

# Package: conan (via r-universe)

May 27, 2026

**Title** Conan the Librarian

**Version** 2.0.0

**Description** Create libraries. For us, there is no spring. Just the wind that smells fresh before the storm.

**License** MIT + file LICENSE

**Encoding** UTF-8

**Roxygen** list(markdown = TRUE)

**RoxygenNote** 7.3.2

**URL** <https://github.com/mrc-ide/conan>, <https://mrc-ide.github.io/conan>

**BugReports** <https://github.com/mrc-ide/conan/issues>

**Imports** cli, fs, glue, prettyunits, rlang, withr

**Suggests** callr, mockery, openssl, pkgdepends, remotes, renv, testthat

**Language** en-GB

**Config/pak/sysreqs** cmake make libuv1-dev

**Repository** <https://mrc-ide.r-universe.dev>

**Date/Publication** 2025-07-22 13:20:34 UTC

**RemoteUrl** <https://github.com/mrc-ide/conan>

**RemoteRef** main

**RemoteSha** a51607cbe4d58983e0143d722e023fe218fd8a47

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conan_compare	<i>Compare conan installations</i>
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**Description**

Compare conan installations.

**Usage**

```
conan_compare(path_lib, curr = 0, prev = -1)
```

**Arguments**

path_lib	Path to the library to compare
curr	The previous installation to compare against. Can be a name (see <a href="#">conan_list</a> to get names), a negative number where <code>-n</code> indicates "n installations ago" or a positive number where n indicates "the nth installation". The default value of 0 corresponds to the current installation.
prev	The previous installation to compare against. Can be a name (see <a href="#">conan_list</a> to get names), a negative number where <code>-n</code> indicates "n installations ago" or a positive number where n indicates "the nth installation". The default of -1 indicates the previous installation. Must refer to an installation before curr. Use NULL or <code>-Inf</code> if you want to compare against the empty installation.

**Value**

An object of class `conan_compare`, which can be printed nicely.

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conan_configure	<i>Configuration for conan</i>
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**Description**

Configuration for running conan. Some common options and some specific to different provisioning methods.

**Usage**

```
conan_configure(
    method,
    ...,
    path_lib,
    path_bootstrap,
    cran = NULL,
    delete_first = FALSE,
```

```

    path = ".",
    envvars = NULL
)

```

## Arguments

method	The method to use; currently <code>script</code> , <code>pkgdepends</code> , <code>auto</code> and <code>renv</code> are supported.
...	Additional arguments, method specific. See Details.
path_lib	The library to install into. Could be an absolute or a relative path.
path_bootstrap	The path to a bootstrap library to use. This needs to contain all the packages required for the method you are using. For <code>script</code> this is just <code>remotes</code> , but for <code>pkgdepends</code> it must contain the full recursive dependencies of <code>pkgdepends</code> .
cran	URL for use as the CRAN repo. If not given we will use the RStudio CRAN mirror. This option has no effect when using <code>renv</code> , as the URLs in your lock file determine the locations that packages are fetched from. The intended use of this option is for where a CRAN repo is misbehaving (e.g., returning 500 errors, or has an invalid/incomplete/out of date index). The most likely alternative version to use is <code>cran = "https://cran.r-project.org"</code>
delete_first	Should we delete the library before installing into it?
path	Path to the root where you would run <code>conan</code> from; typically this is the same path is the root of the project, often as the working directory.
envvars	Environment variables to set before running the installation. See Details for format.

## Details

Different methods support different additional arguments:

- method `script` supports the argument `script`, which is the name of the script to run, defaults to `"provision.R"`
- method `pkgdepends` supports the arguments `filename`, which can be a filename to the input data, `refs`, which can be a character vector of references (rather than reading from the file `pkgdepends.txt` or the file referred to by `filename`), `policy` which is passed through to `pkgdepends::new_pkg_installation_proposal()`.
- method `auto` takes an argument `environment` which contains a list of packages to install and source files to scan for dependencies.
- method `renv` takes no arguments.

Setting environment variables while running the installation comes via the `envvars` argument; this system is designed to play well with `hipercow`, though it does not require it. We expect a `data.frame` with columns `name`, `value` and (optionally) `secret`. If `secret` is given, it must be a logical value indicating that value has been encrypted with an `rsa` public key. If any `secret` is `TRUE`, then `envvars` must also have an `attribute` key that contains the path to private `rsa` key to decrypt the secrets (i.e., `attr(envvars, "key")`). If you use `secret` environment variables, then the `openssl` package must be present in `conan`'s bootstrap.

**Value**

A list with class `conan_config`. Do not modify this object.

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<code>conan_describe</code>	<i>Describe a library</i>
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**Description**

Describe a library. This creates a summary of version information from a library. This may be slightly slow on network filesystems with large libraries.

**Usage**

```
conan_describe(path_lib)
```

**Arguments**

<code>path_lib</code>	Path to the library
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**Value**

A list with class `conan_describe`. We'll write some tooling to work with these soon!

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<code>conan_list</code>	<i>Test if a conan installation is current</i>
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**Description**

List conan installations, and optionally test if they are current.

**Usage**

```
conan_list(path_lib, hash = NULL)
```

**Arguments**

<code>path_lib</code>	Path to the library to compare
<code>hash</code>	A hash to compare; if given (not NULL) then we highlight installations that match this hash.

**Value**

A `data.frame` with columns:

- name: the name of the installation. This might be useful with `conan_compare`
- time: the time the installation was started
- hash: the installation hash
- method: the method used for the installation
- args: the arguments to the installation (as a list column)
- current: Matches the hash passed in the argument hash

This object also has class `conan_list` so that it prints nicely, but you can drop this with `as.data.frame`.

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conan_run	<i>Run a conan installation</i>
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**Description**

Run a conan installation, in another process, blocking from this process.

**Usage**

```
conan_run(config, show_log = TRUE)
```

**Arguments**

config	Conan config, from <code>conan_configure()</code>
show_log	Show output from running the script (passed through to <code>callr::rscript</code> as show)

**Value**

Nothing

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conan_write	<i>Write conan installation script</i>
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**Description**

Write a conan installation script

**Usage**

```
conan_write(config, path)
```

**Arguments**

config	Conan config, from <a href="#">conan_configure()</a>
path	The path to write to

**Value**

Nothing

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