

# Package ‘dang’

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**Type** Package

**Title** ‘Dang’ Associated New Goodies

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Kabira Namit, Colin Gillespie, R Core, and others.

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**Description** A collection of utility functions.

**Suggests** anytime, data.table, zoo, xts, TTR, quantmod, rtweet

**LinkingTo** tidyCpp

**License** GPL (>= 2)

**RoxygenNote** 6.0.1

**NeedsCompilation** yes

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alphavantage	<i>Retrieve real-time data from AlphaVantage</i>
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### Description

Fetch a real-time market data series from AlphaVantage

### Usage

```
alphavantage(sym)
```

### Arguments

sym	Character value for the ticker
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### Details

Several optional parameters could be set, but are not currently.

### Value

A data.table object

### Author(s)

Dirk Eddelbuettel

---

as.data.table.xts	<i>Convert an xts object into a data.table</i>
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---

### Description

Convert an xts object into a data.table

### Usage

```
## S3 method for class 'xts'
as.data.table(x)
```

```
as.data.table(x)
```

```
## Default S3 method:
as.data.table(x, ...)
```

**Arguments**

x                    An xts object  
 ...                  Catch-all arguments passed on to methods

**Details**

This is still experimental. Note that all four *added* columns are keys to the data.table object, and that `setNumericRounding(0)` is executed too,

**Value**

A data.table object with new columns date, time, micros, pt providing, respectively the data as IDate, time as ITime, microseconds (rounded) and numeric POSIXct.

**Author(s)**

Dirk Eddelbuettel

---

assignFormals                    *Assign formal arguments from function*

---

**Description**

Debugging helper to assign formals from function

**Usage**

```
assignFormals(f, env = .GlobalEnv)
```

**Arguments**

f                    A function  
 env                  An environment to assign the values to, defaults to global environment,

**Details**

(Beta) Attempt get default values from a given function, extracting its arguments and assigning which should help in debugging via `browser()` and other helper functions.

**Value**

Nothing, but a side effect of assignment in global environment

**Author(s)**

Dirk Eddelbuettel

---

checkCRANStatus      *Maintainer Status at CRAN*

---

**Description**

Report Maintainer Status at CRAN

**Usage**

```
checkCRANStatus(email, cache, cache.life = 24 * 3600)
```

**Arguments**

email	A character variable with the maintainer email
cache	A character variable with an optional cache file, default value is to use a file inside the per-session temporary directory
cache.life	A numeric timeout, defaults to one day

**Details**

This function retrieves the maintainer status (given an email) at CRAN. Values are optionally cached; the default cache location is inside the per-session temporary directory as R should not write elsewhere.

**Value**

Nothing, the sideeffect of the display is the main effect

**Author(s)**

Brodie Gaslam (with minor modifications by Dirk Eddelbuettel)

---

checkPackageAsciiCode      *checkPackageAsciiCode*

---

**Description**

Check a package directory for non-ASCII characters in source files.

**Usage**

```
checkPackageAsciiCode(dir, respect_quotes = FALSE)
```

**Arguments**

`dir` Character variable with path to directory to be checked  
`respect_quotes` Logical variable whether quotes need to be checked

**Details**

The function is a renamed and slightly edited copy of the base R function `.check_package_ASCII_code`. It uses an unexported C function, also included, from base R, called as `_check_nonASCII`.

**Value**

A vector of things that are wrong per this function, also displayed on standard output

**Author(s)**

Dirk Eddelbuettel for this version, R Core for the underlying code

**Examples**

```
## Not run:  
checkPackageAsciiCode(".", FALSE)  
  
## End(Not run)
```

---

demotivate	<i>Display a demotivating quote</i>
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---

**Description**

Display a demotivating quote to remind the users of the harsh reality econometric and statistical practice.

**Usage**

```
demotivate(x, width = NULL)
```

**Arguments**

`x` A index value chosen to select a quote; if not given a quote is chosen randomly.  
`width` The desired display width.

**Details**

This function is a port of `demotivate` command for 'Stata' from the ado file at <http://fmwww.bc.edu/repec/bocode/d/demotivate.ado>.

**Value**

The formatted is returned invisibly.

