Package 'pkgndep'

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Type Package

Title Check the Heaviness of Package Dependencies

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Depends R (>= 3.5.0)

Imports ComplexHeatmap (>= 2.0.0), GetoptLong, utils, grid, crayon, callr

Suggests knitr

Description It checks the heaviness of the packages that user's package depends on. For each package listed in the ``Depends'', ``Imports'' and ``Suggests'' fields in the DESCRIPTION file, it opens a new R session, loads the package and counts the number of namespaces that are loaded. The summary of the dependencies is visualized by a customized heatmap. Examples of dependency analysis can be found at <https://jokergoo.github.io/pkgndep/stat/>.

URL https://github.com/jokergoo/pkgndep

VignetteBuilder knitr

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NeedsCompilation no

Repository CRAN

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R topics documented:

loaded_ns *Loaded namespaces*

Description

Loaded namespaces

Usage

```
loaded_ns(x, include_suggests = TRUE)
```

Arguments

x	The object from pkgndep.
include_suggests	Whether include the namespaces that are loaded if loading the packages from "Suggests" field.

Value

A vector of namespace names.

Examples

```
# There is no example
NULL
```

pkgndep *Number of Dependency Packages*

Description

Number of Dependency Packages

Usage

```
pkgndep(pkg, verbose = TRUE)
```

Arguments

pkg	Package name or the path of the package.
verbose	Whether print messages.

Details

For each package listed in the "Depends", "Imports" and "Suggests" fields in the DESCRIPTION file, this function opens a new R session, loads the package and counts the number of namespaces that are loaded.

Value

A pkgndep object.

Examples

```
x = pkgndep("ComplexHeatmap")

# The `x` variable generated by `pkgndep()` is already saved in this package.
x = readRDS(system.file("extdata", "x.rds", package = "pkgndep"))
x
plot(x)
```

`plot.pkgndep` *Plot method*

Description

Plot method

Usage

```
## S3 method for class 'pkgndep'
plot(x, pkg_fontsize = 10, title_fontsize = 12, legend_fontsize = 8,
    fix_size = !dev.interactive(), ...)
```

Arguments

`x`	The object from pkgndep.
`pkg_fontsize`	Fontsize for the package names.
`title_fontsize`	Fontsize for the titles.
`legend_fontsize`	Fontsize for the legends.
`fix_size`	Should the rows and columns in the heatmap have fixed size?
`...`	Other arguments.

Details

If `fix_size` is set to `TRUE`. The size of the whole plot can be obtained by:

```
size = plot(x, fix_size = TRUE)
```

where `size` is a `unit` object with the width and height of the whole heatmap, in unit `mm`. If you want to save the plot in to e.g. a PDF file that has the same size of the heatmap, you need to make the plot twice. First save the plot into a null device, just to obtain the size of the plot:

```
pdf(NULL) # a null device
size = plot(x, fix_size = TRUE)
dev.off()
width = convertX(size[1], "inches", valueOnly = TRUE)
height = convertY(size[2], "inches", valueOnly = TRUE)
pdf(..., width = width, height = height)
plot(x)
dev.off()
```

If there are no dependency packages stored in `x`, `NULL` is returned.

Value

A length-tow `unit` object which corresponds to the width and height of the plot.

Examples

```
# See examples in `pkgndep()`.
```

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print.pkgndep *Print method*

Description

Print method

Usage

```
## S3 method for class 'pkgndep'
print(x, ...)
```

Arguments

`x`	The object from `pkgndep`.
`...`	Other arguments.

Value

No value is returned.

Examples

```
# See examples in `pkgndep()`.
```

`unavailable_pkg` *Unavailable packages*

Description

Unavailable packages

Usage

```
unavailable_pkg(x)
```

Arguments

x	The object from pkgndep.

Details

It lists the packages that are not installed in the "Suggests" field.

Value

A vector of package names.

Examples

```
# There is no example
NULL
```

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