# Package 'remotes'

July 21, 2020

```
Title R Package Installation from Remote Repositories, Including
     'GitHub'
Version 2.2.0
Description Download and install R packages stored in 'GitHub', 'GitLab',
     'Bitbucket', 'Bioconductor', or plain 'subversion' or 'git' repositories.
     This package provides the 'install_*' functions in 'devtools'. Indeed most
     of the code was copied over from 'devtools'.
License GPL (>= 2)
URL https://remotes.r-lib.org, https://github.com/r-lib/remotes#readme
BugReports https://github.com/r-lib/remotes/issues
Imports methods, stats, tools, utils
Suggests brew, callr, codetools, curl, covr, git2r (>= 0.23.0), knitr,
     mockery, pkgbuild (>= 1.0.1), pingr, rmarkdown, rprojroot,
     testthat, withr
Depends R (>= 3.0.0)
VignetteBuilder knitr
RoxygenNote 7.1.1
SystemRequirements Subversion for install_svn, git for install_git
Encoding UTF-8
NeedsCompilation no
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download\_version

Download a specified version of a CRAN package

# Description

It downloads the package to a temporary file, and returns the name of the file.

# Usage

```
download_version(
  package,
  version = NULL,
  repos = getOption("repos"),
  type = getOption("pkgType"),
  ...
)
```

# Arguments

package

Name of the package to install.

version

Version of the package to install. Can either be a string giving the exact version required, or a specification in the same format as the parenthesized expressions used in package dependencies. One of the following formats:

• An exact version required, as a string, e.g. "0.1.13"

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- A comparison operator and a version, e.g. ">= 0.1.12"
- Several criteria to satisfy, as a comma-separated string, e.g. ">= 1.12.0, < 1.14"</li>

Several criteria to satisfy, as elements of a character vector, e.g. c(">= 1.12.0", "< 1.14")</li>

repos

character vector, the base URL(s) of the repositories to use, e.g., the URL of a CRAN mirror such as "https://cloud.r-project.org". For more details on supported URL schemes see url.

Can be NULL to install from local files, directories or URLs: this will be inferred by extension from pkgs if of length one.

type

character, indicating the type of package to download and install. Will be "source" except on Windows and some macOS builds: see the section on 'Binary packages' for those.

... Other arguments passed on to utils::install.packages().

#### Value

Name of the downloaded file.

github\_pull

GitHub references

#### Description

Use as ref parameter to install\_github(). Allows installing a specific pull request or the latest release.

# Usage

```
github_pull(pull)
github_release()
```

#### **Arguments**

pull

The pull request to install

#### See Also

```
install_github()
```

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install\_bioc

Install a development package from the Bioconductor git repository

#### **Description**

This function requires git to be installed on your system in order to be used.

# Usage

```
install_bioc(
    repo,
    mirror = getOption("BioC_git", download_url("git.bioconductor.org/packages")),
    git = c("auto", "git2r", "external"),
    dependencies = NA,
    upgrade = c("default", "ask", "always", "never"),
    force = FALSE,
    quiet = FALSE,
    build = TRUE,
    build_opts = c("--no-resave-data", "--no-manual", "--no-build-vignettes"),
    build_manual = FALSE,
    build_vignettes = FALSE,
    repos = getOption("repos"),
    type = getOption("pkgType"),
    ...
)
```

# **Arguments**

repo

Repository address in the format [username:password@][release/]repo[#commit]. Valid values for the release are 'devel', 'release' (the default if none specified), or numeric release numbers (e.g. '3.3').

mirror

The Bioconductor git mirror to use

git

Whether to use the git2r package, or an external git client via system. Default is git2r if it is installed, otherwise an external git installation.

dependencies

Which dependencies do you want to check? Can be a character vector (selecting from "Depends", "Imports", "LinkingTo", "Suggests", or "Enhances"), or a logical vector.

TRUE is shorthand for "Depends", "Imports", "LinkingTo" and "Suggests". NA is shorthand for "Depends", "Imports" and "LinkingTo" and is the default. FALSE is shorthand for no dependencies (i.e. just check this package, not its dependencies).

The value "soft" means the same as TRUE, "hard" means the same as NA.

You can also specify dependencies from one or more additional fields, common ones include:

• Config/Needs/website - for dependencies used in building the pkgdown site.

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• Config/Needs/coverage for dependencies used in calculating test coverage.

upgrade One of "default", "ask", "always", or "never". "default" respects the value of

the R\_REMOTES\_UPGRADE environment variable if set, and falls back to "ask" if unset. "ask" prompts the user for which out of date packages to upgrade. For non-interactive sessions "ask" is equivalent to "always". TRUE and FALSE are

also accepted and correspond to "always" and "never" respectively.

force Force installation, even if the remote state has not changed since the previous

install.

quiet If TRUE, suppress output.

build If TRUE build the package before installing.

build\_opts Options to pass to R CMD build, only used when build

build\_manual If FALSE, don't build PDF manual ('-no-manual').

build\_vignettes

If FALSE, don't build package vignettes ('-no-build-vignettes'). is TRUE.

repos A character vector giving repositories to use.

type Type of package to update.

... Other arguments passed on to utils::install.packages().

#### **Details**

It is vectorised so you can install multiple packages with a single command.

This is intended as an aid for Bioconductor developers. If you want to install the release version of a Bioconductor package one can use the BiocManager package.

## See Also

```
Other package installation: install_bitbucket(), install_cran(), install_dev(), install_github(), install_gitlab(), install_git(), install_local(), install_svn(), install_url(), install_version()
```

# **Examples**

