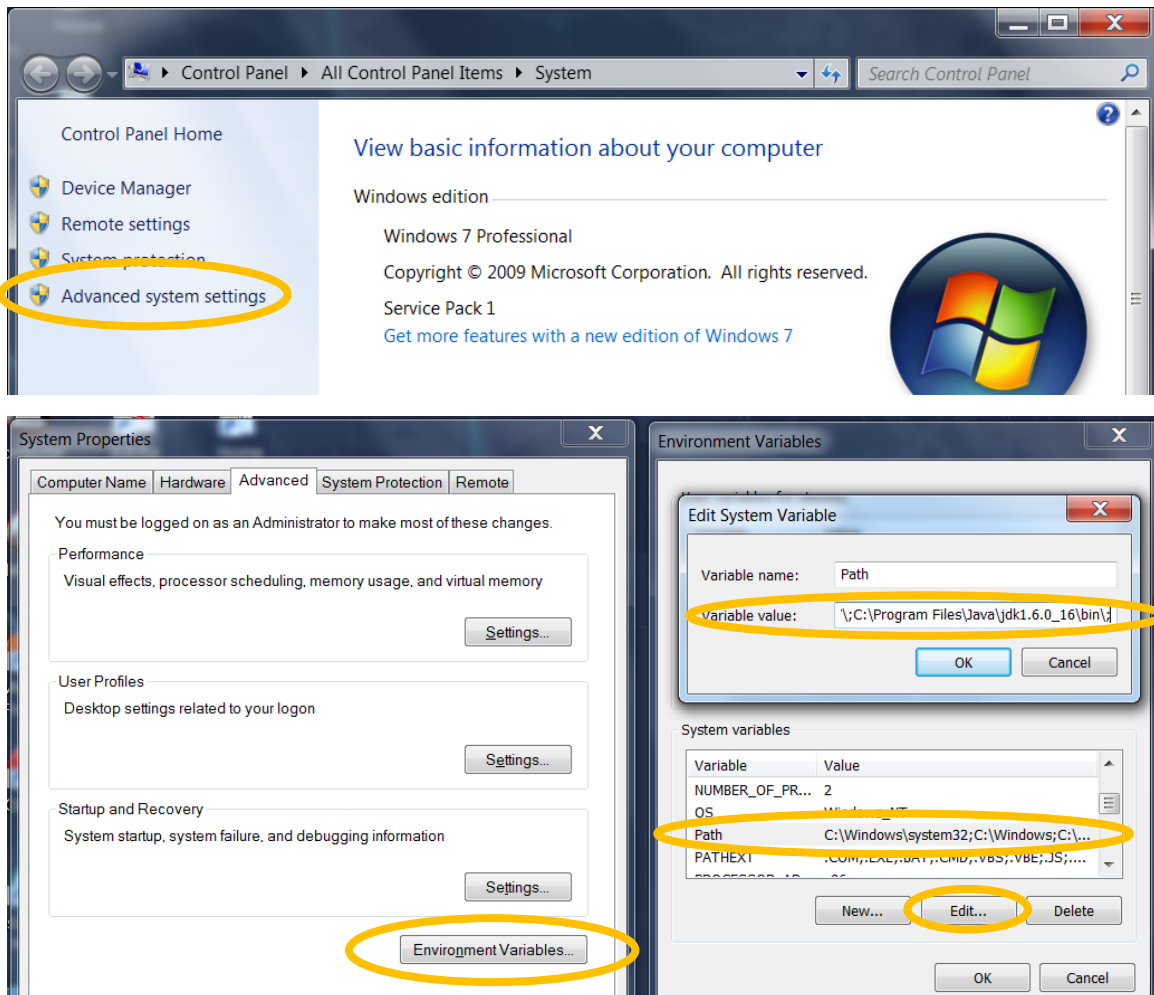
The bottom window is an NEdit text editor window titled "Untitled (red)". The menu bar includes "File", "Edit", "Search", "Preferences", "Shell", "Macro", and "Windows". The main editing area contains the number "1" followed by a cursor.

Working Offline

Working offline allows you increased freedom. With a laptop, you could work on your assignments during your commute to and from campus. Working offline is also convenient if you have a slow or problematic internet connection. However, this method can require downloading, installing, and configuring numerous programs.

Windows

1. Download and install the [Java SE Development Kit \(JDK\) from Oracle](#).
2. Next, open the System settings in the Control Panel. Select “Advanced system settings”, then “Environment Variables...”. Find and select the system variable “Path”. Click on “Edit...”. At the end of the existing value, type a semicolon (“;”), the path to the Java bin folder (e.g., `C:\Program Files\Java\jdk1.7.0_17\bin`), then another semicolon. Click “OK” three times to close all the dialogs.



