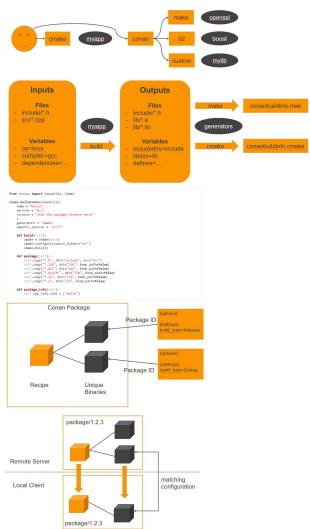
Conan - C/C++ Package Manager

adfad



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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

Sconan 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

Sconan info Shows dependencies of a package.

Working with remotes

Sconan 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

Cheat Sheet creator

 $\frac{https://github.com/namorDev/Conan-}{Cheatsheet}$

Event

Noser Engineering AG Kickoff 2022