

Package ‘roxygen’

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Description A Doxygen-like in-source documentation system for Rd, collation, namespace and callgraphs.

Title Literate Programming in R

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Suggests Rgraphviz (>= 1.19.2)

Collate 'functional.R' 'list.R' 'roxygen.R' 'string.R' 'parse.R' 'roclet.R' 'callgraph.R' 'description.R'
'collate.R' 'namespace.R' 'Rd.R' 'roxygenize.R'

R topics documented:

assign.parent	3
caar	4
cadar	4
caddr	5
cadr	5
car	6
cat.description	6
cdddr	7
cddr	7
cdr	8
Compose	8
copy.dir	9
Curry	9
debug	10
description.dependencies	10
DESCRIPTION.FILE	11
DOC.DIR	11
first.non.null	11
guess.name	11

Identity	12
include	12
INST.DIR	12
is.assignment	13
is.even	13
is.function.definition	14
is.nil	14
is.null.string	15
is.odd	15
LINE.DELIMITER	15
make.callgraph.roclet	16
make.collate.roclet	16
make.description.parser	17
make.namespace.roclet	18
make.Rd.roclet	19
make.roclet	21
MAN.DIR	22
MATTER	22
NAMESPACE.FILE	22
Negate	22
nil	22
NIL.STRING	23
noop.description	23
nwords	23
pairwise	24
parse.assignee	24
parse.call	25
parse.default	25
parse.description.file	26
parse.description	26
parse.description.text	27
parse.element	27
parse.error	28
parse.file	28
parse.files	29
parse.formals	29
parse.message	30
parse.name.description	30
parse.name	31
parse.preref	31
parser.default	32
parse.ref.list	32
parse.ref.preref	33
parse.ref	33
parse.ref.scref	34
parse.refs	34
parser.preref	35
parser.scref	35
parse.scref	35
parse.text	36
parse.toggle	36
parse.value	37

parse.warning	37
preorder.flatten.expression	38
preorder.walk.expression	38
preref.parsers	38
prerefs	39
R.DIR	39
Reduce.paste	39
register.parser	40
register.parsers	40
register.preref.parser	41
register.preref.parsers	41
register.scref.parser	42
register.scref.parsers	42
ROXYGEN.DIR	42
roxygenize	43
roxygen-package	43
roxygen	44
SPACE	44
src.lines	45
scref.parsers	45
strcar	45
strcdr	46
strcons	46
strmap	47
substr.regexpr	47
TAG.DELIMITER	48
trim.left	48
trim	48
trim.right	49
word.ref	49
zip.c	50
zip.list	50
zip	51
Index	52

assign.parent	<i>Assign a variable in the parent environment when «-...</i>
---------------	---

Description

Assign a variable in the parent environment when <<- doesn't see to work.

Usage

```
assign.parent(var, value, env)
```

Arguments

var	string of the variable to assign
value	value to be assigned
env	environment of the assignment (environment())

Value

NULL

caar

Composite car/cdr...

Description

Composite *car/cdr*

Usage

`caar(list)`

Arguments

`list` the list from which to extract

Value

The extracted elements

cadar

Composite car/cdr...

Description

Composite *car/cdr*

Usage

`cadar(list)`

Arguments

`list` the list from which to extract

Value

The extracted elements

caddr	<i>Composite car/cdr..</i>
-------	----------------------------

Description

Composite `car/cdr`

Usage

```
caddr(list)
```

Arguments

`list` the list from which to extract

Value

The extracted elements

cadr	<i>Composite car/cdr..</i>
------	----------------------------

Description

Composite `car/cdr`

Usage

```
cadr(list)
```

Arguments

`list` the list from which to extract

Value

The extracted elements

car	<i>First element of a list...</i>
-----	-----------------------------------

Description

First element of a list

Usage

car(list)

Arguments

list the list to first

Value

The first element

cat.description	<i>Print the field-value pair to a given file or standard out.</i>
-----------------	--

Description

Print the field-value pair to a given file or standard out.

Usage

cat.description(field, value, file)

Arguments

field the field to be printed
value the value to be printed
file the file whither to print (a blank string being standard out)

Value

NULL

cdddr	<i>Composite car/cdr...</i>
-------	-----------------------------

Description

Composite `car/cdr`

Usage

```
cdddr(list)
```

Arguments

`list` the list from which to extract

Value

The extracted elements

cddr	<i>Composite car/cdr...</i>
------	-----------------------------

Description

Composite `car/cdr`

Usage

```
cddr(list)
```

Arguments

`list` the list from which to extract

Value

The extracted elements

`cdr`*Return elements after the first of a list.*

Description

Return elements after the first of a list.

Usage

```
cdr(list)
```

Arguments

`list` the list from which to extract

Value

The elements after the first, or `nil` if only one

`Compose`*Compose an arbitrary number of functions.*

Description

Compose an arbitrary number of functions. My Happy Hacking keyboard gave out during the writing of this procedure; moment of silence, please.

Usage

```
Compose (...)
```

Arguments

`...` the functions to be composed

Value

A composed function

copy.dir	<i>Recursively copy a directory thither; optionally unlinking...</i>
----------	--

Description

Recursively copy a directory thither; optionally unlinking the target first; optionally overwriting; optionally verbalizing.

