

## Software specifications

Chapter number	Software required (With version)	Free/Proprietary	If proprietary, can code testing be performed using a trial version	Download links to the software	OS required
All	Boost C++ Libraries	Free		<a href="http://www.boost.org/users/download/">http://www.boost.org/users/download/</a>	Any
All	Any modern C++ compiler	Free/proprietary	yes	MinGW-w64: <a href="http://win-builds.org/doku.php">http://win-builds.org/doku.php</a> Visual Studio: <a href="https://www.visualstudio.com/downloads/">https://www.visualstudio.com/downloads/</a>	Any
All	QtCreator	Free		<a href="https://www.qt.io/download-open-source/">https://www.qt.io/download-open-source/</a>	Any
12, recipe 7	libpng	Free			Any

## Detailed installation steps (software-wise)

The steps should be listed in a way that it prepares the system environment to be able to test the codes of the book.

**NOTE:** You do not need this if you are using the online version at <http://apolukhin.github.io/Boost-Cookbook/> “Boost C++ Libraries” - this is the core part of all the examples:

- For Windows OS:

- Follow the instructions at [http://boost.org/more/getting\\_started/windows.html](http://boost.org/more/getting_started/windows.html)
  - Or just install prebuild libraries from here <http://www.boost.org/users/download/>
  - Or just use nuget or some other known to you package manager to install Boost (may not have the latest version!)
  - Or build it by yourself: download, extract the archive, run bootstrap.bat and then
    - For Visual Studio: `b2.exe toolset=msvc architecture=x86 stage`
    - For MinGW: `b2.exe toolset=gcc --layout=system variant=release architecture=x86 link=static stage`
- For Linux/Mac OS:
- Follow the instructions at [http://boost.org/more/getting\\_started/unix-variants.html](http://boost.org/more/getting_started/unix-variants.html)
  - Or just use Boost libraries from OS repository or from MacOS's brew tool (may not have the latest version!)
  - Or build it by yourself: download, extract the archive, run bootstrap.sh and then
    - For GCC: `./b2 -j4 toolset=gcc link=shared stage`
    - For Clang: `./b2 -j4 toolset=clang link=shared stage`
2. Modern C++ compiler – tool to build all the examples. Chances are high that you already know how to install and use it. Otherwise:
- For Windows OS:
    - Visual Studio is available at <https://www.visualstudio.com/downloads/>
    - Or MinGW-w64 is available at <http://win-builds.org/doku.php>
  - For Linux/Mac OS:
    - C++ compiler is available in OS's repository or via MacOS's brew tool
3. "Qt Creator" - IDE to have a nice view of all the examples and simple interface to build them.
- Download and install <https://www.qt.io/download-open-source/>
  - Open the BoostBook.pro file with it to see all the examples
4. "libpng" - low-level library to manipulate PNG images
- For Windows OS:
    - Download ready binaries from <http://gnuwin32.sourceforge.net/packages/libpng.htm>
  - For Linux/Mac OS:
    - Use you OS's repository or MacOS's brew tool to install libpng

**Note:** Source codes contain CI file for Windows **.appveyor.yml** and **.travis.yml** CI file for Linux. Those files have step by step instructions for building and running tests with the latest developer version of Boost libraries. There you may find some other ways for downloading and installing Boost.