

# Conan Cheat Sheet

## Consuming Packages

**\$conan install <recipe\_reference>**  
Install dependencies.

**\$conan install . -build=missing** Builds dependencies if no suitable binary found. "." specifies the location of the conanfile.

## Creating Packages

**\$conan create hello/0.1** Creates a package and stores it to local cache

**\$conan new <recipe\_reference>**  
Creates a new recipe with boilerplate code.

**\$conan new hello** Creates a new recipe from the hello template

**\$conan build** Builds a package. Invokes the build method

**\$conan export** Export recipe to local cache but does not build it

## Inspecting Packages

**\$conan search** Lists all packages in local cache

**\$conan search <package\_reference>**  
Shows info about package. No info, if no binaries existing

**\$conan info** Shows dependencies of a package.

## Working with remotes

**\$conan upload** Uploads a package to a remote

**\$conan remote list** shows remote repositories

**conan center** Default remote repo

**conan remote add**  
**<remote\_repo\_name> <url>** Adds a remote repository

**conan search**  
**-r=<remote\_repo\_name>** Searches for packages in a remote repo

**conan upload <recipe\_reference> -all -r=<remote\_repo\_name> <url>**  
Uploads a package to the specified remote repository

## Terms

**profile** Stores settings and options

**settings** Attribute which contains settings for a build system such as arch, os, compiler and compiler version. Will affect all dependencies

**options** Attribute which contains options for a package such as if a library should be SHARED or STATIC. Affect only parts of the dependency tree

**requires** Attribute to specify the requirements for an application

**requirements()** Python function inside a conanfile.py to specify the requirements for an application. Can contain conditional logic in comparison to the 'requires' attribute

**build\_requires** Attribute in a conanfile for specifying requirements for a build. Testing Frameworks and Build Frameworks

**python\_requires** Calling python code from another recipe or python module

**local cache** Location on developer machine where conan packages are stored

**recipe reference** Identifies a recipe e.g. pkg/0.1/@user/testing

**package ID** Identifies a unique binary. Represented as a hash string which is calculated out of the settings and options

**In-source recipe** When the recipe and the sources are in the same repo

**Out-of-source recipe** When the recipe is not in the same repo as the sources

## Cheatsheet Template

emmajane  
[cheatography.com/emmajane](https://cheatography.com/emmajane)

## Cheat Sheet creator

namorDev  
<https://github.com/namorDev/Conan-Cheatsheet>

## Event

Noser Engineering AG  
Kickoff 2022