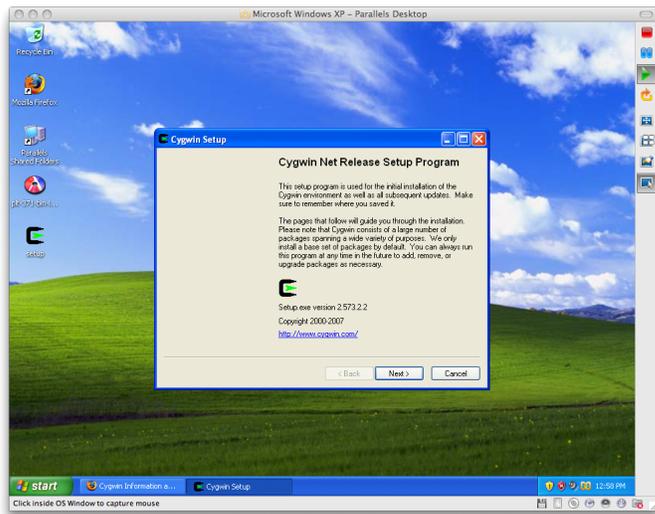


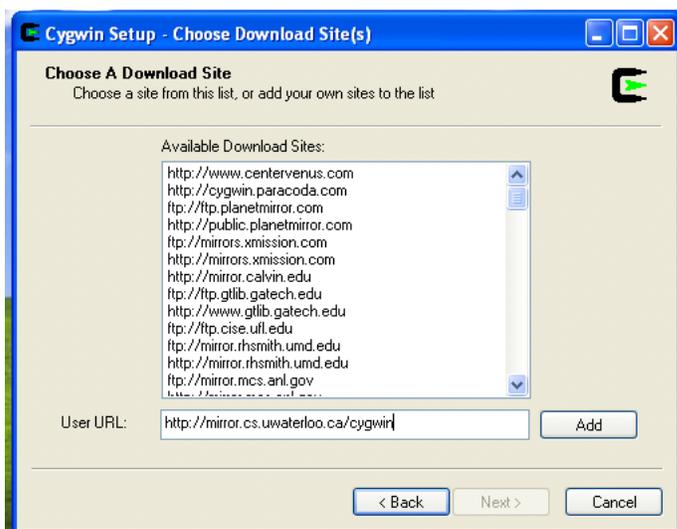
Installing Cygwin on Windows for CS 136 (W08)

In order to install Cygwin on Windows, you will need about 75 Mb of disk space, an Internet connection that will not be interrupted (preferably an on-campus wired connection), and at most half an hour of time. If your user name has a space in it, you might want to create a user whose name has no spaces in it, and run the installer there. This avoids some problems later on.

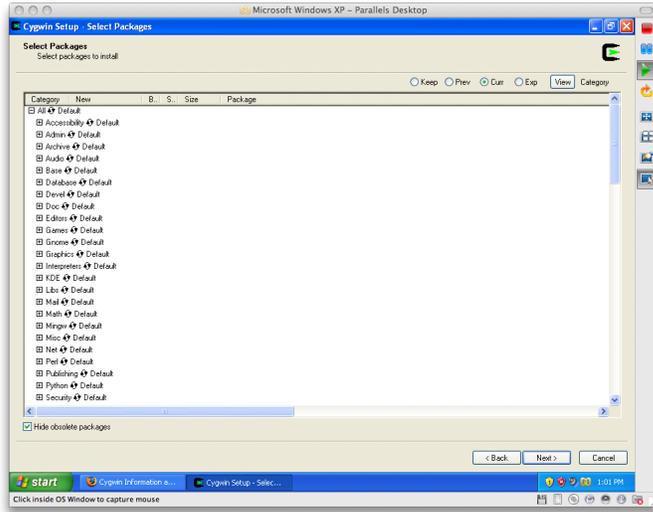
Start by going to <http://www.cygwin.com> and clicking the “Install Cygwin now” icon on the right side. This should download a file called `setup.exe` to your computer. Running this file starts the Cygwin installer, as shown below (the screen captures are from a MacBookPro running Windows XP within Parallels).



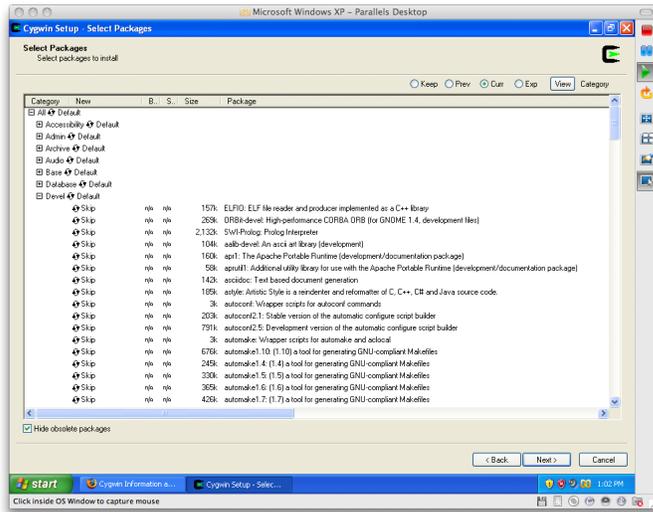
Click the Next button, and you will get to the Download Source window. Keep clicking Next through the Root Install, Local Package, and Internet Connection windows. This will get you to the Download Site window.



