

Package ‘mgsub’

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Type Package

Title Safe, Multiple, Simultaneous String Substitution

Version 2.0.0

BugReports <https://github.com/bmewing/mgsub/issues>

Description Designed to enable simultaneous substitution in strings in a safe fashion.
Safe means it does not rely on placeholders (which can cause errors in same length matches).

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Encoding UTF-8

ByteCompile true

Suggests testthat, knitr, rmarkdown

VignetteBuilder knitr

URL <https://github.com/bmewing/mgsub>, <https://bmewing.github.io/mgsub/>

Config/roxygen2/version 8.0.0

NeedsCompilation yes

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sensor_worker	<i>mgsub_sensor worker</i>
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Description

The hard worker doing everything for mgsub_sensor

Usage

```
sensor_worker(
  string,
  pattern,
  censor,
  split = any(nchar(censor) > 1),
  seed = NULL,
  ...
)
```

Arguments

string	a character vector where replacements are sought
pattern	Character string to be matched in the given character vector
censor	character to use in censoring - see details
split	if a multicharacter censor pattern is provided, should it be split to preserve original string length
seed	optional parameter to fix sampling of multicharacter censors
...	arguments to pass to regex family

fast_replace	<i>Fast escape replace</i>
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Description

Fast escape function for limited case where only one pattern provided actually matches anything

Usage

```
fast_replace(string, pattern, replacement, ...)
```

Arguments

string	a character vector where replacements are sought
pattern	Character string to be matched in the given character vector
replacement	Character string equal in length to pattern or of length one which are a replacement for matched pattern.
...	arguments to pass to gsub

filter_overlap	<i>Filter overlaps from matches</i>
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Description

Helper function used to identify which results from gregexpr overlap other matches and filter out shorter, overlapped results

Usage

```
filter_overlap(x)
```

Arguments

x	Matrix of gregexpr results, 4 columns, index of column matched, start of match, length of match, end of match. Produced exclusively from a worker function in mgsub
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filter_overlap_base	<i>Filter overlaps from matches using only base R functionality</i>
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Description

Helper function using only base R functionality used to identify which results from gregexpr overlap other matches and filter out shorter, overlapped results

Usage

```
filter_overlap_base(x)
```

Arguments

x	Matrix of gregexpr results, 4 columns, index of column matched, start of match, length of match, end of match. Produced exclusively from a worker function in mgsub
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get_matches *Get all matches*

Description

Helper function to be used in a loop to check each pattern provided for matches

Usage

```
get_matches(string, pattern, i, ...)
```

Arguments

string	a character vector where replacements are sought
pattern	Character string to be matched in the given character vector
i	an iterator provided by a looping function
...	arguments to pass to gregexpr

get_matches_base *Get all matches using only base R functionality*

Description

Helper function to be used in a loop to check each pattern provided for matches when the compiled version isn't available

Usage

```
get_matches_base(string, pattern, i, ...)
```

Arguments

string	a character vector where replacements are sought
pattern	Character string to be matched in the given character vector
i	an iterator provided by a looping function
...	arguments to pass to gregexpr

mgsub	<i>Safe, multiple gsub</i>
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Description

mgsub - A safe, simultaneous, multiple global string replacement wrapper that allows access to multiple methods of specifying matches and replacements.

Usage

```
mgsub(string, pattern, replacement, recycle = FALSE, ...)
```

Arguments

string	a character vector where replacements are sought
pattern	Character string to be matched in the given character vector
replacement	Character string equal in length to pattern or of length one which are a replacement for matched pattern.
recycle	logical. should replacement be recycled if lengths differ?
...	arguments to pass to regexpr / sub

Value

Converted string.

Examples

```
mgsub("hey, ho", pattern = c("hey", "ho"), replacement = c("ho", "hey"))
mgsub("developer", pattern = c("e", "p"), replacement = c("p", "e"))
mgsub("The chemical Dopaziamine is fake",
      pattern = c("dopa(.*) ", "fake"),
      replacement = c("mega\\1 ", "real"),
      ignore.case = TRUE)
```

mgsub_censor	<i>Safe, multiple censoring of text strings</i>
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Description

mgsub_censor - A safe, simultaneous, multiple global string censoring (replace matches with a censoring character like '*')

Usage

```
mgsub_censor(
  string,
  pattern,
  censor = "*",
  split = any(nchar(censor) > 1),
  seed = NULL,
  ...
)
```

Arguments

<code>string</code>	a character vector to censor
<code>pattern</code>	regular expressions used to identify where to censor
<code>censor</code>	character to use in censoring - see details
<code>split</code>	if a multicharacter censor pattern is provided, should it be split to preserve original string length
<code>seed</code>	optional parameter to fix sampling of multicharacter censors
<code>...</code>	arguments to pass to regexr / sub

Details

When `censor` is provided as a `>1` length vector or as a multicharacter string with `split = TRUE`, it will be sampled to return random censoring patterns. This can be helpful if you want to create cartoonish swear censoring. If needed, the randomization can be controlled with the `seed` argument.

Value

Censored string.

Examples

```
mgsub_censor("Flowers for a friend", pattern=c("low"), censor="*")
```

worker

mgsub worker

Description

The hard worker doing everything for `mgsub`

Usage

```
worker(string, pattern, replacement, ...)
```

Arguments

string	a character vector where replacements are sought
pattern	Character string to be matched in the given character vector
replacement	Character string equal in length to pattern or of length one which are a replacement for matched pattern.
...	arguments to pass to regexpr family

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