

Princeton University  
COS 217: Introduction to Programming Systems  
Installing and Using Cygwin

Guilherme Ottoni

September 22, 2006

## 1 Downloading and Installing Cygwin

1. Go to the website: <http://www.cygwin.com>
2. Download and execute setup.exe, by clicking on “*Install or update now!*”
3. Click *Next* 5 times
4. Choose a mirror (<http://www.mirrorservice.org> seems fast)
5. Click *Next*
6. Select X and ssh packages:
  - (a) Under X11:
    - i. Add X-start-menu-icons
    - ii. Add X-startup-scripts
  - (b) Under Net
    - i. Add openssh: The OpenSSH server and client programs
7. Click *Next*
8. Wait for a while... :-)
9. Choose to add icons to your desktop and start menu
10. Click *Finish*

*Note:* if you want to install more cygwin packages, you can always rerun the setup.exe program.

## 2 Enabling X Forwarding

*Note: you need to execute this step only once.*

1. Double-click the Cygwin icon on your Desktop.
2. Type the command line: `echo "ForwardX11=true" > .ssh/config`

## 3 Using Cygwin

### 3.1 Through a Cygwin Terminal

1. Double-click the Cygwin icon on your Desktop.
2. Type the command line: `startx &`
3. Log into the hats cluster: `ssh USERNAME@hats.princeton.edu`
4. In order to test the X forwarding, try opening a remote X application, e.g. `xclock`.
5. If you need another terminal, go to the Cygwin original window and type: `xterm &`

### 3.2 Alternative: Using Windows SSH Client

If you want to use the Windows SSH Client, enable X forwarding in:  
Edit → Settings → Profile Settings → Tunneling  
click on *"Tunnel X11 connections"*.