If you are on campus, type `http://mirror.cs.uwaterloo.ca` into the User URL field (the screen capture shows me typing `/cygwin` as well, but that wasn't necessary) and then click the Add button. If you are off campus, you can't connect to `mirror.cs`, so either type `http://mirror.csclub.uwaterloo.ca` into that field and click Add, or find it in the displayed list, and select it. You can also use either of these starting with `ftp:` instead of `http:`. In all cases, click Next to get to the Select Packages window.

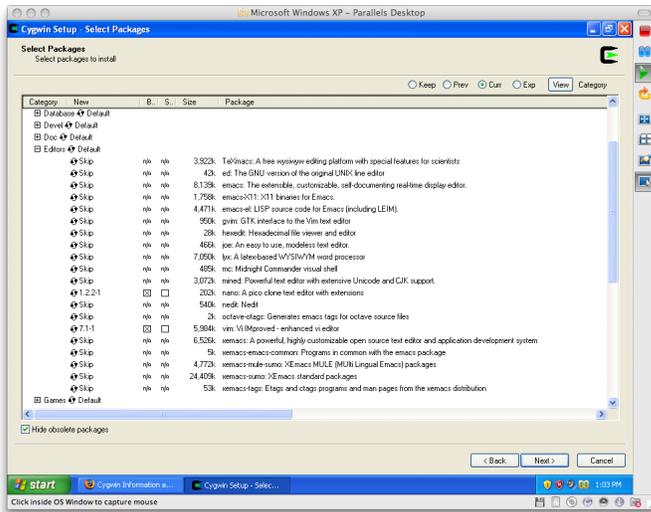


The packages are grouped by category. The base packages you need are already selected. You need to install the C compiler and an editor. The C compiler, GCC, is in the Devel category. Click the + sign next to Devel; it will change to a - sign, and a list of packages in this category will appear.

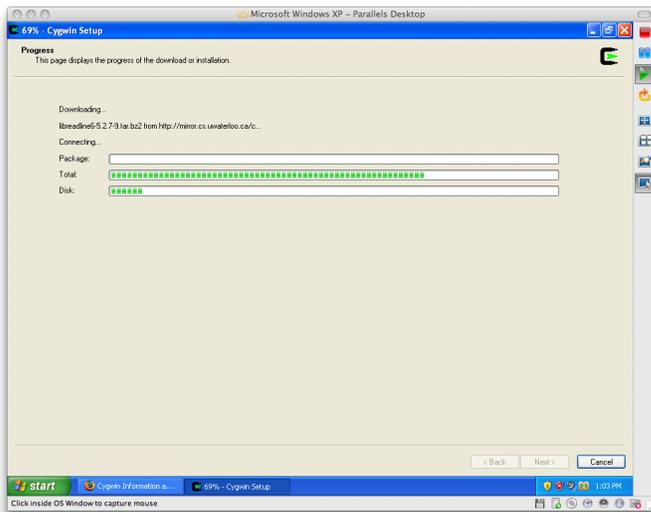


Use the scroll bar to scroll down to GCC and click the little pair of arrows at the left end of that line. Some boxes will appear on the `gcc` line and the word "Skip" to the left should be replaced by some numbers. Scroll up and click the - next to Devel to close the list. Then click the + by Editors.

We suggest that you select Nano and Vim. You do this by clicking on the little pair of arrows to the left of each one, just as you did for GCC. Later on you may wish to go back and add Emacs, but you don't have to do that now.

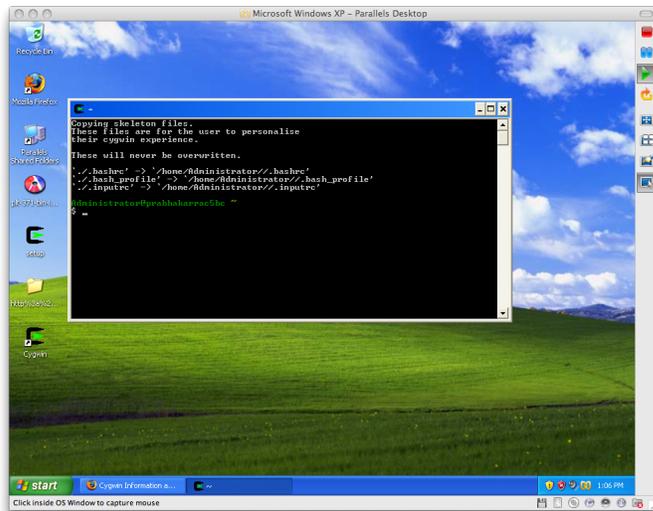


When you have selected all the packages you need, click Next, and the installer will download and configure all the packages, showing you progress bars that look somewhat like this:



On my MacBookPro with an on-campus Ethernet connection, this only took a couple of minutes. On a lower-powered Sony VAIO working through wireless, a cable modem, and a mirror site in Calgary, it took twenty minutes.

When the configuration finishes, the installer will move on to the Create Icons window. Having desktop and Start menu icons is useful, so click Finish to create them. The installer window will close, and there will be a Cygwin icon on your desktop. Double-clicking it will open a terminal window.



The first time you do this, as seen in the screen capture, there is a bit of initial setup, and then the dollar sign is your prompt (we use > in the slides). You can change the terminal size and font by right-clicking on the title bar.

From the Cygwin window, the rest of your files can be accessed through /cygdrive, and from outside Cygwin, your Cygwin files can be accessed at c:\cygwin\home\

For more information on what to do in the Cygwin window, see the links on Unix basics on the course Web page, and for information on configuring Cygwin, see the Cygwin user's guide at <http://www.cygwin.com>.