```
## Not run:
install_bioc("SummarizedExperiment")
install_bioc("devel/SummarizedExperiment")
install_bioc("3.3/SummarizedExperiment")
install_bioc("SummarizedExperiment#abc123")
install_bioc("user:password@release/SummarizedExperiment")
install_bioc("user:password@devel/SummarizedExperiment")
install_bioc("user:password@SummarizedExperiment#abc123")
## End(Not run)
```

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install\_bitbucket

Install a package directly from Bitbucket

# Description

This function is vectorised so you can install multiple packages in a single command.

# Usage

```
install_bitbucket(
  repo,
  ref = "HEAD",
  subdir = NULL,
 auth_user = bitbucket_user(),
 password = bitbucket_password(),
 host = "api.bitbucket.org/2.0",
 dependencies = NA,
 upgrade = c("default", "ask", "always", "never"),
  force = FALSE,
 quiet = FALSE,
 build = TRUE,
 build_opts = c("--no-resave-data", "--no-manual", "--no-build-vignettes"),
 build_manual = FALSE,
 build_vignettes = FALSE,
 repos = getOption("repos"),
  type = getOption("pkgType"),
)
```

# Arguments

repo	Repository address in the format username/repo[/subdir][@ref]. Alternatively, you can specify subdir and/or ref using the respective parameters (see below); if both are specified, the values in repo take precedence.
ref	Desired git reference; could be a commit, tag, or branch name. Defaults to HEAD.
subdir	subdirectory within repo that contains the R package.
auth_user	your account username if you're attempting to install a package hosted in a private repository (and your username is different to username). Defaults to the BITBUCKET_USER environment variable.
password	your password. Defaults to the BITBUCKET_PASSWORD environment variable. See details for further information on setting up a password.
host	GitHub API host to use. Override with your GitHub enterprise hostname, for example, "github.hostname.com/api/v3".

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dependencies

Which dependencies do you want to check? Can be a character vector (selecting from "Depends", "Imports", "LinkingTo", "Suggests", or "Enhances"), or a logical vector.

TRUE is shorthand for "Depends", "Imports", "LinkingTo" and "Suggests". NA is shorthand for "Depends", "Imports" and "LinkingTo" and is the default. FALSE is shorthand for no dependencies (i.e. just check this package, not its dependencies).

The value "soft" means the same as TRUE, "hard" means the same as NA.

You can also specify dependencies from one or more additional fields, common ones include:

- Config/Needs/website for dependencies used in building the pkgdown site.
- Config/Needs/coverage for dependencies used in calculating test coverage.

upgrade

One of "default", "ask", "always", or "never". "default" respects the value of the R\_REMOTES\_UPGRADE environment variable if set, and falls back to "ask" if unset. "ask" prompts the user for which out of date packages to upgrade. For non-interactive sessions "ask" is equivalent to "always". TRUE and FALSE are also accepted and correspond to "always" and "never" respectively.

force Force installation, even if the remote state has not changed since the previous

install.

quiet If TRUE, suppress output.

build If TRUE build the package before installing.

build\_opts Options to pass to R CMD build, only used when build

build\_manual If FALSE, don't build PDF manual ('-no-manual').

build\_vignettes

If FALSE, don't build package vignettes ('-no-build-vignettes'). is TRUE.

repos A character vector giving repositories to use.

type Type of package to update.

... Other arguments passed on to utils::install.packages().

#### **Details**

To install from a private repo, or more generally, access the Bitbucket API with your own credentials, you will need to get an access token. You can create an access token following the instructions found in the Bitbucket App Passwords documentation. The App Password requires read-only access to your repositories and pull requests. Then store your password in the environment variable BITBUCKET\_PASSWORD (e.g. evelynwaugh: swordofhonour)

Note that on Windows, authentication requires the "libcurl" download method. You can set the default download method via the download.file.method option:

```
options(download.file.method = "libcurl")
```

In particular, if unset, RStudio sets the download method to "wininet". To override this, you might want to set it to "libcurl" in your R profile, see base::Startup. The caveat of the "libcurl" method is that it does *not* set the system proxies automatically, see "Setting Proxies" in utils::download.file().

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#### See Also

 $Bit bucket\ API\ docs:\ https://confluence.atlassian.com/bit bucket/use-the-bit bucket-cloud-rest-apis-22272\ html$ 

```
Other package installation: install_bioc(), install_cran(), install_dev(), install_github(), install_gitlab(), install_git(), install_local(), install_svn(), install_url(), install_version()
```

# **Examples**

```
## Not run:
install_bitbucket("sulab/mygene.r@default")
install_bitbucket("djnavarro/lsr")
## End(Not run)
```

install\_cran

Attempts to install a package from CRAN.

#### **Description**

This function is vectorised on pkgs so you can install multiple packages in a single command.

## Usage

```
install_cran(
  pkgs,
  repos = getOption("repos"),
  type = getOption("pkgType"),
  dependencies = NA,
  upgrade = c("default", "ask", "always", "never"),
  force = FALSE,
  quiet = FALSE,
  build = TRUE,
  build_opts = c("--no-resave-data", "--no-manual", "--no-build-vignettes"),
  build_manual = FALSE,
  build_vignettes = FALSE,
  ...
)
```

#### **Arguments**

pkgs Character vector of packages to install.

repos A character vector giving repositories to use.

type Type of package to update.

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dependencies

Which dependencies do you want to check? Can be a character vector (selecting from "Depends", "Imports", "LinkingTo", "Suggests", or "Enhances"), or a logical vector.

TRUE is shorthand for "Depends", "Imports", "LinkingTo" and "Suggests". NA is shorthand for "Depends", "Imports" and "LinkingTo" and is the default. FALSE is shorthand for no dependencies (i.e. just check this package, not its dependencies).

The value "soft" means the same as TRUE, "hard" means the same as NA.

You can also specify dependencies from one or more additional fields, common ones include:

- Config/Needs/website for dependencies used in building the pkgdown site.
- Config/Needs/coverage for dependencies used in calculating test coverage.

upgrade

One of "default", "ask", "always", or "never". "default" respects the value of the R\_REMOTES\_UPGRADE environment variable if set, and falls back to "ask" if unset. "ask" prompts the user for which out of date packages to upgrade. For non-interactive sessions "ask" is equivalent to "always". TRUE and FALSE are also accepted and correspond to "always" and "never" respectively.

force

Force installation, even if the remote state has not changed since the previous

install.

If TRUE, suppress output. quiet

build If TRUE build the package before installing.

build\_opts Options to pass to R CMD build, only used when build

If FALSE, don't build PDF manual ('-no-manual'). build\_manual

build\_vignettes

If FALSE, don't build package vignettes ('-no-build-vignettes'). is TRUE.

Other arguments passed on to utils::install.packages().

# See Also

