**What You Need?**

* C++ Dev Environment   
  Tested with:
* Visual Studio 2011 Beta
* Visual Studio 2012 Beta (with Windows 8 RP)
* [Boost](http://www.boost.org/users/download/) 1.51.0
* [CMake](http://cmake.org/cmake/resources/software.html) 2.8.9

Install these items now if you haven’t already.

**Installing Boost to work with VS 11.0**

CMake has been updated to work with Visual Studio 11 and Boost 1.51.0.

On Windows you need to install Boost using the buildboost.bat script. It has instructions at the top, but you should be able to just copy the script to the directory where you unpacked boost and run it. You will have a full boost install in C:\boost when you are done.

**Check it Out!**

Tetrad is at the following SVN repository:

svn+ssh://peterzone.org/exports/svn/tetrad

**Install the signing certificate**

**How to CMake – Windows**

If you are on Unix or Mac, scroll down for the CMake command line tutorial. Once you have the source checked out, run CMake and you see something like this:



You need to tell CMake where the source is. And where to build all of the project files, binaries and everything. Do it like this to keep your source tree clean:

* source code: Tetrad/
* binaries: Tetrad/Build



Source is the directory where you checked out Tetrad. Where to build the binaries should point to a subdirectory called Build. It will be ignored automatically and you won’t have to worry about checking in any generated files. (Matt)

Click configure. CMake will ask to create the Build directory. Say yes. Select the build tools you want to use. Now you may have the problem that CMake can’t find boost:



To solve this, just do as it says and click Add Entry button to create an entry called BOOST\_ROOT. Set the type to Path and the value to the directory where boost is installed. Then click Configure again and Generate. It should look like this:



At this point all of your build system is generated in the Build directory. For Visual Studio, it looks like this:



You just open the Tetrad.sln and all of the projects are there. If you build the ALL\_BUILD project everything is built and you are good to go.

**How To CMake – Command Line**

After you check out the code, go to the source directory and make a Build directory. Run CMake from there, specifying the path to the source like this:



Now you can run your builds from the command line by going into the Build directory and running ‘make’. If CMake is unable to find boost etc, then you’ll need to pass BOOST\_ROOT on the command line. Refer to the CMake command line help and the instructions for Windows in order to figure out how to do that.