

# Package ‘mgsub’

March 13, 2019

**Type** Package

**Title** Safe, Multiple, Simultaneous String Substitution

**Version** 1.7.1

**Author** Mark Ewing

**Maintainer** Mark Ewing <b.mark@ewingsonline.com>

**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).

**License** MIT + file LICENSE

**Encoding** UTF-8

**ByteCompile** true

**LazyData** true

**RoxygenNote** 6.1.1

**Suggests** covr, testthat, knitr, rmarkdown, qdap, microbenchmark

**VignetteBuilder** knitr

**NeedsCompilation** no

**Repository** CRAN

**Date/Publication** 2019-03-13 11:10:03 UTC

## R topics documented:

censor_worker . . . . .	2
fastReplace . . . . .	2
filterOverlap . . . . .	3
getMatches . . . . .	3
mgsub . . . . .	4
mgsub_censor . . . . .	4
worker . . . . .	5

<b>Index</b>	<b>6</b>
--------------	----------

---

sensor_worker	<i>mgsub_censor worker</i>
---------------	----------------------------

---

### Description

The hard worker doing everything for mgsub\_censor

### 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 regexpr family

---

fastReplace	<i>Fast escape replace</i>
-------------	----------------------------

---

### Description

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

### Usage

```
fastReplace(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

---

filterOverlap	<i>Filter overlaps from matches</i>
---------------	-------------------------------------

---

**Description**

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

**Usage**

```
filterOverlap(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
---	---

---

getMatches	<i>Get all matches</i>
------------	------------------------

---

**Description**

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

**Usage**

```
getMatches(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>
-------	----------------------------

---

### 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 <a href="#">regexpr</a> / <a href="#">sub</a>

### 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>
--------------	---

---

### 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**

string	a character vector to censor
pattern	regular expressions used to identify where to censor
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 <a href="#">regexpr / sub</a>

**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 <code>regexpr</code> family

# Index

`censor_worker`, [2](#)

`fastReplace`, [2](#)

`filterOverlap`, [3](#)

`getMatches`, [3](#)

`mgsub`, [4](#)

`mgsub_censor`, [4](#)

`regexpr`, [4](#), [5](#)

`sub`, [4](#), [5](#)

`worker`, [5](#)