```
Other package installation: install_bioc(), install_bitbucket(), install_dev(), install_github(),
install_gitlab(), install_git(), install_local(), install_svn(), install_url(), install_version()
```

#### **Examples**

```
## Not run:
install_cran("ggplot2")
install_cran(c("httpuv", "shiny"))
## End(Not run)
```

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install\_deps

Install package dependencies if needed.

#### Description

Install package dependencies if needed.

#### Usage

```
install_deps(
  pkgdir = ".",
  dependencies = NA,
  repos = getOption("repos"),
  type = getOption("pkgType"),
  upgrade = c("default", "ask", "always", "never"),
  quiet = FALSE,
  build = TRUE,
  build_opts = c("--no-resave-data", "--no-manual", "--no-build-vignettes"),
  build_manual = FALSE,
  build_vignettes = FALSE,
  ...
)
```

#### **Arguments**

pkgdir

path to a package directory, or to a package tarball.

dependencies

Which dependencies do you want to check? Can be a character vector (selecting from "Depends", "Imports", "LinkingTo", "Suggests", or "Enhances"), or a logical vector.

TRUE is shorthand for "Depends", "Imports", "LinkingTo" and "Suggests". NA is shorthand for "Depends", "Imports" and "LinkingTo" and is the default. FALSE is shorthand for no dependencies (i.e. just check this package, not its dependencies).

The value "soft" means the same as TRUE, "hard" means the same as NA.

You can also specify dependencies from one or more additional fields, common ones include:

- Config/Needs/website for dependencies used in building the pkgdown site.
- Config/Needs/coverage for dependencies used in calculating test coverage.

repos

A character vector giving repositories to use.

type

Type of package to update.

upgrade

One of "default", "ask", "always", or "never". "default" respects the value of the R\_REMOTES\_UPGRADE environment variable if set, and falls back to "ask" if unset. "ask" prompts the user for which out of date packages to upgrade. For non-interactive sessions "ask" is equivalent to "always". TRUE and FALSE are also accepted and correspond to "always" and "never" respectively.

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```
quiet If TRUE, suppress output.
build If TRUE build the package before installing.
```

build\_opts Options to pass to R CMD build, only used when build

build\_manual If FALSE, don't build PDF manual ('-no-manual').

build\_vignettes

If FALSE, don't build package vignettes ('-no-build-vignettes'). is TRUE.

... additional arguments passed to utils::install.packages().

# **Examples**

```
## Not run: install_deps(".")
```

install\_dev

Install the development version of a package

# Description

install\_dev() retrieves the package DESCRIPTION from the CRAN mirror and looks in the 'URL' and 'BugReports' fields for GitHub, GitLab or Bitbucket URLs. It then calls the appropriate install\_() function to install the development package.

#### Usage

```
install_dev(package, cran_url = getOption("repos")[["CRAN"]], ...)
```

#### **Arguments**

package The package name to install.

cran\_url The URL of the CRAN mirror to use, by default based on the 'repos' option. If

unset uses 'https://cloud.r-project.org'.

... Additional arguments passed to install\_github(), install\_gitlab(), or

install\_bitbucket() functions.

#### See Also

```
Other package installation: install_bioc(), install_bitbucket(), install_cran(), install_github(), install_gitlab(), install_git(), install_local(), install_svn(), install_url(), install_version()
```

#### **Examples**

```
## Not run:
# From GitHub
install_dev("dplyr")
# From GitLab
install_dev("iemiscdata")
```

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```
# From Bitbucket
install_dev("argparser")
## End(Not run)
```

install\_git

Install a package from a git repository

# **Description**

It is vectorised so you can install multiple packages with a single command. You do not need to have the git2r package, or an external git client installed.

# Usage