Usage

```
copy.dir(source, target, unlink.target=FALSE, overwrite=FALSE,
         verbose=FALSE)
```

Arguments

source	the source directory
target	the target directory
unlink.target	delete target directory first?
overwrite	overwrite target files?
verbose	verbalize transaction?

Value

NULL

Note

Not tested on non-linux platforms

Curry	<i>Pre-specify a procedures named parameters, returning a new procedure.</i>
-------	--

Description

Pre-specify a procedures named parameters, returning a new procedure.

Usage

```
Curry(FUN, ...)
```

Arguments

FUN	the function to be curried
...	the determining parameters

Details

Thanks, Byron Ellis. <https://stat.ethz.ch/pipermail/r-devel/2007-November/047318.html>

Value

A new function partially determined

debug	<i>Convenience function to print variable-value pairs.</i>
-------	--

Description

Convenience function to print variable-value pairs.

Usage

```
debug(...)
```

Arguments

... named variable of the form a=b, ...

Value

NULL

description.dependencies	<i>Gather a DESCRIPTION's dependencies from the...</i>
--------------------------	--

Description

Gather a 'DESCRIPTION's dependencies from the Package, Depends, Imports, Suggests, and Enhances fields.

Usage

```
description.dependencies(description.file)
```

Arguments

description.file
the 'DESCRIPTION' to parse

Value

A list of dependencies

TODO

Test this!

DESCRIPTION.FILE	Whither to copy collate...
------------------	----------------------------

Description

Whither to copy collate

DOC.DIR	Whither to install docs...
---------	----------------------------

Description

Whither to install docs

first.non.null	Find the first non-null argument.
----------------	-----------------------------------

Description

Find the first non-null argument.

Usage

```
first.non.null(...)
```

Arguments

...	the arguments
-----	---------------

Value

The first non-null argument

guess.name	Pluck name from a hierarchy of candidates; viz.
------------	---

Description

Pluck name from a hierarchy of candidates; viz. name, assignee, S4class, S4method, S4generic.

Usage

```
guess.name(partitum)
```

Arguments

partitum	the parsed elements
----------	---------------------

Value

The guessed name (possibly NULL)

Identity	<i>Identity function.</i>
----------	---------------------------

Description

Identity function.

Usage

Identity(...)

Arguments

... tautological arguments

Details

Is concatenation benign?

Value

The tautologized arguments, concatenated

include	<i>Collate value parser...</i>
---------	--------------------------------

Description

Collate value parser

See Also

make.collate.roclet

INST.DIR	<i>Whither to copy installables...</i>
----------	--

Description

Whither to copy installables

is.assignment	<i>Whether the expression implies assignment by <- or =.</i>
---------------	---

Description

Whether the expression implies assignment by <- or =.

Usage

```
is.assignment (expression)
```

Arguments

expression the expression to check for assignment

Value

Whether or not the expression assigns by <- =

is.even	<i>Is a number even?</i>
---------	--------------------------

Description

Is a number even?

Usage

```
is.even(a)
```

Arguments

a the number to test

Value

Whether the number is even

```
is.function.definition
```

Whether the expression assigns function...

Description

Whether the expression assigns function

Usage

```
is.function.definition(expression)
```

Arguments

`expression` the expression to check for assignment

Value

Whether the expression assigns a function

```
is.nil
```

Whether a list is empty.

Description

Whether a list is empty.

Usage

```
is.nil(list)
```

Arguments

`list` the list to test

Value

Whether the list is empty

is.null.string	<i>Does the string contain no matter, but very well [:space:]?</i>
----------------	--

Description

Does the string contain no matter, but very well [:space:]?

Usage

```
is.null.string(string)
```

Arguments

string	the string to check
--------	---------------------

Value

TRUE if the string contains words, otherwise FALSE

is.odd	<i>Is a number odd?</i>
--------	-------------------------

Description

Is a number odd?

Usage

```
is.odd(a)
```

Arguments

a	the number to test
---	--------------------

Value

Whether the number is odd

LINE.DELIMITER	<i>Sequence that distinguishes roxygen comment from normal comment.</i>
----------------	---

Description

Sequence that distinguishes roxygen comment from normal comment.

```
make.callgraph.roclet
```

Make a callgraph roclet which produces a static call graph...

Description

Make a callgraph roclet which produces a static call graph from a given function at a given depth with or without primitives.

Usage

```
make.callgraph.roclet(dependencies, dir=., verbose=TRUE)
```

Arguments

<code>dependencies</code>	packages required to evaluate interesting functions
<code>dir</code>	the directory to place the callgraphs in
<code>verbose</code>	announce what we're doing

Details

The callgraph roclet supports the following tags:

`@callGraph` Create a call graph of the default depth (currently 2), excluding primitive functions.

`@callGraphPrimitives` Create a call graph of the default depth (currently 2), including primitive functions.

`@callGraphDepth` Change the depth of the callgraph from the default of 2.

The callgraph roclet is awkward in the sense that it requires a function's package to be loadable; which means, like calling LaTeX multiple times, one has to run roxygen on a package, install it, run roxygen again to get the callgraphs, and possibly install the package again.

TODO

`index.html` 'index.html' in 'inst/doc' for callgraphs, possibly with thumbnails in png

Text-only option Option for text-only callgraphs (which are clearer, in my opinion)

```
make.collate.roclet
```

Make collate roclet which parses the given files; topologically...