**Author(s)**

Dirk Eddelbuettel for this function, and Kevin Denny for the 'Stata' original.

**See Also**

<https://ideas.repec.org/c/boc/bocode/s458576.html>

**Examples**

```
demotivate()
```

---

getGitRoot	<i>Are we in a git repository?</i>
------------	------------------------------------

---

**Description**

The `getGitRoot()` function recursively ascends the filesystem tree from the given directory until it either finds a directory `.git`, or the top-level directory to abort the search. The root directory of the git repository is returned, with an empty string in the case of no repository. The `inGit()` function turns this into boolean predicate returning either TRUE or FALSE.

**Usage**

```
getGitRoot(cwd = getwd())
```

```
inGit(cwd = getwd())
```

**Arguments**

`cwd` The start directory, default to the current working directory

**Value**

For `getGitRoot()`, the path of the directory containing the `.git` directory, ie the project root directory, or an empty string in case the search started outside a git directory. The `inGit()` function returns a boolean as to whether a git repository was found or not.

**Author(s)**

Dirk Eddelbuettel

**Examples**

```
inGit()
```

---

googleFinanceData      *Historical Price Data Download from Google Finance*

---

## Description

Download historical time series from Google Finance

## Usage

```
googleFinanceData(sym, current = TRUE, sy = 2005, sm = 1, sd = 1, ey,  
em, ed)
```

## Arguments

sym	A character string for a (tradeable) symbol
current	A logical switch to indicate whether the current time is the endtime
sy	An integer value for the start year, default is 2005
sm	An integer value for the start month, default is 1
sd	An integer value for the start date, default is 1
ey	An optional integer value for the end year, required if current is false
em	An optional integer value for the end month, required if current is false
ed	An optional integer value for the end day, required if current is false

## Details

The function uses an (unofficial) older CGI-style interface at Google to download historical data.

## Value

A `data.table` object with a key on date

## Author(s)

Dirk Eddelbuettel

## See Also

The post at <https://chrisconlan.com/download-historical-stock-data-google-r-python/> provided the initial starting point

isConnected

*Is the current session (networked) and connected?*

---

**Description**

Function to (heuristically) test for a network connection by attempting to connect to a given website.

**Usage**

```
isConnected(site = "https://www.google.com")
```

**Arguments**

site                    Character variable with site to try to connect to, defaults to `http://www.google.com`

**Details**

The main page of Google is used as a proxy for overall network connectivity as Google is generally 'network-close' and the page is relatively small. If a network is unavailable this fails generally already on domain name service resolution. Special thanks to Barry and Brodie for a very helpful discussion re-discovering this function.

**Value**

A boolean value indicating networking status

**Author(s)**

Dirk Eddelbuettel

---

ls.objects

*List largest objects and show memory use*

---

**Description**

List object and memory used by these objects

**Usage**

```
ls.objects(pos = 1, pattern, order.by, decreasing = FALSE, head = FALSE,  
          n = 5)
```

```
lsos(..., n = 10)
```

```
showMemoryUse(sort = "size", decreasing = FALSE, limit)
```



**Arguments**

pos	Position in search path, defaults to 1
pattern	Pattern argument pass on to ls
order.by	Optional sort order column
decreasing	Optional switch for decreasing or increasing sort order
head	Optional switch to show head(...,n)
n	Number of elements to show, default to 5
...	Passed through from lsos to ls.objects
sort	Sort columns, defaults to 'size'
limit	Optional cap on displayed number of items

**Details**

These helper functions have evolved over the years; some were also posted on StackOverflow in response to <https://stackoverflow.com/questions/1358003/tricks-to-manage-the-available-memory-in-an-r-s>

**Value**

The displayed data.frame is returned to, the main purpose effect however is the displayed information

**Author(s)**

Dirk Eddelbuettel, based on and extending code in mailing list posts by Petr Pikal and David Hinds

---

motivate	<i>Display a motivating quote</i>
----------	-----------------------------------

---

**Description**

Display a motivating quote for users.

**Usage**

```
motivate(x, width = NULL)
```

**Arguments**

x	A index value chosen to select a quote; if not given a quote is chosen randomly.
width	The desired display width.

