Package: onbrand (via r-universe)

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Type Package

Title Templated Reporting Workflows in Word and PowerPoint

Version 1.0.6

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Description Automated reporting in Word and PowerPoint can require customization for each organizational template. This package works around this by adding standard reporting functions and an abstraction layer to facilitate automated reporting workflows that can be replicated across different organizational templates.

URL https://onbrand.ubiquity.tools/

BugReports https://github.com/john-harrold/onbrand/issues

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Encoding UTF-8

LazyData FALSE

RoxygenNote 7.3.1

VignetteBuilder knitr

Imports digest, dplyr, flextable, ggplot2, magrittr, officer (>= 0.3.7), stringr, rlang, yaml

Suggests knitr, knitrdata, markdown, rmarkdown, testthat

Repository https://john-harrold.r-universe.dev

RemoteUrl https://github.com/john-harrold/onbrand

RemoteRef HEAD

RemoteSha ab1a95db887981d9bf2d732ceee79dbb21367e71

Contents

`add_pptx_ph_content` *Populate Placeholder In Officer Report*

Description

Places content in a PowerPoint placeholder for a given officer document.

Usage

```
add_pptx_ph_content(
  obnd,
  content_type,
  content,
  ph_label = NULL,
  user_location = NULL,
  verbose = TRUE
)
```

Arguments

`obnd`	onbrand report object
`content_type`	string indicating the content type
`content`	content (see details below)
`ph_label`	placeholder location (text, or NULL if user_location is used)
`user_location`	User specified location using ph_location() or NULL if ph_label is used.

`verbose` Boolean variable when set to TRUE (default) messages will be displayed on the terminal; Messages will be included in the returned onbrand object.

Details

For each content type listed below the following content is expected:

- `"text"` text string of information
- `"list"` vector of paired values (indent level and text), eg. c(1, "Main Bullet", 2 "Sub Bullet")
- `"imagefile"` string containing path to image file
- `"ggplot"` ggplot object, eg. p = ggplot() + ...
- `"table"` list containing the table content and other options with the following elements (defaults in parenthesis):
  - `table` Data frame containing the tabular data
  - `header` Boolean variable to control displaying the header (`TRUE`)
  - `first_row` Boolean variable to indicate that the first row contains header information (`TRUE`)
- `"flextable"` list containing flextable content and other options with the following elements (defaults in parenthesis):
  - `table` Data frame containing the tabular data
  - `header_top`, `header_middle`, `header_bottom` (`NULL`) a list with the same names as the data frame names containing the tabular data and values with the header text to show in the table
  - `header_format` string containing the format, either `"text"`, or `"md"` (default `NULL` assumes `"text"` format)
  - `merge_header` (`TRUE`) Set to true to combine column headers with the same information
  - `table_body_alignment`, table_header_alignment ("center") Controls alignment
  - `table_autofit` (`TRUE`) Automatically fit content, or specify the cell width and height with `cwidth` (`0.75`) and `cheight` (`0.25`)
  - `table_theme` (`"theme_vanilla"`) Table theme
- `"flextable_object"` user defined flextable object

Value

officer pptx object with the content added

See Also

`view_layout` `report_add_slide`

build_span *Construct Table Span From Components*

Description

Takes a large table, common rows, and header information and constructs a table that is a subset of those components using supplied ranges of rows and columns.

Usage

```
build_span(
  table_body = NULL,
  row_common = NULL,
  table_body_head = NULL,
  row_common_head = NULL,
  header_format = "text",
  obnd = NULL,
  row_sel = NULL,
  col_sel = NULL,
  table_alignment = "center",
  inner_border = officer::fp_border(color = "black", width = 0.3),
  outer_border = officer::fp_border(color = "black", width = 2),
  set_header_inner_border_v = TRUE,
  set_header_inner_border_h = TRUE,
  set_header_outer_border = TRUE,
  set_body_inner_border_v = TRUE,
  set_body_inner_border_h = FALSE,
  set_body_outer_border = TRUE,
  notes_detect = NULL
)
```

Arguments

table_body	Data frame with the body of the large table.
row_common	Data frame with the common rows.
table_body_head	Data frame or matrix with headers for the table body.
row_common_head	Data frame or matrix with headers for the common rows.
header_format	Format of the header either "text" (default) or "md" for markdown.
obnd	Optional onbrand object used to format markdown. The default NULL value will use default formatting.
row_sel	Indices of rows to build to the table with.
col_sel	Indices of columns to build to the table with.

