

The toolchain sysroot is a directory which contains subdirectories for libraries, header files, and other configuration files. It can be set when the toolchain is configured through `--with-sysroot=` or it can be set on the command line, using `--sysroot=`. You can see the location of the default sysroot by using `-print-sysroot`

You will find the following in the sysroot: •

lib: Contains the shared objects for the C library and the dynamic linker/ loader, `ld-linux`

usr/lib: the static library archives for the C library and any other libraries that may be installed subsequently

usr/include: Contains the headers for all the libraries

usr/bin: Contains the utility programs that run on the target, such as the `ldd` command

/usr/share: Used for localization and internationalization

sbin: Provides the `ldconfig` utility, used to optimize library loading paths

Plainly, some of these are needed on the development host to compile programs, and others - for example the shared libraries and `ld-linux` - are needed on the target at runtime.