Description

Make collate roclet which parses the given files; topologically sorting `@includes`, and either merging the `Collate:` directive with a pre-existing 'DESCRIPTION' or writing to standard out.

Usage

```
make.collate.roclet(merge.file, target.file, verbose=TRUE)
```


Arguments

<code>merge.file</code>	'DESCRIPTION' file with which to merge directive; or NULL for none
<code>target.file</code>	whither to cat directive (whether merged or not); blank line is standard out
<code>verbose</code>	whether to describe what we're doing with the target.file

Details

Each `@include` tag should specify the filename of one intrapackage dependency; multiple `@include` tags may be given.

Contains the member function `parse` which parses an arbitrary number of files, and `parse.dir` which recursively parses a directory tree.

Value

Rd roclet

See Also

[make.roclet](#)

Examples

```
#' `example-a.R`, `example-b.R` and `example-c.R` reside
#' in the `example` directory, with dependencies
#' a -> {b, c}. This is `example-a.R`.
#' @include example-b.R
#' @include example-c.R
roxygen()

roclet <- make.collate.roclet()
## Not run: roclet$parse.dir('example')
```

```
make.description.parser
```

Make a parser to parse DESCRIPTION files.

Description

Make a parser to parse 'DESCRIPTION' files.

Usage

```
make.description.parser(parse.default=cat.description,
  pre.parse=noop.description, post.parse=noop.description)
```

Arguments

<code>parse.default</code>	the default parser receiving a field and value
<code>pre.parse</code>	a function receiving the parsed fields before individual parsing
<code>post.parse</code>	a function receiving the parsed fields after individual parsing

Details

Contains the member functions `register.parser`, taking a field and parser; and `parse`, taking the parsed fields from `parse.description.file` or similar.

Value

NULL

```
make.namespace.roclet
```

Make a namespace roclet which parses the given files and writes a list of..

Description

Make a namespace roclet which parses the given files and writes a list of namespace directives to a given file or standard out; see *Writing R Extensions* (<http://cran.r-project.org/doc/manuals/R-exts.pdf>) for details.

Usage

```
make.namespace.roclet(outfile, verbose=TRUE)
```

Arguments

<code>outfile</code>	whither to send output; blank string means standard out
<code>verbose</code>	whether to announce what we're doing with the <i>outfile</i>

Details

The namespace roclet supports the following tags:

Roxygen tag	'NAMESPACE' equivalent
<code>@export</code>	<code>export</code>
<code>@exportClass</code>	<code>exportClasses</code>
<code>@exportMethod</code>	<code>exportMethod</code>
<code>@exportPattern</code>	<code>exportPattern</code>
<code>@S3method</code>	<code>S3method</code>
<code>@import</code>	<code>import</code>
<code>@importFrom</code>	<code>importFrom</code>
<code>@importClassesFrom</code>	<code>importClassesFrom</code>
<code>@importMethodsFrom</code>	<code>importMethodsFrom</code>

`@export` May be specified with or without value; if unadorned, roxygen will try to guess the exported value by assignee, `setMethod`, `setClass`, etc. Otherwise, `@export f g ...` translates to `export(f, g, ...)`.

`@exportClass` Overrides `setClass`.

`@exportMethod` Overrides `setMethod` or `setGeneric`.

`@exportPattern` See "1.6.2 Registering S3 methods" from *Writing R Extensions*.

`@S3method` Overrides the export of an S3 method.

@import See “1.6.1 Specifying imports and exports” from *Writing R Extensions*.

@importFrom See “1.6.1 Specifying imports and exports” from *Writing R Extensions*.

@importClassesFrom See “1.6.6 Name spaces with formal classes and methods” from *Writing R Extensions*.

@importMethodsFrom See “1.6.6 Name spaces with formal classes and methods” from *Writing R Extensions*.

Value

Namespace roclet

Examples

```
#' An example file, example.R, which imports
#' packages foo and bar
#' @import foo bar
roxygen()

#' An exportable function
#' @export
fun <- function() {}

roclet <- make.namespace.roclet()
## Not run: roclet$parse('example.R')
```

make.Rd.roclet	<i>Make an Rd roclet which parses the given files and, if specified, populates...</i>
----------------	---

Description

Make an Rd roclet which parses the given files and, if specified, populates the given subdirectory with Rd files; or writes to standard out. See *Writing R Extensions* (<http://cran.r-project.org/doc/manuals/R-exts.pdf>) for details.

Usage

```
make.Rd.roclet(subdir, verbose=TRUE)
```

Arguments

subdir	directory into which to place the Rd files; if NULL, standard out.
verbose	whether to declare what we’re doing in the <i>subdir</i>

Details

The first paragraph of a roxygen block constitutes its description, the subsequent paragraphs its details; moreover, the Rd roclet supports these tags:

Roxygen tag	Rd analogue
@author	\author
@aliases	\alias, ...
@concept	\concept
@example	<i>n/a</i>

```

@examples      \examples
@keywords      \keyword, ...
@method        \method
@name          \name
@note          \note
@param         \arguments{\item, ...}
@references    \references
@return        \value
@seealso       \seealso
@title         \title
@TODO          n/a
@usage         \usage

```

@author See “2.1.1 Documenting functions” from *Writing R Extensions*.