```
install_git(
  url,
  subdir = NULL,
 ref = NULL,
 branch = NULL,
  credentials = git_credentials(),
 git = c("auto", "git2r", "external"),
  dependencies = NA,
  upgrade = c("default", "ask", "always", "never"),
  force = FALSE,
 quiet = FALSE,
 build = TRUE,
 build_opts = c("--no-resave-data", "--no-manual", "--no-build-vignettes"),
 build_manual = FALSE,
 build_vignettes = FALSE,
  repos = getOption("repos"),
  type = getOption("pkgType"),
)
```

# **Arguments**

url	Location of package. The url should point to a public or private repository.	
subdir	A sub-directory within a git repository that may contain the package we are interested in installing.	
ref	Name of branch, tag or SHA reference to use, if not HEAD.	
branch	Deprecated, synonym for ref.	
credentials	A git2r credentials object passed through to clone. Supplying this argument implies using git2r with git.	

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Whether to use the git2r package, or an external git client via system. Default is git2r if it is installed, otherwise an external git installation.

dependencies Which dependencies do you want to check? Can be a character vector (select-

ing from "Depends", "Imports", "LinkingTo", "Suggests", or "Enhances"), or a logical vector.

TRUE is shorthand for "Depends", "Imports", "LinkingTo" and "Suggests". NA is shorthand for "Depends", "Imports" and "LinkingTo" and is the default. FALSE is shorthand for no dependencies (i.e. just check this package, not its dependencies).

The value "soft" means the same as TRUE, "hard" means the same as NA.

You can also specify dependencies from one or more additional fields, common ones include:

- Config/Needs/website for dependencies used in building the pkgdown site.
- Config/Needs/coverage for dependencies used in calculating test coverage.

upgrade One of "default", "ask", "always", or "never". "default" respects the value of

the R\_REMOTES\_UPGRADE environment variable if set, and falls back to "ask" if unset. "ask" prompts the user for which out of date packages to upgrade. For non-interactive sessions "ask" is equivalent to "always". TRUE and FALSE are

also accepted and correspond to "always" and "never" respectively.

force Force installation, even if the remote state has not changed since the previous

install.

quiet If TRUE, suppress output.

build If TRUE build the package before installing.

build\_opts Options to pass to R CMD build, only used when build

build\_manual If FALSE, don't build PDF manual ('-no-manual').

build\_vignettes

If FALSE, don't build package vignettes ('-no-build-vignettes'). is TRUE.

repos A character vector giving repositories to use.

type Type of package to update.

... Other arguments passed on to utils::install.packages().

#### **Details**

If you need to set git credentials for use in the Remotes field you can do so by placing the credentials in the remotes.git\_credentials global option.

#### See Also

```
Other package installation: install_bioc(), install_bitbucket(), install_cran(), install_dev(), install_github(), install_gitlab(), install_local(), install_svn(), install_url(), install_version()
```

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#### **Examples**

```
## Not run:
install_git("git://github.com/hadley/stringr.git")
install_git("git://github.com/hadley/stringr.git", ref = "stringr-0.2")
## End(Not run)
```

install\_github

Attempts to install a package directly from GitHub.

# Description

This function is vectorised on repo so you can install multiple packages in a single command.

# Usage

```
install_github(
  repo,
  ref = "HEAD",
  subdir = NULL,
  auth_token = github_pat(quiet),
  host = "api.github.com",
  dependencies = NA,
  upgrade = c("default", "ask", "always", "never"),
  force = FALSE,
  quiet = FALSE,
  build = TRUE,
  build_opts = c("--no-resave-data", "--no-manual", "--no-build-vignettes"),
  build_manual = FALSE,
  build_vignettes = FALSE,
  repos = getOption("repos"),
  type = getOption("pkgType"),
)
```

# Arguments

repo	Repository address in the format username/repo[/subdir][@refl#pull @*release]. Alternatively, you can specify subdir and/or ref using the respective parameters (see below); if both are specified, the values in repo take precedence.
ref	Desired git reference. Could be a commit, tag, or branch name, or a call to github_pull() or github_release(). Defaults to "HEAD", which means the default branch on GitHub and for git remotes. See setting-the-default-branch for more details.
subdir	subdirectory within repo that contains the R package.

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auth\_token To install from a private repo, generate a personal access token (PAT) in "https://github.com/settings/token

and supply to this argument. This is safer than using a password because you can easily delete a PAT without affecting any others. Defaults to the GITHUB\_PAT

environment variable.

host GitHub API host to use. Override with your GitHub enterprise hostname, for

example, "github.hostname.com/api/v3".

dependencies Which dependencies do you want to check? Can be a character vector (select-

ing from "Depends", "Imports", "LinkingTo", "Suggests", or "Enhances"), or a

logical vector.

TRUE is shorthand for "Depends", "Imports", "LinkingTo" and "Suggests". NA is shorthand for "Depends", "Imports" and "LinkingTo" and is the default. FALSE is shorthand for no dependencies (i.e. just check this package, not its dependen-

cies).

The value "soft" means the same as TRUE, "hard" means the same as NA.

You can also specify dependencies from one or more additional fields, common ones include:

• Config/Needs/website - for dependencies used in building the pkgdown site.

• Config/Needs/coverage for dependencies used in calculating test coverage.

upgrade One of "default", "ask", "always", or "never". "default" respects the value of

the R\_REMOTES\_UPGRADE environment variable if set, and falls back to "ask" if unset. "ask" prompts the user for which out of date packages to upgrade. For non-interactive sessions "ask" is equivalent to "always". TRUE and FALSE are

also accepted and correspond to "always" and "never" respectively.

force Force installation, even if the remote state has not changed since the previous

install.

quiet If TRUE, suppress output.

build If TRUE build the package before installing.

build\_opts Options to pass to R CMD build, only used when build

build\_manual If FALSE, don't build PDF manual ('-no-manual').

build\_vignettes

If FALSE, don't build package vignettes ('-no-build-vignettes'). is TRUE.

repos A character vector giving repositories to use.

type Type of package to update.

... Other arguments passed on to utils::install.packages().

#### **Details**

If the repository uses submodules a command-line git client is required to clone the submodules.

#### See Also

```
github_pull()
```

```
Other package installation: install_bioc(), install_bitbucket(), install_cran(), install_dev(), install_gitlab(), install_git(), install_local(), install_svn(), install_url(), install_version()
```

install\_gitlab

#### **Examples**

install\_gitlab

Install a package from GitLab

# **Description**

This function is vectorised on repo so you can install multiple packages in a single command. Like other remotes the repository will skip installation if force == FALSE (the default) and the remote state has not changed since the previous installation.

# Usage

