

Package ‘esutils’

October 7, 2024

Type Package

Title esutils

Version 0.3.6

Date 2023-12-29

Maintainer Enrico Schumann <es@enricoschumann.net>

Description Various Tools.

License GPL (>=2)

SystemRequirements ssconvert (Gnumeric), pdftotext (Xpdf)

Imports crayon, datetimeutils, git2r, graphics, textutils, tools,
utils, zip, zoo

Suggests tinytest, weaver

URL <http://enricoschumann.net/esutils/> ,
<https://git.sr.ht/~enricoschumann/esutils>

NeedsCompilation no

Author Enrico Schumann [aut, cre] (<<https://orcid.org/0000-0001-7601-6576>>)

Contents

esutils-package	2
backup	2
char2num	3
map01	4
nth	5
pdf2txt	6
pkg_build	7
require	8
repositories	9
ss2csv	10
xy_text	11

Index	12
--------------	-----------

esutils-package *Enrico Schumann's Tools*

Description

Various tools.

Details

Tools.

Author(s)

Enrico Schumann <es@enricoschumann.net>

backup *Tools for Creating Backups*

Description

Functions for creating and maintaining backups.

Usage

```
old_files(min.age = 365,
          path = ".",
          pattern = NULL,
          ignore.case = FALSE,
          recursive = FALSE,
          min.age.monthend = NULL,
          min.age.yearend = NULL,
          full.names = FALSE)
path8.3(path = ".")
backup_filename(root, UTC = FALSE, ...)
```

Arguments

min.age	number of days: an integer
path	a string
pattern	a string

Details

`old_files` will look at filenames and then use [guess_datetime](#) to extract the date.

Value

for old_files, a character vector

Author(s)

Enrico Schumann

Examples

```
backup_filename("daily_report.pdf")
```

char2num	<i>Convert Strings to Numbers</i>
----------	-----------------------------------

Description

Convert strings to numbers.

Usage

```
char2num(s, dec = ",", big.mark = ".")
```

Arguments

s	a character vector
dec	character: the decimal point; will be replaced with “.”
big.mark	character: will be removed, see Details.

Details

char2num uses [as.numeric](#) on a character vector after removing/replacing certain characters: all occurrences of big.mark are removed, and dec is changed to a dot.

Value

a character vector

Author(s)

Enrico Schumann

See Also

[as.numeric](#), [type.convert](#)

Examples

```

char2num("12.000,23")
char2num("12,000.23", big.mark = ",")
char2num("12000.23", big.mark = " ") ## but 'as.numeric' is simpler
char2num("12'000.23", big.mark = "'")
char2num("12 000|23", dec = "|", big.mark = " ")

```

map01

*Map Numeric Values to Range***Description**

Rescale a numeric vector in such a way that all values lie within a specified range (per default 0 to 1).

Usage

```
map01(x, min = 0, max = 1, omin = min(x), omax = max(x), na.rm = FALSE)
```

Arguments

x	a numeric vector
min	a numeric vector of length one
max	a numeric vector of length one
omin	a numeric vector of length one
omax	a numeric vector of length one
na.rm	logical

Details

Maps the elements of a numeric vector to a specified range; default is 0 to 1.

Value

a numeric vector

Author(s)

Enrico Schumann

See Also

[scale](#)

Examples

```

map01(0:10)          ## 0, 0.1, 0.2 ... 1.0
map01(0:10, 0, 100) ## 0, 10, 20 ... 100

```

nth *Every Nth Element of a Vector*

Description

Every nth element of a vector.

Usage

```
nth(x, n, first = 1L)
```

Arguments

x	a vector (or a list)
n	an integer
first	where to start

Details

Subsets are chosen with [Extract](#), so for a list a new list is returned.

Value

a vector (or a list)

Author(s)

Enrico Schumann

See Also

[Extract](#)

Examples

```
nth(1:20, 2, 1)
nth(1:20, 2, 2)
```

pdf2txt

Pdf to Text File

Description

Pdf to Text File

Usage

```
pdf2txt(file, out, path.exec = "pdftotext", ..., layout = TRUE)
```

Arguments

file	the file to be converted. Note that the file is not actually changed.
out	the outfile
path.exec	path to pdftotext
...	passed to <code>system</code>
layout	logical; defaults to TRUE

Details

Relies on `ssconvert`, which ships with Gnumeric.

Value

The return value of `system` (0 signals success).

Author(s)

Enrico Schumann

References

<http://www.foolabs.com/xpdf/home.html>

Examples

```
## Not run:  
## runs in the current directory  
pdf2txt("test.pdf")  
## End(Not run)
```

Description

Building, checking and installing R packages.