@aliases A default alias is plucked from the @name or assignee; otherwise, @alias a b ... translates to \alias{a}, \alias{b}, &c. If you specify one alias, however, specify them all.

@concept See “2.8 Indices” from *Writing R Extensions*.

@example Each @example tag specifies an example file relative to the package head; if the file resides in ‘tests’, for instance, it will be checked with R CMD check. The contents of the file will be concatenated under \examples{...}.

@examples Verbatim examples; see “2.1.1 Documenting functions” from *Writing R Extensions*.

@keywords @keywords a b ... translates to \keyword{a}, \keyword{b}, &c.

@method Use @method <generic> <class> to document S3 functions.

@name In the absense of an explicit @name tag, the name of an assignment is plucked from the assignee.

@note See “2.1.1 Documenting functions” from *Writing R Extensions*.

@param Each function variable should have a @param <variable> <description> specified.

@references See “2.1.1 Documenting functions” from *Writing R Extensions*.

@return The return value of the function, or NULL.

@seealso See “2.1.1 Documenting functions” from *Writing R Extensions*.

@title A default title is plucked from the first sentence of the description; that is, the first phrase ending with a period, question mark or newline. In the absence of a description, the title becomes the @name or assignee; lastly, it can be overridden with @title.

@TODO Note to developers to get off their asses.

@usage A default usage is construed from a function’s formals, but can be overridden with @usage (e.g. in the case of multiple functions in one Rd unit).

Value

Rd roclet

Examples

```

#' This sentence describes the function.
#'
#' Here are the details (notice the preceding blank
#' line); the name, title, usage and alias will be
#' automatically generated.
#'

```

```

#' @param a a parameter
#' @return NULL
f <- function(a=1) NULL

#' S3 functions require a @method tag for
#' the time being.
#'
#' @method specialize foo
#' @param f a generic foo
#' @param ... ignored
#' @return The specialized foo
specialize.foo <- function(f, ...)
  actually.specialize(f)

roclet <- make.Rd.roclet('man')
## Not run: roclet$parse('example.R')

```

make.roclet

Abstract roclet that serves as a rudimentary API.

Description

Abstract roclet that serves as a rudimentary API.

Usage

```
make.roclet(parse.default, pre.parse, post.parse, pre.files,
            post.files)
```

Arguments

parse.default	the default parser taking key and value
pre.parse	a callback function taking a list of parsed elements; called before processing a file
post.parse	a callback function taking a list of parsed elements; called after processing a file
pre.files	a callback function with no arguments; called before any file has been parsed
post.files	a callback function with no arguments; called after every file has been parsed

Details

Contains the following member functions:

register.parser takes key and parser

register.parsers takes parser and keys

register.default.parser takes a key

register.default.parsers take parsers

parse parses material contained in files

MAN.DIR	<i>Whither to copy Rds...</i>
---------	-------------------------------

Description

Whither to copy Rds

MATTER	<i>Anti-anti-words...</i>
--------	---------------------------

Description

Anti-anti-words

NAMESPACE.FILE	<i>Whither to copy namespace...</i>
----------------	-------------------------------------

Description

Whither to copy namespace

Negate	<i>Negate a function; borrowed from src/library/base/R/funprog...</i>
--------	---

Description

Negate a function; borrowed from src/library/base/R/funprog.R for pre-2.7 Rs.

Usage

Negate(f)

Arguments

f the function to be negated

Value

The negated function

nil	<i>The empty list...</i>
-----	--------------------------

Description

The empty list

NIL.STRING	<i>Analogue to the empty list...</i>
------------	--------------------------------------

Description

Analogue to the empty list

noop.description	<i>Description parser that does nothing...</i>
------------------	--

Description

Description parser that does nothing

Usage

```
noop.description(field, value)
```

Arguments

field	the field to be parsed
value	the value to be parsed

Value

NULL

nwords	<i>Number of words a string contains.</i>
--------	---

Description

Number of words a string contains.

Usage

```
nwords(string)
```

Arguments

string	the string whose words to count
--------	---------------------------------

Value

Number of words in the string

`pairwise`*Combine a list into pairwise elements; lists should...*

Description

Combine a list into pairwise elements; lists should be of the same length. In case of odd numbers of members, the last will be removed.

Usage

```
pairwise(list)
```

Arguments

`list` the list to be pairwise decomposed

Value

A list of pairwise elements

`parse.assignee`*Find the assignee of the expression...*

Description

Find the assignee of the expression

Usage

```
parse.assignee(expression)
```

Arguments

`expression` the expression in which to find the assignee

Value

The expression's assignee

parse.call	<i>Parse a function call, paying special attention to...</i>
------------	--

Description

Parse a function call, paying special attention to assignments by `<-` or `=`.

Usage

```
parse.call(expressions)
```

Arguments

`expressions` the expression to search through

Value

List of formals and assignee in case of assignment, the processed expression in case of non-assigning function calls (see `parse.srcref`).

parse.default	<i>Default parser which simply emits the key and expression;...</i>
---------------	---

Description

Default parser which simply emits the key and expression; used for elements with optional values (like `@export`) where roclets can do more sophisticated things with `NULL`.

Usage

```
parse.default(key, rest)
```

Arguments

`key` the parsing key
`rest` the expression to be parsed

Value

A list containing the key and expression (possibly null)

`parse.description.file`

Convenience function to call...