```
install_gitlab(
  repo,
  subdir = NULL,
  auth_token = gitlab_pat(quiet),
  host = "gitlab.com",
  dependencies = NA,
  upgrade = c("default", "ask", "always", "never"),
  force = FALSE,
  quiet = FALSE,
  build = TRUE,
  build_opts = c("--no-resave-data", "--no-manual", "--no-build-vignettes"),
  build_manual = FALSE,
  build_vignettes = FALSE,
  repos = getOption("repos"),
  type = getOption("pkgType"),
)
```

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#### **Arguments**

repo Repository address in the format username/repo[@ref]. subdir subdirectory within repo that contains the R package.

auth\_token To install from a private repo, generate a personal access token (PAT) in https:

//docs.gitlab.com/ee/user/profile/personal\_access\_tokens.html and supply to this argument. This is safer than using a password because you can easily delete a PAT without affecting any others. Defaults to the GITLAB\_PAT

environment variable.

host GitLab API host to use. Override with your GitLab enterprise hostname, for

example, "gitlab.hostname.com".

dependencies Which dependencies do you want to check? Can be a character vector (select-

ing from "Depends", "Imports", "LinkingTo", "Suggests", or "Enhances"), or a

logical vector.

TRUE is shorthand for "Depends", "Imports", "LinkingTo" and "Suggests". NA is shorthand for "Depends", "Imports" and "LinkingTo" and is the default. FALSE is shorthand for no dependencies (i.e. just check this package, not its dependen-

cies).

The value "soft" means the same as TRUE, "hard" means the same as NA.

You can also specify dependencies from one or more additional fields, common ones include:

• Config/Needs/website - for dependencies used in building the pkgdown site.

• Config/Needs/coverage for dependencies used in calculating test coverage.

upgrade One of "default", "ask", "always", or "never". "default" respects the value of

the R\_REMOTES\_UPGRADE environment variable if set, and falls back to "ask" if unset. "ask" prompts the user for which out of date packages to upgrade. For non-interactive sessions "ask" is equivalent to "always". TRUE and FALSE are

also accepted and correspond to "always" and "never" respectively.

force Force installation, even if the remote state has not changed since the previous

install.

quiet If TRUE, suppress output.

build If TRUE build the package before installing.

build\_opts Options to pass to R CMD build, only used when build

build\_manual If FALSE, don't build PDF manual ('-no-manual').

build\_vignettes

If FALSE, don't build package vignettes ('-no-build-vignettes'). is TRUE.

repos A character vector giving repositories to use.

type Type of package to update.

... Other arguments passed on to utils::install.packages().

# See Also

Other package installation: install\_bioc(), install\_bitbucket(), install\_cran(), install\_dev(), install\_github(), install\_git(), install\_local(), install\_svn(), install\_url(), install\_version()

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#### **Examples**

```
## Not run:
install_gitlab("jimhester/covr")
## End(Not run)
```

install\_local

Install a package from a local file

# Description

This function is vectorised so you can install multiple packages in a single command.

# Usage

```
install_local(
  path = ".",
  subdir = NULL,
  dependencies = NA,
  upgrade = c("default", "ask", "always", "never"),
  force = FALSE,
  quiet = FALSE,
  build = !is_binary_pkg(path),
  build_opts = c("--no-resave-data", "--no-manual", "--no-build-vignettes"),
  build_manual = FALSE,
  build_vignettes = FALSE,
  repos = getOption("repos"),
  type = getOption("pkgType"),
  ...
)
```

#### **Arguments**

path

path to local directory, or compressed file (tar, zip, tar.gz tar.bz2, tgz2 or tbz)

subdir

subdirectory within url bundle that contains the R package.

dependencies

Which dependencies do you want to check? Can be a character vector (selecting from "Depends", "Imports", "LinkingTo", "Suggests", or "Enhances"), or a logical vector.

TRUE is shorthand for "Depends", "Imports", "LinkingTo" and "Suggests". NA is shorthand for "Depends", "Imports" and "LinkingTo" and is the default. FALSE is shorthand for no dependencies (i.e. just check this package, not its dependencies).

The value "soft" means the same as TRUE, "hard" means the same as NA.

You can also specify dependencies from one or more additional fields, common ones include:

• Config/Needs/website - for dependencies used in building the pkgdown site.

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• Config/Needs/coverage for dependencies used in calculating test coverage.

upgrade One of "default", "ask", "always", or "never". "default" respects the value of

the R\_REMOTES\_UPGRADE environment variable if set, and falls back to "ask" if unset. "ask" prompts the user for which out of date packages to upgrade. For non-interactive sessions "ask" is equivalent to "always". TRUE and FALSE are

also accepted and correspond to "always" and "never" respectively.

force Force installation, even if the remote state has not changed since the previous

install.

quiet If TRUE, suppress output.

build If TRUE build the package before installing.

build\_opts Options to pass to R CMD build, only used when build

build\_manual If FALSE, don't build PDF manual ('-no-manual').

build\_vignettes

If FALSE, don't build package vignettes ('-no-build-vignettes'). is TRUE.

repos A character vector giving repositories to use.

type Type of package to update.

... Other arguments passed on to utils::install.packages().

#### See Also

```
Other package installation: install_bioc(), install_bitbucket(), install_cran(), install_dev(), install_github(), install_gitlab(), install_git(), install_svn(), install_url(), install_version()
```

#### **Examples**

```
## Not run:
dir <- tempfile()
dir.create(dir)
pkg <- download.packages("testthat", dir, type = "source")
install_local(pkg[, 2])
## End(Not run)</pre>
```

install\_svn

Install a package from a SVN repository

#### **Description**

This function requires svn to be installed on your system in order to be used.

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#### Usage