**Details**

This function is a port of motivate command for 'Stata' from the ado file at <http://fmwww.bc.edu/repec/bocode/m/motivate.ado>

**Value**

The formatted is returned invisibly.

**Author(s)**

Dirk Eddelbuettel for this function, and Kabira Namit for the 'Stata' original.

**See Also**

<https://ideas.repec.org/c/boc/bocode/s458565.html>

**Examples**

```
motivate()
```

---

muteTweeters

*Mute Twitter Users with Excessive Hashtag Use*

---

**Description**

Mutes Twitter accounts using for than 'ncrit' hashtags among 'N' tweets in search of along with of 'term'.

**Usage**

```
muteTweeters(term = "#rstats", N = 1000, ncrit = 10)
```

**Arguments**

term	A character variable to search for, defaults to '#rstats'
N	An number of tweets to fetch, defaults to 1000
ncrit	A number of hashtags after which use is deemed excessive, defaults to 10

**Details**

This is a modified version of the code in this wonderful tweet by Colin Gillespie at <https://twitter.com/csgillespie/status/1298621645767290881>. It requires the `rtweet` and `data.table` packages.

**Value**

NULL, invisibly, but the function is invoked for the side effect of calling `post_mute`.

**Author(s)**

Dirk Eddelbuettel

**Examples**

```
## Not run:
## mute users with more than 10 hashtags among
## the 1000 most recent #rstats tweets
muteTweeters("#rstats", 1000, 10)

## End(Not run)
```

plotOBOS

*Plot Overbought/Oversold Regions for A Stock or ETF***Description**

Compute and display overbought and oversold regions

**Usage**

```
plotOBOS(symbol, n = 50, type = c("sma", "ema", "zlema", "hma"),
  years = 1, blue = TRUE, current = TRUE, title = symbol,
  ticks = TRUE, axes = TRUE)
```

**Arguments**

symbol	A (required) character string for stock symbol, or alternatively a xts or zoo object with data
n	An optional integer for the moving average length, defaults to 50
type	An optional character string for the type of moving average; currently supported are 'SMA', 'EMA', 'ZLEMA', and 'HMA'.
years	An optional numeric or integer value for the number of years of data to display, defaults to one
blue	An optional boolean determining whether blue or gray tones are used, defaults to true implying blue tones
current	An optional boolean determining whether the current date is the end date
title	An optional character string for the plot title, defaults to the symbol
ticks	An optional boolean indicating whether ticks are plotted, passed on to plot.xts, defaults to true
axes	An optional boolean indicating whether axes are plotted, passed on to plot.xts, defaults to true

**Details**

This function computes a smoothed version of the price using a moving average (with one of several possible methods) as well as a standard deviation band, and displays one and two standard deviations around the smoothed price.

**Value**

NULL as the function is invoked for the side effect of the plot

**Author(s)**

Dirk Eddelbuettel

---

print.xts	<i>Printing helper function for xts object</i>
-----------	--

---

**Description**

Print helper function for xts objects.

**Usage**

```
## S3 method for class 'xts'  
print(x, ..., n = 10)
```

**Arguments**

x	An xts objects
...	Ignored, but needed for consistency with print generic.
n	The default number of lines to display, default is 10.

**Value**

The return from print

**Author(s)**

Dirk Eddelbuettel

---

silent	<i>Silently load a library</i>
--------	--------------------------------

---

**Description**

Silently attach a library to the search path.

**Usage**

```
silent(...)
```

**Arguments**

... Passed though

**Details**

This function wraps `suppressMessages` around the call to `library`

**Value**

Nothing, but the desired library is attached

**Author(s)**

Dirk Eddelbuettel

---

ymd

*Format a Date(time) object as ymd*

---

**Description**

Format a `Date(time)` object as `ymd`

**Usage**

```
ymd(pt)
```

**Arguments**

`pt` A POSIXt Datetime or a Date object

**Value**

A character object formatted as 'YYYYMMDD'

**Author(s)**

Dirk Eddelbuettel

**Examples**

```
if (requireNamespace("anytime", quietly=TRUE)) {  
  ymd(anytime::anytime("2016-09-01 10:11:12.123456"))  
  ymd(anytime::anydate("2016-Sep-01"))  
}
```

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