table_alignment
: Character string specifying the alignment #'of the table (body and headers). Can be "center" (default), "left", "right", or "justify"

inner_border
: Border object for inner border lines defined using officer::fp_border()

outer_border
: Border object for outer border lines defined using officer::fp_border()

set_header_inner_border_v
: Boolean value to enable or disable inner vertical borders for headers

set_header_inner_border_h
: Boolean value to enable or disable inner horizontal borders for headers

set_header_outer_border
: Boolean value to enable or disable outer border for headers

set_body_inner_border_v
: Boolean value to enable or disable inner vertical borders for the body

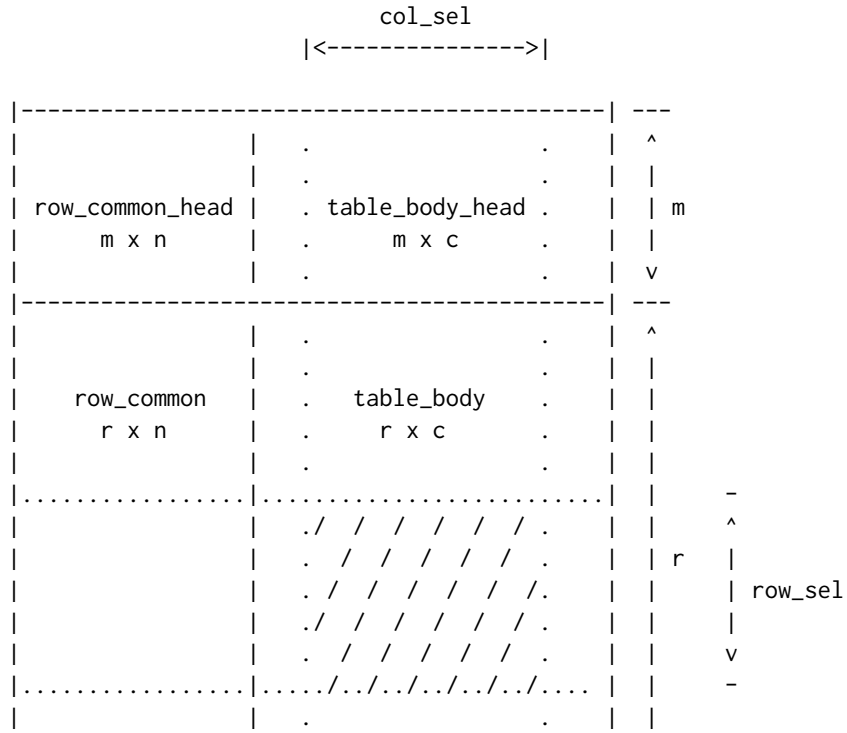
set_body_inner_border_h
: Boolean value to enable or disable inner horizontal borders for the body

set_body_outer_border
: Boolean value to enable or disable outer border borders for the body

notes_detect
: Vector of strings to detect in output tables (example c("NC", "BLQ")).

Details

The way the data frames relate to each other are mapped out below. The dimensions of the different data frames are identified below (nrow x ncol)



```
|                  |   .                   .    |  v
|-----------------------------------------------| ---

|<---------------->|<------------------------>|
        n                     c
```

Value

list with the following elements

- df: Data frame with the built table.
- ft: The data frame as a flextable object.
- notes: Note placeholders found in the table.