```
install_svn(
  url,
  subdir = NULL,
  args = character(0),
  revision = NULL,
  dependencies = NA,
  upgrade = c("default", "ask", "always", "never"),
  force = FALSE,
  quiet = FALSE,
  build = TRUE,
  build_opts = c("--no-resave-data", "--no-manual", "--no-build-vignettes"),
  build_manual = FALSE,
  build_vignettes = FALSE,
  repos = getOption("repos"),
  type = getOption("pkgType"),
)
```

#### **Arguments**

url Location of package. The url should point to a public or private repository.

subdir A sub-directory within a svn repository that contains the package we are inter-

ested in installing.

A character vector providing extra options to pass on to svn. args

revision svn revision, if omitted updates to latest

Which dependencies do you want to check? Can be a character vector (selectdependencies ing from "Depends", "Imports", "LinkingTo", "Suggests", or "Enhances"), or a

logical vector.

TRUE is shorthand for "Depends", "Imports", "LinkingTo" and "Suggests". NA is shorthand for "Depends", "Imports" and "LinkingTo" and is the default. FALSE is shorthand for no dependencies (i.e. just check this package, not its dependencies).

The value "soft" means the same as TRUE, "hard" means the same as NA.

You can also specify dependencies from one or more additional fields, common ones include:

- Config/Needs/website for dependencies used in building the pkgdown site.
- Config/Needs/coverage for dependencies used in calculating test coverage.

upgrade

One of "default", "ask", "always", or "never". "default" respects the value of the R\_REMOTES\_UPGRADE environment variable if set, and falls back to "ask" if unset. "ask" prompts the user for which out of date packages to upgrade. For non-interactive sessions "ask" is equivalent to "always". TRUE and FALSE are also accepted and correspond to "always" and "never" respectively.

Force installation, even if the remote state has not changed since the previous install.

force

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```
quiet
                  If TRUE, suppress output.
build
                  If TRUE build the package before installing.
                  Options to pass to R CMD build, only used when build
build_opts
build_manual
                  If FALSE, don't build PDF manual ('-no-manual').
build_vignettes
                  If FALSE, don't build package vignettes ('-no-build-vignettes'). is TRUE.
                  A character vector giving repositories to use.
repos
                  Type of package to update.
type
                  Other arguments passed on to utils::install.packages().
. . .
```

#### **Details**

It is vectorised so you can install multiple packages with a single command.

#### See Also

```
Other package installation: install_bioc(), install_bitbucket(), install_cran(), install_dev(), install_github(), install_git(), install_local(), install_url(), install_version()
```

# **Examples**

```
## Not run:
install_svn("https://github.com/hadley/stringr/trunk")
install_svn("https://github.com/hadley/httr/branches/oauth")
## End(Not run)
```

install\_url

Install a package from a url

#### **Description**

This function is vectorised so you can install multiple packages in a single command.

#### Usage

```
install_url(
  url,
  subdir = NULL,
  dependencies = NA,
  upgrade = c("default", "ask", "always", "never"),
  force = FALSE,
  quiet = FALSE,
  build = TRUE,
  build_opts = c("--no-resave-data", "--no-manual", "--no-build-vignettes"),
```

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```
build_manual = FALSE,
build_vignettes = FALSE,
repos = getOption("repos"),
type = getOption("pkgType"),
...
)
```

#### **Arguments**

url location of package on internet. The url should point to a zip file, a tar file or a

bzipped/gzipped tar file.

subdir subdirectory within url bundle that contains the R package.

dependencies Which dependencies do you want to check? Can be a character vector (select-

ing from "Depends", "Imports", "LinkingTo", "Suggests", or "Enhances"), or a

logical vector.

TRUE is shorthand for "Depends", "Imports", "LinkingTo" and "Suggests". NA is shorthand for "Depends", "Imports" and "LinkingTo" and is the default. FALSE is shorthand for no dependencies (i.e. just check this package, not its dependen-

cies).

The value "soft" means the same as TRUE, "hard" means the same as NA.

You can also specify dependencies from one or more additional fields, common ones include:

• Config/Needs/website - for dependencies used in building the pkgdown site.

• Config/Needs/coverage for dependencies used in calculating test coverage.

upgrade One of "default", "ask", "always", or "never". "default" respects the value of

the R\_REMOTES\_UPGRADE environment variable if set, and falls back to "ask" if unset. "ask" prompts the user for which out of date packages to upgrade. For non-interactive sessions "ask" is equivalent to "always". TRUE and FALSE are

also accepted and correspond to "always" and "never" respectively.

force Force installation, even if the remote state has not changed since the previous

install.

quiet If TRUE, suppress output.

build If TRUE build the package before installing.

build\_opts Options to pass to R CMD build, only used when build

build\_manual If FALSE, don't build PDF manual ('-no-manual').

build\_vignettes

If FALSE, don't build package vignettes ('-no-build-vignettes'). is TRUE.

repos A character vector giving repositories to use.

type Type of package to update.

... Other arguments passed on to utils::install.packages().

#### See Also

```
Other package installation: install_bioc(), install_bitbucket(), install_cran(), install_dev(), install_github(), install_git(), install_local(), install_svn(), install_version()
```

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#### **Examples**

```
## Not run:
install_url("https://github.com/hadley/stringr/archive/HEAD.zip")
## End(Not run)
```

install\_version

Install specific version of a package.

# **Description**

This function knows how to look in multiple CRAN-like package repositories, and in their archive directories, in order to find specific versions of the requested package.

#### Usage

