

# Package ‘dateback’

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**Type** Package

**Title** Collect and Install R Packages on a Specified Date with Dependencies

**Version** 1.0.5

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**Description** Works as a virtual CRAN snapshot for source packages.  
It automatically downloads and installs 'tar.gz' files with dependencies,  
all of which were available on a specific day.

**License** MIT + file LICENSE

**Encoding** UTF-8

**URL** <https://github.com/r-suzuki/dateback>

**NeedsCompilation** no

**Repository** CRAN

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install	<i>Collect and install source packages on a specified date with dependencies</i>
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## Description

Collect and install source packages on a specified date with dependencies.

`install()` automatically downloads and installs tar .gz files with dependencies, all of which were available on a specific day.

Downloaded contents are saved in `outdir` (if set) which can be used as a local repository for `install.packages()`.

Use `collect()` to create a local repository without installation. See the example for details.

## Usage

```
install(pkgs, date,
        lib = .libPaths()[1],
        repos = "https://cloud.r-project.org",
        dependencies = c("Depends", "Imports", "LinkingTo"),
        skip_installed = TRUE,
        skip_recommended = FALSE,
        outdir = NULL,
        overwrite = FALSE,
        ...
)

collect(pkgs, date, outdir,
        repos = "https://cloud.r-project.org",
        dependencies = c("Depends", "Imports", "LinkingTo"),
        skip_installed = FALSE,
        skip_recommended = TRUE,
        overwrite = FALSE
)
```

## Arguments

<code>pkgs</code>	character vector of the names of packages.
<code>date</code>	character specifying a date in YYYY-MM-DD format. It tries to find the latest version of source packages on this date.
<code>outdir</code>	character specifying the output directory path. In <code>install()</code> it can be NULL to use a temporary directory. It will contain downloaded source packages, and can be used as a local package repository. See the example for details.
<code>repos</code>	CRAN mirror URL such as <code>https://cloud.r-project.org</code> .
<code>lib</code>	character vector of the library directories used in <code>install.packages()</code> .
<code>dependencies</code>	character vector of the dependency level for additional downloads. It can include <code>c("Depends", "Imports", "LinkingTo", "Suggests")</code> .
<code>skip_installed</code>	logical. If TRUE it does not collect files for packages already installed.
<code>skip_recommended</code>	logical. If TRUE it does not collect files for "recommended" packages.
<code>overwrite</code>	logical. If TRUE it overwrites existing files in <code>outdir</code> .

```
...           Arguments to be passed to install.packages()  
.
```

**Value**

data.frame containing information about collected packages. Please notice that it is intended for logging, and the structure of this object may change in future releases.

**Note**

This package was originally developed to (partially) substitute the "CRAN Time Machine" (or "MRAN Time Machine"), which retired in July 2023 (<https://blog.revolutionanalytics.com/2023/01/mran-time-machine-retired.html>).

Posit Package Manager (<https://packagemanager.posit.co/>) has a snapshot feature, so can be used as a direct replacement for CRAN Time Machine. Windows/Mac users would greatly benefit from it since binary packages are also available.

**Examples**

```
## Not run:  
  
# Install 'ranger' package and its dependencies on the date 2023-03-01  
dateback::install(pkgs = "ranger", date = "2023-03-01")  
  
# Collect packages and install them later (maybe on another system)  
dateback::collect(pkgs = "ranger", date = "2023-03-01", outdir = "local_repo")  
install.packages(pkgs = "ranger", repos = "file:local_repo")  
  
## End(Not run)
```

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