

Package ‘ctv’

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Title CRAN Task Views

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Description Server-side and client-side tools for task views to CRAN-style repositories

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ctv-client

CRAN Task Views: Client-side Tools

Description

Client-side tools for installing CRAN task views.

Usage

```

available.views(repos = NULL, ...)
install.views(views, coreOnly = FALSE, repos = NULL, ...)
update.views(views, coreOnly = FALSE, repos = NULL, lib.loc = NULL, ...)

## S3 method for class 'ctv':
print(x, pagelist = TRUE, ...)
## S3 method for class 'ctvlist':
print(x, pagelist = FALSE, ...)

```

Arguments

<code>views</code>	character vector with the short names of the task views whose associated packages should be downloaded and installed. Alternatively, <code>views</code> can also be an object of class "ctvlist" (as returned by <code>available.views</code>) or an object of class "ctv" (i.e., an element of a "ctvlist").
<code>coreOnly</code>	logical. Should all packages or only core packages be installed? (recycled to the same length as <code>views</code>)
<code>repos</code>	character, the base URL of the repository. By default <code>getOption("repos")</code> is tried and otherwise <code>getOption("CRAN")</code> is used.
<code>lib.loc</code>	character vector describing the location of R library trees to search through (and update packages therein).
<code>...</code>	further arguments passed to <code>install.packages</code> .
<code>x</code>	an object of class "ctv" or "ctvlist" respectively.
<code>pagelist</code>	logical. Should the pagelist also be printed?

Details

`install.views` queries the file 'Views.rds' located at the 'src/contrib' directory of 'repos' and then simply calls `install.packages` to install the packages associated with the view specified. For each view it can be specified whether all packages or only the core packages should be installed.

`available.views` returns the names of the task views currently available in the file 'Views.rds'. In earlier versions, this was called `CRAN.views` (which still works and provides the same functionality).

`update.views` queries which packages from a view are not yet installed (using `installed.packages`) and which of the installed packages are older than the packages available (using `available.packages`). It subsequently installs only the packages that are not current or not installed yet.

For a closer description of the arguments see also `install.packages`.

Value

`available.views` returns an object of class "ctvlist" of the available task views whose elements are of class "ctv".

`install.views` and `update.views` have no return value.

See Also

`install.packages`

Examples

```
## Not run:
## query names of CRAN task views available
available.views()

## install Econometrics view
install.views("Econometrics")
## only with core packages
install.views("Econometrics", coreOnly = TRUE)

## update Econometrics view
update.views("Econometrics")

## End(Not run)
```

ctv-server

CRAN Task Views: Server-side Tools

Description

Server-side tools for maintaining CRAN task views.

Usage

```
repos_update_views(repos = ".", css = "../CRAN_web.css", reposname = "CRAN", ...)

read.ctv(file)
ctv2html(x, file = NULL, css = "../CRAN_web.css", packageURL = "../packages/", repo
```

Arguments

<code>repos</code>	character, the base URL of the CRAN-style repository where the ‘Views.rds’ and ‘.html’ files should be installed. The ‘.ctv’ files should be located in the ‘web/views/’ directory.
<code>css</code>	character specifying the path and name of the cascade style sheet that should be included in the HTML files.
<code>reposname</code>	character giving the name of the CRAN-style repository, used for generating HTML pages.
<code>...</code>	further arguments passed to <code>ctv2html</code> .
<code>file</code>	character specifying a CRAN task view ‘.ctv’ file.
<code>x</code>	an object of class "ctv" as returned by <code>read.ctv</code> .
<code>packageURL</code>	character specifying the path (relative to the view directory) to the package descriptions.

Details

CRAN Task views are generated from an XML-based format ‘.ctv’ that is described in the vignette of this package.

`read.ctv` can read a ‘.ctv’ file with a CRAN task view specification and returns an object of class "ctv". This function requires the availability of the **XML** package.

`ctv2html` generates a ‘.html’ file with the information contained in a "ctv" object.

`updateViews` reads all ‘.ctv’ files in a specified directory, generates a ‘.html’ file for each and an index ‘.html’ file. Furthermore, it stores all "ctv" objects in a "ctvlist" object in a file ‘Views.rds’ that can be queried by [install.views](#) or [CRAN.views](#).

Value

`updateViews` returns an object of class "ctvlist" containing the "ctv" objects available.

`ctv2html` returns invisibly a vector with the HTML code generated.

`read.ctv` returns a list of class "ctv" with elements:

<code>name</code>	character, name of the task view (must be a valid name for an R object).
<code>topic</code>	character, topic of the task view.
<code>maintainer</code>	character, maintainer of the task view.
<code>email</code>	character, valid e-mail address (optional).
<code>version</code>	character, version specified via date in ISO format.
<code>info</code>	character, HTML code with informations about the task view.
<code>packagelist</code>	data frame with the columns <code>name</code> (character, name of package) and <code>core</code> (logical, Is priority core?).
<code>links</code>	character vector, HTML code with links for the task view.

See Also

[install.views](#)

Examples

```
## read .ctv file
x <- read.ctv(file.path(.find.package("ctv"), "ctv", "Econometrics.ctv"))
x

## Not run:
## generate corresponding .html file
ctv2html(x)

## End(Not run)
```

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