Examples

```
if(interactive()){
trow = c(1:51)
tcol = c(1:63)
cht  = c(rep("A", 20),
         rep("B", 20),
         rep("C", 11))


table_body = NULL
for(cn in tcol){
  if(is.null(table_body)){
    tmp_cmd =  paste0("table_body = data.frame(C_",
                      cn,"= paste0(trow, ',', cn))")
  } else {
    tmp_cmd =  paste0("table_body = cbind(table_body, data.frame(C_",
                      cn,"= paste0(trow, ',', cn)))")
  }
  eval(parse(text=tmp_cmd))
}


table_body[1,]    = "BQL"
table_body[5,8]   = "NC"
table_body[20,]   = "BQL"
table_body[25,2]  = "NC"

row_common = data.frame(
    ID = trow,
    CH = cht)


row_common_head = data.frame(
    ID  = c("ID",     "ID", "ID"),
    CH  = c("Cohort", "Cohort", "Cohort"))
```

```
  table_body_head = NULL

  cidx = 1
  for(cn in names(table_body)){

    units = "units"
    range = "range"

    if(cidx < 4){
      range = "R A"
    } else if(cidx < 12 ){
      range = "R B"
    } else if(cidx < 18 ){
      range = "R C"
    } else if(cidx < 28 ){
      range = "R D"
    } else if(cidx < 35 ){
      range = "R E"
    } else if(cidx < 48 ){
      range = "R F"
    } else if(cidx < 55 ){
      range = "R G"
    } else if(cidx < 60 ){
      range = "R H"
    } else {
      range = "R I"
    }

    if(cidx < 4){
      units = "U A"
    } else if(cidx < 8  ){
      units = "U B"
    } else if(cidx < 14 ){
      units = "U Q"
    } else if(cidx < 18 ){
      units = "U C"
    } else if(cidx < 28 ){
      units = "U D"
    } else if(cidx < 35 ){
      units = "U E"
    } else if(cidx < 48 ){
      units = "U F"
    } else if(cidx < 55 ){
      units = "U G"
    } else if(cidx < 60 ){
      units = "U H"
    } else {
      units = "U I"
    }

    if(is.null(table_body_head)){
      tmp_cmd =  paste0("table_body_head = data.frame(",
```

```
                    cn,'= c("', cn, '", units, range))')
  } else {
    tmp_cmd =  paste0("table_body_head = cbind(table_body_head, data.frame(",
                    cn,'= c("', cn, '", units, range)))')
  }

  eval(parse(text=tmp_cmd))
  cidx = cidx + 1
}

res =
span_table(table_body      = table_body,
           row_common      = row_common,
           table_body_head = table_body_head,
           row_common_head = row_common_head,
           max_row         = 20,
           max_col         = 10,
           notes_detect    = c("BQL", "NC"))

# Notes detected in the first table:
res[["tables"]][["Table 1"]][["notes"]]

# First table as a data frame:
res[["tables"]][["Table 1"]][["df"]]

# First table as a flextable:
res[["tables"]][["Table 1"]][["ft"]]

}
```

`fetch_md_def` *Fetch Markdown Default Format from onbrand Object*

Description

Used to extract the formatting elements for a given style from an onbrand object.

Usage

```
fetch_md_def(obnd, style = "default", verbose = TRUE)
```

Arguments

obnd	onbrand report object
style	name of style in md_def for the report type in obnd to fetch (`"default"`)
verbose	Boolean variable when set to TRUE (default) messages will be displayed on the terminal; Messages will be included in the returned onbrand object.

Value

list with the following elements

- isgood: Boolean variable indicating success or failure
- md_def: List with the default format for the specified style
- msgs: Vector of messages

Examples

```
obnd = read_template(
   template = file.path(system.file(package="onbrand"), "templates", "report.docx"),
   mapping  = file.path(system.file(package="onbrand"), "templates", "report.yaml"))
obnd = fetch_md_def(obnd, style="default")
md_def =  obnd[["md_def"]]
```

---

fetch_officer_object *Extracts Officer Object From Onbrand Report Object*

Description

If you need modify the onbrand report object directly with officer functions you can use this function to extract the report object from the onbrand object.

Usage

```
fetch_officer_object(obnd, verbose = TRUE)
```

Arguments

obnd	onbrand report object
verbose	Boolean variable when set to TRUE (default) messages will be displayed on the terminal; Messages will be included in the returned onbrand object.

Value

List with the following elements

- isgood: Boolean variable indicating success or failure
- rpt: Officer object
- msgs: Vector of messages

See Also

set_officer_object

Examples

```
obnd = read_template(
      template = file.path(system.file(package="onbrand"), "templates", "report.pptx"),
      mapping  = file.path(system.file(package="onbrand"), "templates", "report.yaml"))

rpt = fetch_officer_object(obnd)$rpt
```

`fetch_report_format` *Fetch The Specified Report Formatting Information*

Description

Returns a list of the default font format for the report element

Usage

```
fetch_report_format(obnd, format_name = "default", verbose = TRUE)
```

Arguments

obnd	onbrand report object
format_name	Name of report format to fetch; this is defined in the md_def
verbose	Boolean variable when set to TRUE (default) messages will be displayed on the terminal; Messages will be included in the returned list. section for the given report type ("default")

Value

list containing the following elements

- isgood: Boolean variable indicating success or failure
- msgs: Vector of messages
- format_details: List containing the format details for the specified format_name

Examples

```
obnd = read_template(
       template = file.path(system.file(package="onbrand"), "templates", "report.pptx"),
        mapping = file.path(system.file(package="onbrand"), "templates", "report.yaml"))

fr = fetch_report_format(obnd)
```

fetch_rpttype *Determines Type of Report Template*

Description

Based on the file extension for a template

Usage

```
fetch_rpttype(template = NULL, verbose = TRUE)
```

Arguments

template	Name of PowerPoint or Word file
verbose	Boolean variable when set to TRUE (default) messages will be displayed on the terminal; Messages will be included in the returned list.

