## What is a toolchain

A toolchain is the set of compiler + linker + librarian + any other tools you need to produce the executable (+ shared libraries, etc) for the target. A debugger and/or IDE may also count as part of a toolchain.

A toolchain is the set of tools that compiles source code into executables that can run on your target device, and includes a compiler, a linker, and run-time libraries.

* Native: This toolchain runs on the same type of system, sometimes the same actual system, as the programs it generates. This is the usual case for desktops and servers, and it is becoming popular on certain classes of embedded devices. The Raspberry Pi running Debian for ARM, for example, has self-hosted native compilers.
* Cross: This toolchain runs on a different type of system than the target, allowing the development to be done on a fast desktop PC and then loaded onto the embedded target for testing.