```
install_version(
  package,
  version = NULL,
  dependencies = NA,
  upgrade = c("default", "ask", "always", "never"),
  force = FALSE,
  quiet = FALSE,
  build = FALSE,
  build_opts = c("--no-resave-data", "--no-manual", "--no-build-vignettes"),
  build_manual = FALSE,
  build_vignettes = FALSE,
  repos = getOption("repos"),
  type = "source",
  ...
)
```

#### **Arguments**

package

Name of the package to install.

version

Version of the package to install. Can either be a string giving the exact version required, or a specification in the same format as the parenthesized expressions used in package dependencies. One of the following formats:

- An exact version required, as a string, e.g. "0.1.13"
- A comparison operator and a version, e.g. ">= 0.1.12"
- Several criteria to satisfy, as a comma-separated string, e.g. ">= 1.12.0,<</li>
   1.14"
- Several criteria to satisfy, as elements of a character vector, e.g. c(">= 1.12.0", "< 1.14")</li>

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dependencies logical indicating whether to also install uninstalled packages which these pack-

ages depend on/link to/import/suggest (and so on recursively). Not used if repos

= NULL. Can also be a character vector, a subset of c("Depends", "Imports", "LinkingTo", "Suggests'

Only supported if 1ib is of length one (or missing), so it is unambiguous where to install the dependent packages. If this is not the case it is ignored, with a

warning.

The default, NA, means c("Depends", "Imports", "LinkingTo").

TRUE means to use c("Depends", "Imports", "LinkingTo", "Suggests") for pkgs and c("Depends", "Imports", "LinkingTo") for added dependencies: this installs all the packages needed to run pkgs, their examples, tests and vignettes (if the package author specified them correctly).

In all of these, "LinkingTo" is omitted for binary packages.

upgrade One of "default", "ask", "always", or "never". "default" respects the value of

the R\_REMOTES\_UPGRADE environment variable if set, and falls back to "ask" if unset. "ask" prompts the user for which out of date packages to upgrade. For non-interactive sessions "ask" is equivalent to "always". TRUE and FALSE are

also accepted and correspond to "always" and "never" respectively.

force Force installation, even if the remote state has not changed since the previous

install.

quiet logical: if true, reduce the amount of output. This is not passed to available.packages()

in case that is called, on purpose.

build If TRUE build the package before installing.

build\_opts Options to pass to R CMD build, only used when build build\_manual If FALSE, don't build PDF manual ('-no-manual').

build\_vignettes

If FALSE, don't build package vignettes ('-no-build-vignettes'). is TRUE.

repos character vector, the base URL(s) of the repositories to use, e.g., the URL of a

CRAN mirror such as "https://cloud.r-project.org". For more details on

supported URL schemes see url.

Can be NULL to install from local files, directories or URLs: this will be inferred

by extension from pkgs if of length one.

type character, indicating the type of package to download and install. Will be "source"

except on Windows and some macOS builds: see the section on 'Binary pack-

ages' for those.

... Other arguments passed on to utils::install.packages().

#### Details

The repositories are searched in the order specified by the repos argument. This enables teams to maintain multiple in-house repositories with different policies - for instance, one repo for development snapshots and one for official releases. A common setup would be to first search the official release repo, then the dev snapshot repo, then a public CRAN mirror.

Older versions of packages on CRAN are usually only available in source form. If your requested package contains compiled code, you will need to have an R development environment installed. You can check if you do by running devtools::has\_devel (you need the devtools package for this).

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#### See Also

```
Other package installation: install_bioc(), install_bitbucket(), install_cran(), install_dev(), install_github(), install_git(), install_local(), install_svn(), install_url()
```

#### **Examples**

```
## Not run:
install_version("devtools", "1.11.0")
install_version("devtools", ">= 1.12.0, < 1.14")

## Specify search order (e.g. in ~/.Rprofile)
options(repos = c(
    prod = "http://mycompany.example.com/r-repo",
    dev = "http://mycompany.example.com/r-repo-dev",
    CRAN = "https://cran.revolutionanalytics.com"
))
install_version("mypackage", "1.15") # finds in 'prod'
install_version("mypackage", "1.16-39487") # finds in 'dev'

## End(Not run)</pre>
```

package\_deps

Find all dependencies of a CRAN or dev package.

# **Description**

Find all the dependencies of a package and determine whether they are ahead or behind CRAN. A print() method identifies mismatches (if any) between local and CRAN versions of each dependent package; an update() method installs outdated or missing packages from CRAN.

## Usage

```
package_deps(
  packages,
  dependencies = NA,
  repos = getOption("repos"),
  type = getOption("pkgType")
)

local_package_deps(pkgdir = ".", dependencies = NA)

dev_package_deps(
  pkgdir = ".",
  dependencies = NA,
  repos = getOption("repos"),
  type = getOption("pkgType")
)
```

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```
## S3 method for class 'package_deps'
update(
  object,
  dependencies = NA,
  upgrade = c("default", "ask", "always", "never"),
  force = FALSE,
  quiet = FALSE,
  build = TRUE,
  build_opts = c("--no-resave-data", "--no-manual", "--no-build-vignettes"),
  build_manual = FALSE,
  build_vignettes = FALSE,
  repos = getOption("repos"),
  type = getOption("pkgType"),
  ...
)
```

#### **Arguments**

packages

A character vector of package names.

dependencies

Which dependencies do you want to check? Can be a character vector (selecting from "Depends", "Imports", "LinkingTo", "Suggests", or "Enhances"), or a logical vector.

TRUE is shorthand for "Depends", "Imports", "LinkingTo" and "Suggests". NA is shorthand for "Depends", "Imports" and "LinkingTo" and is the default. FALSE is shorthand for no dependencies (i.e. just check this package, not its dependencies)

The value "soft" means the same as TRUE, "hard" means the same as NA.

You can also specify dependencies from one or more additional fields, common ones include:

- Config/Needs/website for dependencies used in building the pkgdown site.
- Config/Needs/coverage for dependencies used in calculating test coverage.

repos

A character vector giving repositories to use.

type

Type of package to update.

pkgdir

path to a package directory, or to a package tarball.

object

A package\_deps object.

upgrade

One of "default", "ask", "always", or "never". "default" respects the value of the R\_REMOTES\_UPGRADE environment variable if set, and falls back to "ask" if unset. "ask" prompts the user for which out of date packages to upgrade. For non-interactive sessions "ask" is equivalent to "always". TRUE and FALSE are also accepted and correspond to "always" and "never" respectively.

force

Force installation, even if the remote state has not changed since the previous

install.

quiet

If TRUE, suppress output.

build

If TRUE build the package before installing.