Value

List with the following elements

- rpttype: Either Word, PowerPoint or Unknown
- rptext: Either docx, pptx, or Unknown
- rptobj: Either rdocx, rpptx, or Unknown
- isgood: Boolean variable indicating success or failure
- msgs: Vector of messages

Examples

```
rpttype = fetch_rpttype(template=
  file.path(system.file(package="onbrand"), "templates", "report.pptx"))
```

fph *Fetch PowerPoint Placeholder*

Description

Retrieves the placeholder name in PowerPoint for a specified layout element.

Usage

```
fph(obnd, template = NULL, pn = NULL, verbose = TRUE)
```

Arguments

obnd	onbrand report object
template	Name of slide template (name from templates in yaml mapping file)
pn	Placehodler name to fetch
verbose	Boolean variable when set to TRUE (default) messages will be displayed on the terminal; Messages will be included in the returned list.

Value

List with the following elements

- ph: Placeholder label or NULL if failure
- type: Placeholder content type in PowerPoint or NULL if failure
- isgood: Boolean variable indicating success or failure
- msgs: Vector of messages

Examples

```
# Creating an onbrand object:
obnd = read_template(
      template = file.path(system.file(package="onbrand"), "templates", "report.pptx"),
      mapping  = file.path(system.file(package="onbrand"), "templates", "report.yaml"))

# Pulling out the placeholder information:
ph = fph(obnd, "two_content_header_text", "content_left_header")
```

---

fst *Fetch Word Style*

Description

Retrieves the style name in Word for a specified onbrand style name.

Usage

```
fst(obnd, osn = NULL, verbose = TRUE)
```

Arguments

obnd	onbrand report object
osn	onbrand Word style name to fetch
verbose	Boolean variable when set to TRUE (default) messages will be displayed on the terminal; Messages will be included in the returned list.

Value

List with the following elements

- wsn: Word style name that corresponds to the specified onbrand style name (osn)
- dff: Default font format for that style (the corresponding md_def section of the yaml file for that style)
- isgood: Boolean variable indicating success or failure
- msgs: Vector of messages

Examples

```
# Creating an onbrand object:
obnd = read_template(
      template = file.path(system.file(package="onbrand"), "templates", "report.docx"),
      mapping  = file.path(system.file(package="onbrand"), "templates", "report.yaml"))

# Pulling out the placeholder information:
st = fst(obnd, "Heading_3")
```

---

ft_apply_md *Render Markdown in flextable Object*

Description

Takes a flextable object and renders any markdown in the specified part.

Usage

```
ft_apply_md(ft, obnd = NULL, part = "body")
```

Arguments

ft	Flextable object.
obnd	Optional onbrand object used to format markdown. The default NULL value will use default formatting.
part	Part of the table can be one of "all", "body" (default), "header", or "footer"

Value

flextable with markdown applied

`md_to_officer` *Parse Markdown for Officer*

Description

Parses text in Markdown format and returns fpar and as_paragraph command strings to be used with officer

Usage

```
md_to_officer(
  str,
 default_format = list(color = "black", font.size = 12, bold = FALSE, italic = FALSE,
  underlined = FALSE, font.family = "Cambria (Body)", vertical.align = "baseline",
    shading.color = "transparent")
)
```

Arguments

`str`	string containing Markdown can contain the following elements: • paragraph: two or more new lines creates a paragraph • bold: can be either `"**text in bold**"` or `"__text in bold__"` • italics: can be either `"*text in italics*"` or `"_text in italics_"` • subscript: `"Normal~subscript~"` • superscript: `"Normal^superscript^"` • color: `"<color:red>red text</color>"` • shade: `"<shade:#33ff33>shading</shade>"` • font family: `"<ff:symbol>symbol</ff>"` • reference: `"<ref:key>"` Where `"key"` is the value assigned when adding a table or figure

