

Crash Course on How to Install OpenSSL

CS 458/558: Introduction to Computer Security

Instructor:

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OpenSSL (1)

- **Step 1:** Download the tar ball (e.g., [openssl-1.0.2-beta3.tar.gz](https://www.openssl.org/source/openssl-1.0.2-beta3.tar.gz)) from <https://www.openssl.org/source/>



OpenSSL (2)

- **Step 2:** Based on the computer architecture you are using, build the code.
 - For example, on my mac: `./Configure --prefix=/Users/ghyan/Software/test/openssl-1.0.2-beta3/compiled darwin64-x86_64-cc`
 - If unsure about the os-compiler, run `./Configure` to see all options
 - Run: `make`
 - Run: `make install`
 - Now you should be able to see in directory `/Users/ghyan/Software/test/openssl-1.0.2-beta3/compiled` the following subdirectories:
 - `bin, include, lib, ssl`

OpenSSL (3)

- **Step 3:** When compiling your c/c++ code, you need to specify the include path and library path
 - On MacOS, for instance, the command I used is:
 - `gcc -isystem /Users/ghyan/Software/test/openssl-1.0.2-beta3/compiled/ main.cc -lcrypto -o ./exec`
 - On a **Linux** machine, you may want to use the following:
 - `gcc -I/Users/ghyan/Software/test/openssl-1.0.2-beta3/compiled/include -L/Users/ghyan/Software/test/openssl-1.0.2-beta3/compiled/lib main.cc -lcrypto -o ./exec`
 - Option `-I`: specify the path to the header files (Include)
 - Option `-L`: specify the path to the library files (Library)

End