Description

Convenience function to call `parse.description.text` with the given 'DESCRIPTION' file.

Usage

```
parse.description.file(description.file)
```

Arguments

`description.file`
the 'DESCRIPTION' file to be parsed

Value

NULL

`parse.description` *Parse description: the premier part of a roxygen block...*

Description

Parse description: the premier part of a roxygen block containing description and option details separated by a blank roxygen line.

Usage

```
parse.description(expression)
```

Arguments

`expression` the description to be parsed

Value

A list containing the parsed description

`parse.description.text`

Parse lines of text corresponding to a package DESCRIPTION file.

Description

Parse lines of text corresponding to a package DESCRIPTION file.

Usage

`parse.description.text (description)`

Arguments

`description` the lines of tex

Value

A list of values indexed by field

`parse.element`

Parse a raw string containing key and expressions.

Description

Parse a raw string containing key and expressions.

Usage

`parse.element (element)`

Arguments

`element` the string containing key and expressions

Value

A list containing the parsed constituents

parse.error	<i>Centrally formatted error; stopping execution...</i>
-------------	---

Description

Centrally formatted error; stopping execution

Usage

```
parse.error(key, message)
```

Arguments

key	the offending key
message	the apposite message

Value

NULL

parse.file	<i>Parse a source file containing roxygen directives.</i>
------------	---

Description

Parse a source file containing roxygen directives.

Usage

```
parse.file(file)
```

Arguments

file	string naming file to be parsed
------	---------------------------------

Value

List containing parsed directives

parse.files	<i>Parse many files at one.</i>
-------------	---------------------------------

Description

Parse many files at one.

Usage

```
parse.files(...)
```

Arguments

... files to be parsed

Value

List containing parsed directives

See Also

[parse.file](#)

parse.formals	<i>Find the formal arguments associated with a given...</i>
---------------	---

Description

Find the formal arguments associated with a given expression (may be `NULL`).

Usage

```
parse.formals(expressions)
```

Arguments

expressions the expressions from which to extract formal arguments

Value

The formal arguments of said expression or `NULL`

<code>parse.message</code>	<i>Centrally formatted message...</i>
----------------------------	---------------------------------------

Description

Centrally formatted message

Usage

`parse.message(key, message)`

Arguments

<code>key</code>	the offending key
<code>message</code>	the apposite message

Value

The formatted message

<code>parse.name.description</code>	<i>Parse an element containing a mandatory name...</i>
-------------------------------------	--

Description

Parse an element containing a mandatory name and description (such as @param).

Usage

`parse.name.description(key, rest)`

Arguments

<code>key</code>	the parsing key
<code>rest</code>	the expression to be parsed

Value

A list containing the key, name and description

`parse.name`*Parse an element containing a single name and only a name;...*

Description

Parse an element containing a single name and only a name; extra material will be ignored and a warning issued.

Usage

```
parse.name(key, name)
```

Arguments

key	parsing key
name	the name to be parsed

Value

A list containing key and name

`parse.preref`*Resorts to the default parser but with a warning about the...*

Description

Resorts to the default parser but with a warning about the unknown key.

Usage

```
parse.preref(key, rest)
```

Arguments

key	the parsing key
rest	the expression to be parsed

Value

A list containing the key and expression (possibly null)

See Also

[parse.default](#)

parser.default	<i>Default parser-lookup; if key not found, return...</i>
----------------	---

Description

Default parser-lookup; if key not found, return the default parser specified.

Usage

```
parser.default(table, key, default)
```

Arguments

table	the parser table from which to look
key	the key upon which to look
default	the parser to return upon unsuccessful lookup

Value

The parser

parse.ref.list	<i>Parse a preref/srcrefs pair..</i>
----------------	--------------------------------------

Description

Parse a preref/srcrefs pair

Usage

```
## S3 method for class 'list':
parse.ref (ref, ...)
```

Arguments

ref	the preref/srcref pair
...	ignored

Value

List combining the parsed preref/srcref

parse.ref.preref *Parse a preref...*

Description

Parse a preref

Usage

```
## S3 method for class 'preref':
parse.ref (ref, ...)
```

Arguments

ref	the preref to be parsed
...	ignored

Value

List containing the parsed preref

parse.ref *Parse either srcrefs, prerefs or pairs of the same.*

Description

Parse either srcrefs, prerefs or pairs of the same.

Usage

```
parse.ref (ref, ...)
```

Arguments

ref	the srcref, preref or pair of the same
...	ignored

Value

List containing the parsed srcref/preref

parse.ref.srcref	<i>Parse a srcref...</i>
------------------	--------------------------

Description

Parse a srcref

Usage

```
## S3 method for class 'srcref':  
parse.ref (ref, ...)
```

Arguments

ref	the srcref to be parsed
...	ignored

Value

List containing the parsed srcref

parse.refs	<i>Parse each of a list of preref/srcref pairs.</i>
------------	---

Description

Parse each of a list of preref/srcref pairs.

Usage

```
parse.refs (preref.srcrefs)
```

Arguments

preref.srcrefs	list of preref/srcref pairs
----------------	-----------------------------

Value

List combining parsed preref/srcrefs

parser.preref	<i>Preref parser-lookup; defaults to parse...</i>
---------------	---

Description

Preref parser-lookup; defaults to parse.preref.

