

LAB2

Setting up C++ Programming Environment on Windows

Jiajie TAN

Sept.10 2015

Install MinGW GCC

- Install MinGW GCC
 - Official website: <http://www.mingw.org/>
 - Direct download:
<http://sourceforge.net/projects/mingw/files/latest/download?source=files>
- Install at least these packages
 - mingw-developer-toolkit
 - mingw32-base
 - mingw32-gcc-g++
 - msys-base

Install MinGW GCC

- Set environment variables

- Add `MINGW_HOME=C:\MinGW` (the path of your MinGW installation)

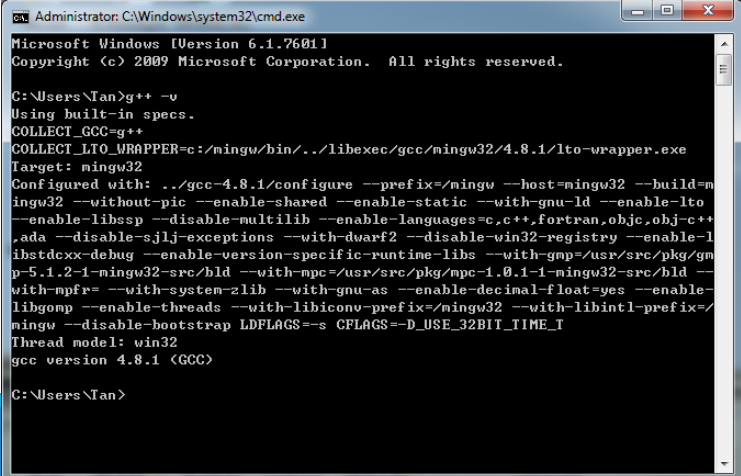
- Append to

- `Path=%SystemRoot%\system32;%SystemRoot%;%SystemRoot%\System32\Wbem;%SYSTEMROOT%\System32\WindowsPowerShell\v1.0\;%JAVA_HOME%\;%MINGW_HOME%\bin`

- Execute `set Path .` in CMD to apply the setting (or you can just reboot the computer)

- Test whether it works

- Execute `g++ -v` in CMD



```
Administrator: C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
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C:\Users\tan>g++ -v
Using built-in specs.
COLLECT_GCC=g++
COLLECT_LTO_WRAPPER=c:/mingw/bin/../../libexec/gcc/mingw32/4.8.1/lto-wrapper.exe
Target: mingw32
Configured with: ../gcc-4.8.1/configure --prefix=/mingw --host=mingw32 --build=m
ingw32 --without-pic --enable-shared --enable-static --with-gnu-ld --enable-lto
--enable-libssp --disable-multilib --enable-languages=c,c++,fortran,objc,obj-c++
,ada --disable-sjlj-exceptions --with-dwarf2 --disable-win32-registry --enable-l
ibstdcxx-debug --enable-version-specific-runtime-libs --with-gmp=/usr/src/pkg/gm
p-5.1.2-1-mingw32-src/bld --with-mpc=/usr/src/pkg/mpc-1.0.1-1-mingw32-src/bld --
with-mpfr= --with-system-zlib --with-gnu-as --enable-decimal-float=yes --enable-
libgomp --enable-threads --with-libiconv-prefix=/mingw32 --with-libintl-prefix=/
mingw --disable-bootstrap LDFLAGS=-s CFLAGS=-D_USE_32BIT_TIME_T
Thread model: win32
gcc version 4.8.1 (GCC)

C:\Users\tan>
```

Install Eclipse with CDT

- Install Eclipse with C/C++ Development Tool (CDT)
- Link: <http://www.eclipse.org/downloads/>



- Extract to anywhere you like (e.g. C:\eclipse)
- Run from **eclipse.exe**

Install Emacs for Windows

- Install Emacs
 - Official website: <https://www.gnu.org/software/emacs/>
 - Direct download (22.3):
<http://ftp.yzu.edu.tw/gnu/emacs/windows/emacs-22.3-bin-i386.zip>
- Extract to anywhere you like (e.g. C:\emacs)
- Run from **bin/emacs.exe**

Useful Resources

- How To Install Eclipse CDT 8.2 and Get Started
 - http://www3.ntu.edu.sg/home/ehchua/programming/howto/EclipseCpp_HowTo.html
- A Guided Tour of Emacs
 - <http://www.gnu.org/software/emacs/tour/>