Usage

```
pkg_build(pkg, parent.dir = ".", check = FALSE,
          build.vignettes = TRUE,
          run.tests = TRUE, install = FALSE,
          keep.source = FALSE,
          clean = FALSE,
          bump.version = FALSE,
          bump.date = FALSE,
          resave.data = TRUE,
          as.cran = FALSE,
          show.test.results = TRUE,
          verbose = TRUE,
          use.crayon = FALSE)
latest_version(pkg, path = ".", type = "source", strict = TRUE)
```

Arguments

pkg	package name
parent.dir	a string: the path in which the source directories reside
type	string: source or zip
as.cran	logical
strict	logical. See package_version .

Details

pkg_build builds a package from a source directory, and optionally checks and installs it.

Value

a character vector, invisibly

Author(s)

Enrico Schumann

Examples

```
basedir <- "~/Packages"
packages <- c("NMOF", "PMwR")

for (p in packages)
  pkg_build(pkg = p,
            parent.dir = basedir,
            install = TRUE,
            check = TRUE,
            clean = FALSE,
            keep.source = TRUE)
```

qrequire	<i>Loading/Attaching of Packages, but quietly</i>
----------	---

Description

Load package quietly.

Usage

```
qrequire(package, lib.loc = NULL, quietly = TRUE,
         warn.conflicts = TRUE, character.only = FALSE,
         file = tempfile())
```

Arguments

package	see require
lib.loc	require
quietly	require
warn.conflicts	require
character.only	require
file	character

Details

Just as `require`, but quiet.

Value

Logical, invisibly.

Author(s)

Enrico Schumann

See Also[require](#)**Examples**

```
## Not run: qrequire("zoo")
```

repositories

Helper Functions for Managing Local Git Repositories

Description

Helper functions for managing local git repositories.

Usage

```
find_git(path = ".", tilde = TRUE, max.char, ...)  
fetch_git_info(path, ...)
```

Arguments

path	character
tilde	logical: do tilde expansion through path.expand?
max.char	NA or integer: if the latter, filepaths longer than max.char are excluded. (Necessary for operating systems that impose maximum path lengths.)
...	other arguments

Details

Find git repositories, i.e. directories with name .git.

Value

a character vector for find_git, a [data.frame](#) for fetch_git_info

Author(s)

Enrico Schumann

See Also

the [git2r](#) package

Examples

```
path <- "~/Packages"  
repos <- find_git(path)  
fetch_git_info(repos)[, c("path", "clean", "remote_urls")]
```

`ss2csv`*Spreadsheet to CSV*

Description

Spreadsheet to CSV

Usage

```
ss2csv(file, out, path.exec = "ssconvert", ...)
```

Arguments

<code>file</code>	the file to be converted. Note that the file is not actually changed.
<code>out</code>	the outfile
<code>path.exec</code>	path to <code>ssconvert</code>
<code>...</code>	passed to <code>system</code>

Details

Relies on `ssconvert`, which ships with `Gnumeric`.

Value

The return value of `system` (0 signals success).

Author(s)

Enrico Schumann

References

<http://projects.gnome.org/gnumeric/>

<http://projects.gnome.org/gnumeric/doc/sect-files-ssconvert.shtml>

Examples

```
## Not run:  
## runs in the current directory  
ss2csv("Journal.ods")  
## End(Not run)
```

`xy_text`*Add Text to Plot at Relative Coordinates*

Description

Add text to a plot at specific relative coordinates, e.g. 50%, 50%.

Usage

```
xy_text(x, y, labels, ...)
```

Arguments

<code>x</code>	numeric
<code>y</code>	numeric
<code>labels</code>	string
<code>...</code>	arguments passed to text

Details

See [text](#).

Value

A vector of coordinates, returned invisibly.

Author(s)

Enrico Schumann

See Also

[text](#)

Examples

```
plot(0:10, 0:10)
lines(5,5, col = "blue", pch = 19, type = "p")
xy_text(0.5,0.5, "The Centre", pos = 1)
xy_text(0.5,0.5, "The Centre", pos = 2)
xy_text(0.5,0.5, "The Centre", pos = 3)
xy_text(0.5,0.5, "The Centre", pos = 4)
```

Index

- * **package**
 - esutils-package, 2
- as.numeric, 3
- backup, 2
- backup_filename (backup), 2
- build_pkg (pkg_build), 7
- char2num, 3
- data.frame, 9
- esutils (esutils-package), 2
- esutils-package, 2
- Extract, 5
- fetch_git_info (repositories), 9
- find_git (repositories), 9
- guess_datetime, 2
- latest_version (pkg_build), 7
- map01, 4
- NA, 9
- nth, 5
- old_files (backup), 2
- package_version, 7
- path.expand, 9
- path8.3 (backup), 2
- pdf2txt, 6
- pkg_build, 7
- pkg_clean (pkg_build), 7
- qrequire, 8
- repositories, 9
- require, 8, 9
- scale, 4
- ss2csv, 10
- system, 6, 10
- text, 11
- type.convert, 3
- xy_text, 11