Conan C/C++ package manager

Recipe conanfile.py → `conan create` → **Local cache** ~/.conan2 → `conan upload` → **Remote** conancenter, Artifactory

CONCEPTS

Conan 2 reads a conanfile.txt or conanfile.py; a profile picks compiler and settings, generators feed your build system.

Settings, options and conf given on the command line override the profile; use -pr:b for the build machine and -pr:h for the target.

Binaries are keyed by a package ID hashed from settings and options; any difference means a different binary.

PROJECT SETUP

conan profile detect
Generate the default profile

conan new cmake_lib -d name=<n> **-d version=**<v>
Scaffold a CMake library recipe

conan new -h
List the built-in templates

conan version
Print the Conan version

conan config home
Print the Conan home folder

INSTALL & BUILD

conan install .
Install dependencies of this project

conan install . --build=missing
Build binaries that are not available

conan build .
Install deps and run the recipe's build()

conan install . -of <dir>
Write generated files to another folder

conan install . -g CMakeDeps
Add a generator

conan install --requires=<pkg>**/**<ver>
Install a package without a recipe

conan install . -s build_type=Debug
Override a setting

conan install . -o <pkg>**/*:shared=True**
Set a package option

conan install . -pr:b <profile> **-pr:h** <profile>
Cross-build with two profiles

CREATE PACKAGES

conan create .
Build the recipe and test it

conan create . --build=missing
Create, building missing deps

conan create . -tf=""
Create without running test_package

conan export .
Put only the recipe in the cache

conan test test_package <pkg>**/**<ver>
Test an existing package

conan editable list
Show editable packages

PROFILES

conan profile list
List profiles in the cache

conan profile show
Show the resolved default profile

conan profile show -pr <profile> **-s build_type=Debug**
Preview a profile plus overrides

conan profile path <profile>
Print a profile's file path

PROFILES (cont.)

conan profile detect --name <profile>
Detect into a named profile

REMOTES

conan remote list
List remotes

conan remote add <name> <url>
Add a remote

conan remote login <remote> <user>
Log in to a remote

SEARCH & LIST

conan search "<pkg>***"**
Search recipes in all remotes

conan search "<pkg>***" -r** <remote>
Search one remote

conan list "<pkg>**/*"**
List cached versions

conan list "<pkg>**/**<ver>**:*"**
List cached binaries

conan list "<pkg>**/*" -r** <remote>
List versions on a remote

conan graph info .
Show the dependency graph

UPLOAD & CACHE

conan upload "<pkg>**/**<ver>**" -r** <remote>
Upload recipe and binaries

conan upload "*" -r <remote> **-c**
Upload everything, no prompt

conan upload "<pkg>**/**<ver>**" -r** <remote> **--only-recipe**
Upload only the recipe

conan download "<pkg>**/**<ver>**" -r** <remote>
Download without installing

conan remove "<pkg>**/**<ver>**"**
Delete from the local cache

conan remove "<pkg>**/*" -c**
Remove all versions, no prompt

conan cache path <pkg>**/**<ver>
Print a recipe's cache folder

conan cache clean
Drop source and build folders

LOCKFILES

conan lock create .
Freeze dependency versions