Arguments

key the key upon which to look

Value

The parser

parser.srcref	<i>Srcref parser-lookup; defaults to parse...</i>
---------------	---

Description

Srcref parser-lookup; defaults to parse.srcref.

Arguments

key the key upon which to look

Value

The parser

parse.srcref	<i>By default, srcrefs are ignored; this parser returns nil.</i>
--------------	--

Description

By default, srcrefs are ignored; this parser returns nil.

Usage

```
parse.srcref(pivot, expression)
```

Arguments

pivot the parsing pivot
 expression the expression to be parsed

Value

nil

parse.text	<i>Text-parsing hack using tempfiles for more facility.</i>
------------	---

Description

Text-parsing hack using tempfiles for more facility.

Usage

```
parse.text(...)
```

Arguments

...	lines of text to be parsed
-----	----------------------------

Value

The parse tree

parse.toggle	<i>Turn a binary element on; parameters are ignored.</i>
--------------	--

Description

Turn a binary element on; parameters are ignored.

Usage

```
parse.toggle(key, rest)
```

Arguments

key	parsing key
rest	the expression to be parsed

Value

A list with the key and TRUE

<code>parse.value</code>	<i>Parse an element with a mandatory value.</i>
--------------------------	---

Description

Parse an element with a mandatory value.

Usage

```
parse.value(key, rest)
```

Arguments

<code>key</code>	the parsing key
<code>rest</code>	the expression to be parsed

Value

A list containing the key and value

<code>parse.warning</code>	<i>Centrally formatted warning...</i>
----------------------------	---------------------------------------

Description

Centrally formatted warning

Usage

```
parse.warning(key, message)
```

Arguments

<code>key</code>	the offending key
<code>message</code>	the apposite message

Value

NULL

`preorder.flatten.expression`
Flatten a nested expression into a list, preorderly.

Description

Flatten a nested expression into a list, preorderly.

Usage

```
preorder.flatten.expression(expression)
```

Arguments

<code>expression</code>	the root of the expression to be flattened
-------------------------	--

Value

A list containing the flattened expression

`preorder.walk.expression`
Recursively walk an expression (as returned by parse) in...

Description

Recursively walk an expression (as returned by parse) in preorder.

Usage

```
preorder.walk.expression(proc, expression)
```

Arguments

<code>proc</code>	the procedure to apply to each subexpression
<code>expression</code>	the root of the expression

Value

NULL

`preref.parsers` *Preref parser table...*

Description

Preref parser table

TODO

number parser?

prerefs	<i>Comment blocks (possibly null) that precede a file's expressions.</i>
---------	--

Description

Comment blocks (possibly null) that precede a file's expressions.

Usage

```
prerefs(srcfile, srcrefs)
```

Arguments

srcfile	result of running srcfile on an interesting file
srcrefs	the resultant srcrefs

Value

A list of prerefs that resemble srcrefs in form, i.e. with srcfile and lloc

R.DIR	<i>Whence to copy source code...</i>
-------	--------------------------------------

Description

Whence to copy source code

Reduce.paste	<i>Ad-hoc abstraction to paste processed list-elements together.</i>
--------------	--

Description

Ad-hoc abstraction to paste processed list-elements together.

Usage

```
Reduce.paste(proc, elts, sep)
```

Arguments

proc	the procedure to apply to the elements
elts	the elements to be processed
sep	the glue to joined the processed elements

Value

The processed elements as a glued string

register.parser	Register a parser with a table...
-----------------	-----------------------------------

Description

Register a parser with a table

Usage

```
register.parser(table, key, parser)
```

Arguments

table	the table under which to register
key	the key upon which to register
parser	the parser callback to register; a function taking key and expression

Value

NULL

register.parsers	Register many parsers at once.
------------------	--------------------------------

Description

Register many parsers at once.

Usage

```
register.parsers(table, parser, ...)
```

Arguments

table	the table under which to register
parser	the parser to register
...	the keys upon which to register

Value

NULL

`register.preref.parser`*Specifically register a preref parser...*

Description

Specifically register a preref parser

Arguments

<code>key</code>	the key upon which to register
<code>parser</code>	the parser callback to register; a function taking <code>key</code> and <code>expression</code>

Value

NULL

See Also

[register.parser](#)

`register.preref.parsers`*Register many preref parsers at once.*

Description

Register many preref parsers at once.

Arguments

<code>parser</code>	the parser to register
<code>...</code>	the keys upon which to register

Value

NULL

```
register.srcref.parser
```

Specifically register a srcref parser..

Description

Specifically register a srcref parser

Arguments

key	the key upon which to register
parser	the parser callback to register; a function taking key and expression

Value

NULL

See Also

[register.parser](#)

```
register.srcref.parsers
```

Register many srcref parsers at once.

Description

Register many srcref parsers at once.

Arguments

parser	the parser to register
...	the keys upon which to register

Value

NULL

```
ROXYGEN.DIR
```

Whither to copy package...

Description

Whither to copy package

roxygenize	<i>Process a package with the Rd, namespace and collate roclets.</i>
------------	--

Description

Process a package with the Rd, namespace and collate roclets.

