

Package ‘RTLknitr’

November 21, 2025

Type Package

Title Right to Left Dynamic Documents Using 'knitr'

Version 1.1.1

Date 2025-11-21

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Description Provide seamless support for right-to-left (RTL) languages, such as Persian and Arabic, in R Markdown documents and 'LaTeX' output. It includes functions and hooks that enable easy integration of RTL language content, allowing users to create documents that adhere to RTL writing conventions. For in-depth insights into dynamic documents and the 'knitr' package, consider referring to Xie, Y (2014) <ISBN: 978-1-482-20353-0>.

License GPL (>= 2)

URL <https://github.com/FoadEsmaeili5/RTLknitr>

Encoding UTF-8

RoxygenNote 7.3.2

Depends R (>= 4.1)

Imports knitr, magrittr, gt, bookdown

NeedsCompilation no

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Repository CRAN

Date/Publication 2025-11-21 16:30:02 UTC

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Centering	<i>Centering Caption of LaTeX Table</i>
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Description

This function adds the "\centering" command to the caption of a LaTeX table, allowing the caption to be centered in the final output.

Usage

```
Centering(x)
```

Arguments

x LaTeX-formatted table with a caption.

Value

LaTeX-formatted table with a centered caption.

Examples

```
latex_table <- "\\begin{table}\\caption{This is a caption.}\\end{table}"
centered_table <- Centering(latex_table)
print(centered_table)
```

hooks_rtl	<i>Customize knitr Hooks for Right-to-Left (RTL) Text Formatting</i>
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Description

This function defines customized knitr hooks to handle RTL (right-to-left) text formatting for languages like Persian and Arabic for Sweave. It allows you to modify the appearance of output, messages, warnings, and errors when producing RTL documents.

Usage

```
hooks_rtl(fontcolor = "black", bgcolor = "gray")
```

Arguments

fontcolor Font color for inline output. Default is "black".
 bgcolor Background color for inline output. Default is "gray".

Value

The function returns a list of customized `knit_hooks` that handle RTL text formatting. It modifies the output, messages, warnings, errors, inline expressions, and source code to include appropriate commands for RTL languages.

When `'echo=FALSE'` you need to use `'rtl=TRUE'` in order to get the output appropriately.

References

Xie, Y. (2014). *Dynamic Documents with R and knitr*. Chapman & Hall/CRC. ISBN: 978-1482203530.

See Also

Use [markdown_rtl](#) to enable RTL formatting for Markdown documents.

Examples

```
# Define custom RTL hooks
rtl_hooks <- hooks_rtl()

# Apply custom RTL hooks to `knit_hooks`
knitr::knit_hooks$set(rtl_hooks)

# After setting the hooks, knit your document as usual to produce RTL formatting.
```

markdown_rtl

Enable Right-to-Left (RTL) Formatting for Markdown Documents

Description

This function modifies the behavior of `knit` output hooks to handle RTL (right-to-left) text formatting for Markdown documents, particularly for languages like Persian and Arabic.

Usage

```
markdown_rtl(...)
```

Arguments

... Additional arguments to be passed to the underlying `knit_hooks$set` function.

Details

The `markdown_rtl` function wraps the existing `knit_hooks` with custom commands that switch the text direction between Latin and Persian. It enhances the appearance of the output, messages, warnings, and errors in RTL languages.

Value

The function has no explicit return value. It modifies the behavior of `knit_hooks` for RTL formatting.

References

Xie, Y. (2014). *Dynamic Documents with R and knitr*. Chapman & Hall/CRC. ISBN: 978-1482203530.

See Also

Use [hooks_rtl](#) for handling RTL formatting within code chunks.

Examples

```
# Enable RTL formatting for the current R Markdown document
markdown_rtl()

# After enabling RTL formatting, proceed to knit the R Markdown document as usual.
# The output and messages will be formatted for RTL languages.
```

markdown_rtl_header	<i>Generate a YAML header for an R Markdown document with RTL support</i>
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Description

This function generates a YAML header for an R Markdown document that will produce a PDF output with support for Persian typesetting using the `xepersian` package and the `Arial` font.

Usage

```
markdown_rtl_header()
```

Value

A character string containing the YAML header.

Examples

```
markdown_rtl_header()
```

remove_escape_latex *Remove Escaped LaTeX Formulas from Text*

Description

This function removes escaped LaTeX formulas and formatting commands from LaTeX-formatted text.

Usage

```
remove_escape_latex(x)
```

Arguments

x A character vector or string containing LaTeX-formatted text.

Value

A character vector with escaped LaTeX formulas and formatting commands removed.

Examples

```
# Remove escaped LaTeX formulas from a string
cleaned_text <- remove_escape_latex("\\\\textbf\\{Hello\\}, $\\alpha$ formula")
print(cleaned_text)
```

tab_header_lbl *Create a Labeled Header for gt Tables*

Description

This function enhances the gt package's tab_header function by allowing the inclusion of a label for referencing the table in LaTeX documents.

Usage

```
tab_header_lbl(data, title, subtitle = NULL, label = NULL)
```

Arguments

data A gt table object.
title Title of the table.
subtitle Subtitle of the table.
label Label for referencing the table in LaTeX.

Details

Be sure to use this function at the end of `gt` format functions. This function returns a LaTeX-formatted table header.

Value

LaTeX-formatted table header.

Examples

```
require(gt)
head(iris) |> gt() |> tab_header_lbl(title = "iris",label = "tab:iris") |> cat()
```

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