# How to install protocol buffer for c++ on windows

1. You need to install MSYS with mingw. This is a minimal unix-like shell environment that lets you configure/make most unix packages. Read the mingw docs on how to install that (either with mingw-get or the GUI installer).
2. Once you have installed MSYS, you should have a shortcut in your start menu, named "MinGW Shell". That opens a console with a bash.
3. Extract the source tarball to your MSYS home directory. I have mingw installed in "D:\prog", so the directory was "D:\prog\MinGW\msys\1.0\home\<username>". You can tell your MSYS username from the shell prompt. When done, you should have a directory "D:\prog\MinGW\msys\1.0\home\<username>\protobuf-2.4.1".
4. At the shell prompt, change to the protobuf directory:

cd protobuf-2.4.1

1. Run the configure script (note the backquotes):

./configure --prefix=`cd /mingw; pwd -W`

(this didn’t work for me, so I just run ./configure instead)

The --prefix paramater makes sure protobuf is installed in the mingw directory tree instead of the MSYS directories, so you can build outside the MSYS shell (e.g. with CodeBlocks...)

1. Run make:

make

1. Install:

make install

1. That's it. You should now be able to compile your project with protobuf.  
   You should be able to:
   * call protoc from your project/makefiles
   * #include <google/protobuf/message.h> etc.
   * link with -lprotobuf or -lprotobuf-lite

Install google protocol buffer plugin for eclipse:

<http://protoclipse.googlecode.com/svn/trunk/site/>

protoc --java\_out=..\..\java\ PdpProtos.proto