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```
build_opts Options to pass to R CMD build, only used when build build_manual If FALSE, don't build PDF manual ('-no-manual'). build_vignettes

If FALSE, don't build package vignettes ('-no-build-vignettes'). is TRUE.

Additional arguments passed to install_packages.
```

#### Value

A data. frame with columns:

package The dependent package's name, installed The currently installed version, available on CRAN,

An integer denoting whether the locally installed version of the package is newer (1), the same (0) or older (-1) to

# **Examples**

```
## Not run:
package_deps("devtools")
# Use update to update any out-of-date dependencies
update(package_deps("devtools"))
## End(Not run)
```

parse-git-repo

Parse a remote git repo specification

# **Description**

A remote repo can be specified in two ways:

```
as a URL parse_github_url() handles HTTPS and SSH remote URLs and various GitHub browser URLs
```

via a shorthand parse\_repo\_spec() handles this concise form: [username/]repo[/subdir][#pulll@refl@\*release]

## Usage

```
parse_repo_spec(repo)
parse_github_repo_spec(repo)
parse_github_url(repo)
```

#### **Arguments**

repo Character scalar, the repo specification.

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#### Value

List with members: username, repo, subdir ref, pull, release, some which will be empty.

#### **Examples**

```
parse_repo_spec("metacran/crandb")
parse_repo_spec("jimhester/covr#47")
                                            ## pull request
parse_repo_spec("jeroen/curl@v0.9.3")
                                            ## specific tag
parse_repo_spec("tidyverse/dplyr@*release") ## shorthand for latest release
parse_repo_spec("r-lib/remotes@550a3c7d3f9e1493a2ba") ## commit SHA
parse_repo_spec("igraph=igraph/rigraph") ## Different package name from repo name
parse_github_url("https://github.com/jeroen/curl.git")
parse_github_url("git@github.com:metacran/crandb.git")
parse_github_url("https://github.com/jimhester/covr")
parse_github_url("https://github.example.com/user/repo.git")
parse_github_url("git@github.example.com:user/repo.git")
parse_github_url("https://github.com/r-lib/remotes/pull/108")
parse_github_url("https://github.com/r-lib/remotes/tree/name-of-branch")
parse_github_url("https://github.com/r-lib/remotes/commit/1234567")
parse_github_url("https://github.com/r-lib/remotes/releases/latest")
parse_github_url("https://github.com/r-lib/remotes/releases/tag/1.0.0")
```

system\_requirements

Query the system requirements for a dev package (and its dependencies)

# Description

Returns a character vector of commands to run that will install system requirements for the queried operating system.

#### Usage

```
system_requirements(os, os_release, path = ".", curl = Sys.which("curl"))
```

# **Arguments**

os, os_release	The operating system and operating system release version, see https://github.
	<pre>com/rstudio/r-system-requirements#operating-systems for the list of supported operating systems.</pre>
	supported operating systems.
path	The path to the dev package's root directory.
curl	The location of the curl binary on your system.

#### Value

A character vector of commands needed to install the system requirements for the package.

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update\_packages

Update packages that are missing or out-of-date.

#### **Description**

Works similarly to utils::install.packages() but doesn't install packages that are already installed, and also upgrades out dated dependencies.

#### Usage

```
update_packages(
  packages = TRUE,
  dependencies = NA,
  upgrade = c("default", "ask", "always", "never"),
  force = FALSE,
  quiet = FALSE,
  build = TRUE,
  build_opts = c("--no-resave-data", "--no-manual", "--no-build-vignettes"),
  build_manual = FALSE,
  build_vignettes = FALSE,
  repos = getOption("repos"),
  type = getOption("pkgType"),
  ...
)
```

# **Arguments**

packages

Character vector of packages to update.

dependencies

Which dependencies do you want to check? Can be a character vector (selecting from "Depends", "Imports", "LinkingTo", "Suggests", or "Enhances"), or a logical vector.

TRUE is shorthand for "Depends", "Imports", "LinkingTo" and "Suggests". NA is shorthand for "Depends", "Imports" and "LinkingTo" and is the default. FALSE is shorthand for no dependencies (i.e. just check this package, not its dependencies).

The value "soft" means the same as TRUE, "hard" means the same as NA.

You can also specify dependencies from one or more additional fields, common ones include:

- Config/Needs/website for dependencies used in building the pkgdown site.
- Config/Needs/coverage for dependencies used in calculating test coverage.

upgrade

One of "default", "ask", "always", or "never". "default" respects the value of the R\_REMOTES\_UPGRADE environment variable if set, and falls back to "ask" if unset. "ask" prompts the user for which out of date packages to upgrade. For non-interactive sessions "ask" is equivalent to "always". TRUE and FALSE are also accepted and correspond to "always" and "never" respectively.

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force Deprecated, this argument has no effect.

quiet If TRUE, suppress output.

build If TRUE build the package before installing.

 $\label{eq:continuous} \text{Options to pass to } R \text{ CMD build, only used when build}$ 

build\_manual If FALSE, don't build PDF manual ('-no-manual').

build\_vignettes

If FALSE, don't build package vignettes ('-no-build-vignettes'). is TRUE.

repos A character vector giving repositories to use.

type Type of package to update.

... Other arguments passed on to utils::install.packages().

#### See Also

package\_deps() to see which packages are out of date/ missing.

# **Examples**

```
## Not run:
update_packages("ggplot2")
update_packages(c("plyr", "ggplot2"))
## End(Not run)
```

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