Usage

```
roxygenize(package.dir, roxygen.dir, copy.package=TRUE, overwrite=TRUE,
  unlink.target=FALSE)
```

Arguments

package.dir	the package's top directory
roxygen.dir	whither to copy roxygen files; defaults to 'package.roxygen'.
copy.package	copies the package over before adding/manipulating files.
overwrite	overwrite target files
unlink.target	unlink target directory before processing files

Value

NULL

TODO

Options to enable/disable specific roclet (`--no-callgraphs`, etc.)

roxygen-package	<i>Literate Programming in R</i>
-----------------	----------------------------------

Description

Roxygen is a Doxygen-like documentation system for R; allowing in-source specification of Rd files, collation and namespace directives.

Details

Package:	Roxygen
Type:	Package
Version:	0.1
Date:	2008-08-25
License:	GPL (>= 2)
LazyLoad:	yes

Roxygen is run on a package (hereafter <package>) by R CMD roxygen <package> or Rcmd roxygen.sh <package> on Windows. By default, it creates a directory '<package>.roxygen'

with the complete package cum populated Rd files, ‘NAMESPACE’, etc.; but can also operate destructively on the package itself with the ‘-d’ option.

See the vignette (‘roxygen.pdf’) or manual (‘roxygen-manual.pdf’) for details.

Author(s)

Peter Danenberg <pcd@roxygen.org>, Manuel Eugster <Manuel.Eugster@stat.uni-muenchen.de>
Maintainer: Peter Danenberg <pcd@roxygen.org>

See Also

See `make.Rd.roclet`, `make.namespace.roclet`, `make.collate.roclet`, `make.callgraph.roclet` for an overview of roxygen tags.
See `roxygenize` for an alternative to ‘R CMD roxygen’.

Examples

```
## To process a package in `pkg`, run `R CMD roxygen pkg`; or:  
## Not run: roxygenize('pkg')
```

roxygen	<i>No-op for sourceless files...</i>
---------	--------------------------------------

Description

No-op for sourceless files

Value

NULL

SPACE	<i>Absence of words...</i>
-------	----------------------------

Description

Absence of words

src.lines	<i>Extract the source code from parsed elements...</i>
-----------	--

Description

Extract the source code from parsed elements

Usage

```
src.lines(partitum)
```

Arguments

partitum	the parsed elements
----------	---------------------

Value

The lines of source code

srcref.parsers	<i>Srcref parser table...</i>
----------------	-------------------------------

Description

Srcref parser table

strcar	<i>First word in a string.</i>
--------	--------------------------------

Description

First word in a string.

Usage

```
strcar(string)
```

Arguments

string	the string whose word to finde
--------	--------------------------------

Value

The first word

strcdr	<i>Words after first in a string.</i>
--------	---------------------------------------

Description

Words after first in a string.

Usage

```
strcdr(string)
```

Arguments

string	the string whose words to find
--------	--------------------------------

Value

The words after first in the string

strcons	<i>Join two string.</i>
---------	-------------------------

Description

Join two string.

Usage

```
strcons(consor, consee, sep)
```

Arguments

consor	the joining string
consee	the joined string
sep	the intervening space

Value

The joined strings

strmap	<i>Map through the words in a string, joining the mapped...</i>
--------	---

Description

Map through the words in a string, joining the mapped words with a separator.

Usage

```
strmap(proc, sep, string)
```

Arguments

proc	procedure to apply to each word
sep	the separator joining the mapped words
string	the string to be mapped

Details

General enough to be designated ‘map’: isn’t it closer to a specialized reduce?

Value

Mapped words separated by sep

substr.regexpr	<i>Actually do the substring representation that...</i>
----------------	---

Description

Actually do the substring representation that regexpr should do; does not acknowledge groups, since regexpr doesn’t.

Usage

```
substr.regexpr(pattern, text)
```

Arguments

pattern	the pattern to match
text	the text to match against

Value

The matched substring

<code>TAG.DELIMITER</code>	<i>Symbol that delimits tags.</i>
----------------------------	-----------------------------------

Description

Symbol that delimits tags.

<code>trim.left</code>	<i>Trim [:space:] to the left of a string.</i>
------------------------	--

Description

Trim [:space:] to the left of a string.

Usage

```
trim.left(string)
```

Arguments

<code>string</code>	the string to be trimmed
---------------------	--------------------------

Value

A left-trimmed string

<code>trim</code>	<i>Trim [:space:] on both sides of a string.</i>
-------------------	--

Description

Trim [:space:] on both sides of a string.

Usage

```
trim(string)
```

Arguments

<code>string</code>	the string to be trimmed
---------------------	--------------------------

Value

A trimmed string

trim.right	Trim [:space:] to the right of a string.
------------	--

Description

Trim [:space:] to the right of a string.

Usage

```
trim.right(string)
```

Arguments

string	the string to be trimmed
--------	--------------------------

Value

A right-trimmed string

word.ref	Find the nth word in a string.
----------	--------------------------------

Description

Find the nth word in a string.

Usage

```
word.ref(string, n)
```

Arguments

string	the string to search in
n	the nth word to find

Value

A list containing:

start	the first letter of the word.
end	the last letter of the word.

Undefined if no such word; though end may be less than start in such a case.

`zip.c`*Zip using c.*

Description

Zip using `c`.

Usage

```
zip.c(...)
```

Arguments

... the lists to be zipped

Value

A list of tuples

See Also

[zip](#)

`zip.list`*Zip using list.*

Description

Zip using `list`.