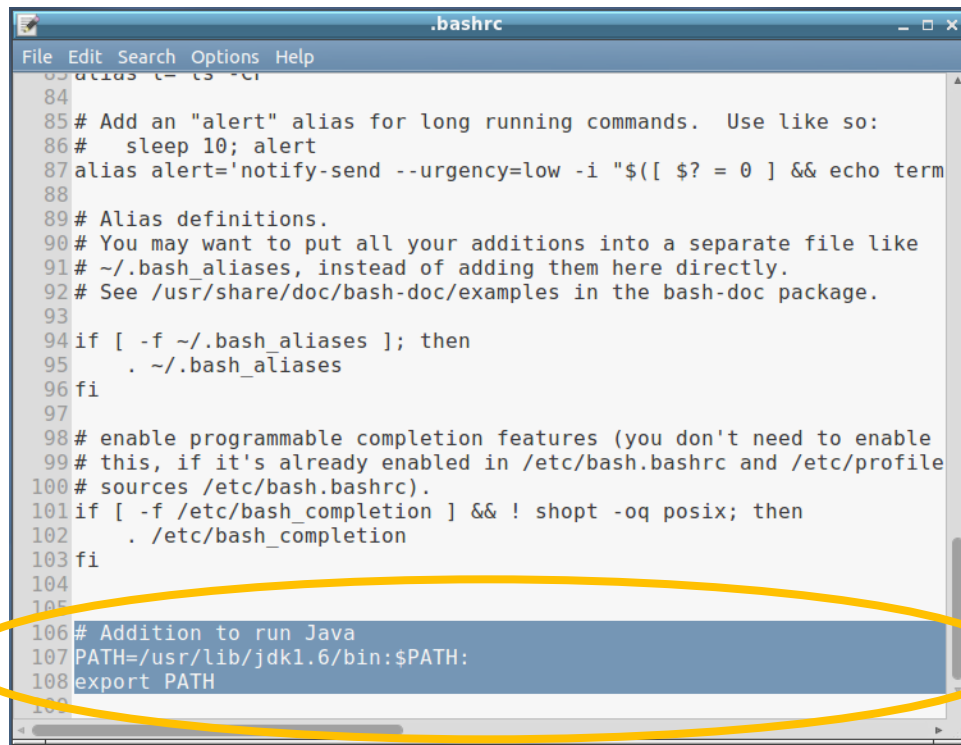
3. Continue with the section “Installing and Configuring Eclipse” below.

OS X

Download and install the [Java SE Development Kit \(JDK\) from Oracle](#). Continue with the section “Installing and Configuring Eclipse” below.

Linux

Download and install the [Java SE Development Kit \(JDK\) from Oracle](#). You will need to update your path environment variable as shown below. The example assumes the JDK was installed in `/usr/lib` (change it as appropriate). If you use the `bash`, `ksh`, or `sh` shell, modify the `~/.bashrc`, `ENV`, or `~/.profile` file, respectively. Continue with the section “Installing and Configuring Eclipse” below.



```
.bashrc
File Edit Search Options Help
84
85 # Add an "alert" alias for long running commands.  Use like so:
86 #   sleep 10; alert
87 alias alert='notify-send --urgency=low -i "${ $? = 0 } && echo term
88
89 # Alias definitions.
90 # You may want to put all your additions into a separate file like
91 # ~/.bash_aliases, instead of adding them here directly.
92 # See /usr/share/doc/bash-doc/examples in the bash-doc package.
93
94 if [ -f ~/.bash_aliases ]; then
95     . ~/.bash_aliases
96 fi
97
98 # enable programmable completion features (you don't need to enable
99 # this, if it's already enabled in /etc/bash.bashrc and /etc/profile
100 # sources /etc/bash.bashrc).
101 if [ -f /etc/bash_completion ] && ! shopt -oq posix; then
102     . /etc/bash_completion
103 fi
104
105
106 # Addition to run Java
107 PATH=/usr/lib/jdk1.6/bin:$PATH:
108 export PATH
109
```

Installing and Configuring Eclipse

1. Download “Eclipse IDE for Java Developers” from the [Eclipse](#) website.
2. Extract the contents of the downloaded archive to your hard drive. The specific location does not matter.
3. Create a folder/directory to serve as your workspace.
4. Start Eclipse and set the workspace to be the folder/directory you created in step 3.
5. Continue with “Configuring Eclipse” in the Guided Tour.

Transferring Files To and From your CSE Account

Download and install an FTP client. [FileZilla](#) is a client that is free, popular, and available for Window, OS X, and Linux. You can connect to the CSE server using the “Quickconnect” bar near the top of the window. The details are as follows:

Host:	red.cse.yorku.ca
Username and Password:	(your CSE username and password)
Port:	22

If this is your first time connecting, accept the server’s key certificate.

Once connected, you will see files and directories in two panes. The left pane represents your local computer's file system. The right pane represents your CSE account on the server. Select the desired files/directories, right-click them, and select "Upload" or "Download" to transfer the files.

