

## Supplement

### Installing the Cygwin C++ Compiler

For Introduction to C++ Programming  
Y. Daniel Liang

You may download a free C++ compiler from several sources. This supplement shows you how to download and install the Cygwin compiler.

1. To download the Cygwin compiler, go to [www.Cygwin.com](http://www.Cygwin.com), as shown in Figure 1. Click the hyperlink on `setup.exe` to download `setup.exe`, as shown in Figure 2. After it is saved, open and run the file, as shown in Figure 3. Click the Run button to start the setup, as shown in Figure 4.

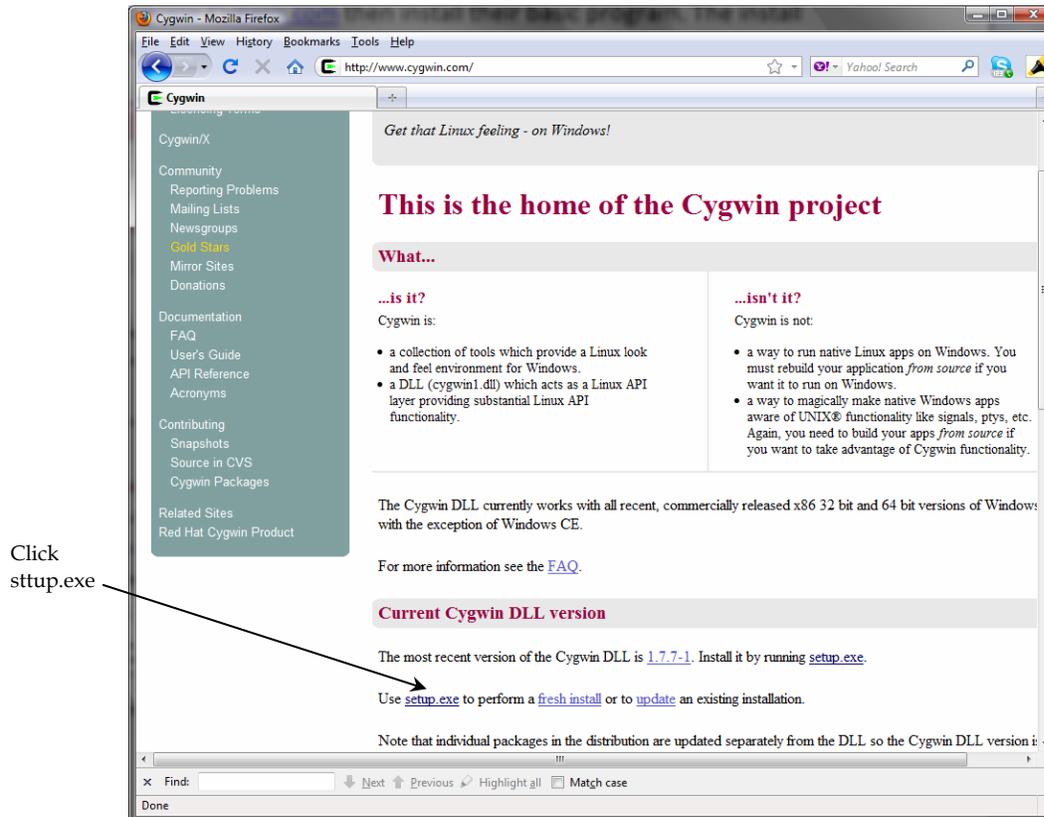
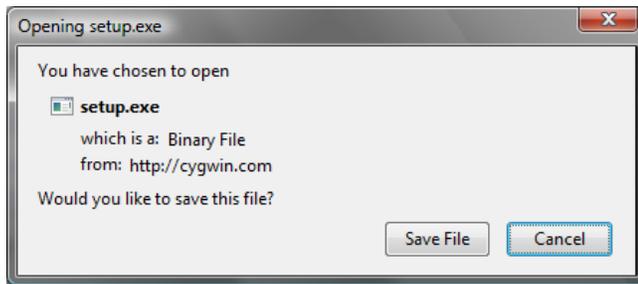


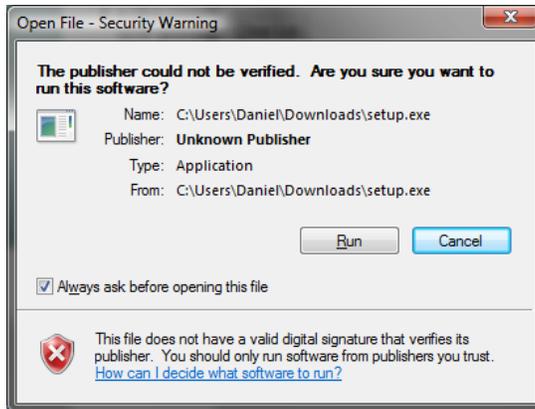
Figure 1

Download `setup.exe` to install a C++ compiler.