Usage

```
zip.list(...)
```

Arguments

... the lists to be zipped

Value

A list of tuples

See Also

[zip](#)

`zip`*Zip n lists together into tuples of...*

Description

Zip n lists together into tuples of length n .

Usage

```
zip(zipper, ...)
```

Arguments

<code>zipper</code>	the zipping function
<code>...</code>	the lists to be zipped

Value

A list of tuples

Index

*Topic package

- roxygen-package, 41
- aliases (*make.Rd.roclet*), 17
- assign.parent, 1
- author (*make.Rd.roclet*), 17
- caar, 2
- cadar, 2
- caddr, 3
- cadr, 3
- callGraph
 - (*make.callgraph.roclet*), 14
- callGraphDepth
 - (*make.callgraph.roclet*), 14
- callGraphPrimitives
 - (*make.callgraph.roclet*), 14
- car, 4
- cat.description, 4
- cdddr, 5
- cddr, 5
- cdr, 6
- Compose, 6
- concept (*make.Rd.roclet*), 17
- copy.dir, 7
- Curry, 7
- debug, 8
- description.dependencies, 8
- DESCRIPTION.FILE, 9
- DOC.DIR, 9
- example (*make.Rd.roclet*), 17
- examples (*make.Rd.roclet*), 17
- export (*make.namespace.roclet*), 16
- exportClass
 - (*make.namespace.roclet*), 16
- exportMethod
 - (*make.namespace.roclet*), 16
- exportPattern
 - (*make.namespace.roclet*), 16
- first.non.null, 9
- guess.name, 9
- Identity, 10
- import (*make.namespace.roclet*), 16
- importClassesFrom
 - (*make.namespace.roclet*), 16
- importFrom
 - (*make.namespace.roclet*), 16
- importMethodsFrom
 - (*make.namespace.roclet*), 16
- include, 10
- INST.DIR, 10
- is.assignment, 11
- is.even, 11
- is.function.definition, 12
- is.nil, 12
- is.null.string, 13
- is.odd, 13
- keywords (*make.Rd.roclet*), 17
- LINE.DELIMITER, 13
- make.callgraph.roclet, 14, 42
- make.collate.roclet, 14, 42
- make.description.parser, 15
- make.namespace.roclet, 16, 42
- make.Rd.roclet, 17, 42
- make.roclet, 15, 19
- MAN.DIR, 20
- MATTER, 20
- method (*make.Rd.roclet*), 17
- name (*make.Rd.roclet*), 17
- NAMESPACE.FILE, 20
- Negate, 20
- nil, 20
- NIL.STRING, 21
- noop.description, 21
- note (*make.Rd.roclet*), 17
- nwords, 21
- pairwise, 22
- param (*make.Rd.roclet*), 17
- parse.assignee, 22
- parse.call, 23
- parse.default, 23, 29

- parse.description, [24](#)
- parse.description.file, [16](#), [24](#)
- parse.description.text, [24](#), [25](#)
- parse.element, [25](#)
- parse.error, [26](#)
- parse.file, [26](#), [27](#)
- parse.files, [27](#)
- parse.formals, [27](#)
- parse.message, [28](#)
- parse.name, [29](#)
- parse.name.description, [28](#)
- parse.preref, [29](#)
- parse.ref, [31](#)
- parse.ref.list, [30](#)
- parse.ref.preref, [31](#)
- parse.ref.srcref, [32](#)
- parse.refs, [32](#)
- parse.srcref, [33](#)
- parse.text, [34](#)
- parse.toggle, [34](#)
- parse.value, [35](#)
- parse.warning, [35](#)
- parser.default, [30](#)
- parser.preref, [33](#)
- parser.srcref, [33](#)
- preorder.flatten.expression, [36](#)
- preorder.walk.expression, [36](#)
- preref.parsers, [36](#)
- prerefs, [37](#)

- R.DIR, [37](#)
- Reduce.paste, [37](#)
- references (*make.Rd.roclet*), [17](#)
- register.parser, [38](#), [39](#), [40](#)
- register.parsers, [38](#)
- register.preref.parser, [39](#)
- register.preref.parsers, [39](#)
- register.srcref.parser, [40](#)
- register.srcref.parsers, [40](#)
- return (*make.Rd.roclet*), [17](#)
- roxygen, [42](#)
- roxygen-package, [41](#)
- ROXYGEN.DIR, [40](#)
- roxygenize, [41](#), [42](#)

- S3method (*make.namespace.roclet*), [16](#)
- seealso (*make.Rd.roclet*), [17](#)
- setClass (*make.Rd.roclet*), [17](#)
- setGeneric (*make.Rd.roclet*), [17](#)
- setMethod (*make.Rd.roclet*), [17](#)
- SPACE, [42](#)
- src.lines, [43](#)
- srcref.parsers, [43](#)
- strcar, [43](#)
- strodr, [44](#)
- strcons, [44](#)
- strmap, [45](#)
- substr.regexpr, [45](#)

- TAG.DELIMITER, [46](#)
- title (*make.Rd.roclet*), [17](#)
- TODO (*make.Rd.roclet*), [17](#)
- trim, [46](#)
- trim.left, [46](#)
- trim.right, [47](#)

- usage (*make.Rd.roclet*), [17](#)

- word.ref, [47](#)

- zip, [48](#), [49](#)
- zip.c, [48](#)
- zip.list, [48](#)