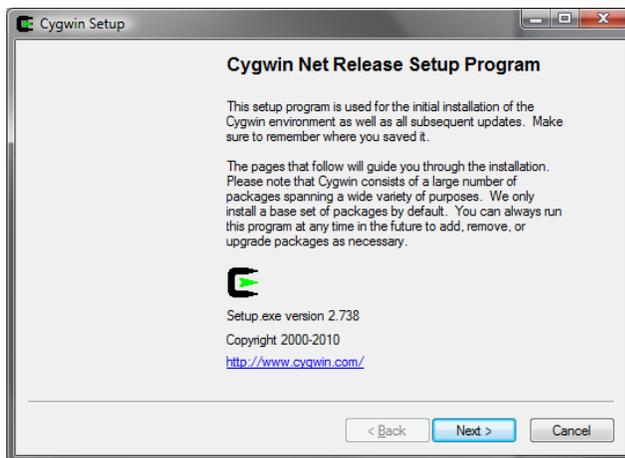
**Figure 2**

*You need to save setup.exe and then run it.*



**Figure 3**

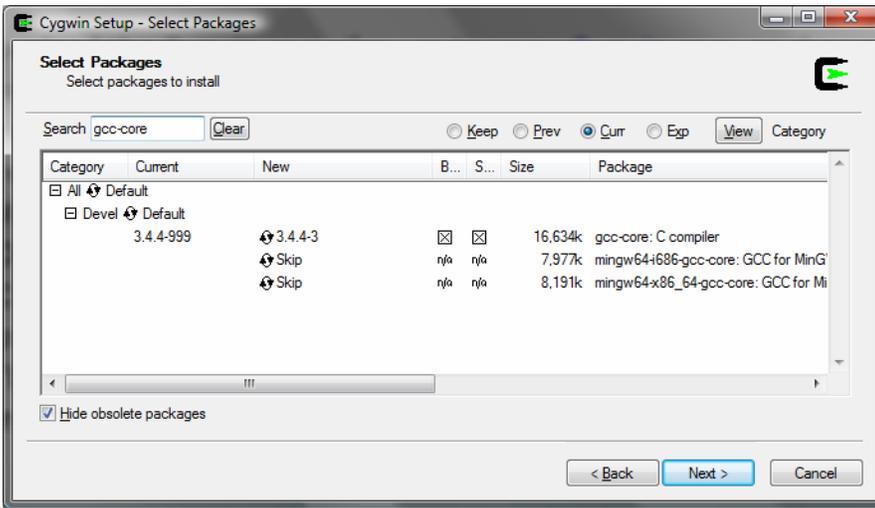
*Run setup.exe to start setup.*



**Figure 4**

*The setup program will install a C++ compiler.*

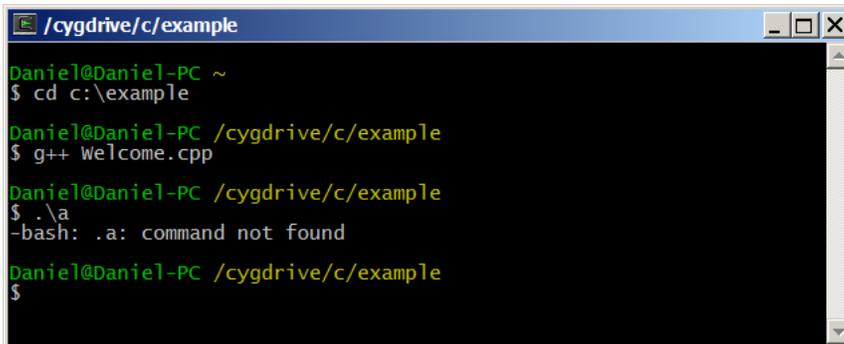
2. Continue to click *Next* on each subsequent dialog box until you see the *Select Packages* dialog box, as shown in Figure 5. In the *Search* field, enter *gcc-core*, you will see *gcc-core* compiler appearing in the *Package* column. Select it.



**Figure 5**

*You need to select appropriate packages to install.*

3. Continue to search and select the following packages
  - gcc-g++: C++ compiler
  - gdb: The GNU Debugger
  - make: the GNU version of the 'make' utility.
4. Click *Next* to install the selected packages.
5. After installation is completed, open Cygwin Terminal from the Windows Start button, as shown in Figure 6. You can now use this terminal as in a UNIX environment to compile and run C++ programs. For more information on compiling and running C++ on UNIX, see Supplement I.D.



**Figure 6**

*You can compile and run C++ program from the Cygwin Terminal.*