`default_format`	list containing the default format for elements not defined with markdown default values.
	`default_format = list(`
	`color = "black",`
	`font.size = 12,`
	`bold = FALSE,`
	`italic = FALSE,`
	`underlined = FALSE,`
	`font.family = "Cambria (Body)",`
	`vertical.align = "baseline",`
	`shading.color = "transparent")`

Value

list with parsed paragraph elements with the content added to the body, each paragraph can be found in a numbered list element (e.g. pgraph_1, pgraph_2, etc) each with the following elements:

- locs: Dataframe showing the locations of markdown elements in the current paragraph
- pele: These are the individual parsed paragraph elements
- ftext_cmd: String containing the ftext commands.
- fpar_cmd: String containing the fpar commands that can be run using `eval` to return the output of `fpar`. For example:

```
myfpar = eval(parse(text=pgparse$pgraph_1$fpar_cmd))
```

- as_paragraph_cmd: String containing the as_paragraph_cmd that can be run using

```
myas_para = eval(parse(text=pgparse$pgraph_1$as_paragraph_cmd))
```

Examples

```
res              = md_to_officer("Be **bold**!")
fpar_obj         = eval(parse(text=res$pgraph_1$fpar_cmd))
as_paragraph_obj = eval(parse(text=res$pgraph_1$as_paragraph_cmd))
```

`md_to_oo` *Parse Markdown into Officer as_paragraph Result*

Description

Used to take small markdown chunks and return the as_paragraph results. This function will take the markdown specified in str, calls md_to_officer, evals the as_paragraph field from the first paragraph returned, evals that result and returns the object from the as_paragraph command.

Usage

```
md_to_oo(strs, default_format = NULL)
```

Arguments

`strs`	vector of strings containing Markdown can contain the following elements:
`default_format`	list containing the default format for elements not defined with markdown default values (format the same as `md_to_officer`, default is `NULL`)

Value

list with the following elements

- isgood: Boolean value indicating the result of the function call
- msgs: sequence of strings containing a description of any problems
- as_par_cmd:as_paragraph generated code from md_to_officer
- oo: as_paragraph officer object resulting from running the as_par_cmd code

Examples

```
res = md_to_oo("Be **bold**")
```

`onbrand` *onbrand: officer Abstraction Layer for Organizational Templates*

Description

The onbrand package creates an abstraction layer that is easily configurable with a yaml file to allow for creation of reproducible reporting work flows across Word and PowerPoint templates.

Author(s)

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Authors:

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See Also

https://github.com/john-harrold/onbrand

`preview_template` *Generate Report Previewing the Locations From Mapping File*

Description

Takes an onbrand object with a loaded template and populates the template with the elements from the mapping file.

Usage

```
preview_template(obnd, verbose = TRUE)
```

Arguments

obnd	onbrand report object
verbose	Boolean variable when set to TRUE (default) messages will be displayed on the terminal; Messages will be included in the returned onbrand object.

Value

onbrand object with template previews added and any messages passed along

Examples

```
obnd = read_template(
   template = file.path(system.file(package="onbrand"), "templates", "report.pptx"),
   mapping  = file.path(system.file(package="onbrand"), "templates", "report.yaml"))
obnd = preview_template(obnd)

obnd = read_template(
   template = file.path(system.file(package="onbrand"), "templates", "report.docx"),
   mapping  = file.path(system.file(package="onbrand"), "templates", "report.yaml"))
obnd = preview_template(obnd)
```

---

read_template *Read Word or PowerPoint Templates*

Description

Takes a given template file/yaml mapping file combination, reads in that information, checks to make sure the mapping information is correct and then returns an onbrand object.

Usage

```
read_template(
 template = file.path(system.file(package = "onbrand"), "templates", "report.pptx"),
 mapping = file.path(system.file(package = "onbrand"), "templates", "report.yaml"),
  verbose = TRUE
)
```

Arguments

template	Name of PowerPoint or Word file to annotate (defaults to included PowerPoint template)
mapping	Name of yaml file with configuration information
verbose	Boolean variable when set to TRUE (default) messages will be displayed on the terminal; Messages will be included in the returned onbrand object.

Value

onbrand object which is a list with the following elements:

- isgood: Boolean variable indicating the current state of the object
- rpt: Officer object containing the initialized report
- rpttype: Type of report (either PowerPoint or Word)
- key_table: Empty (NULL) mapping table for tracking cross referencing (Word only)
- placeholders: Empty list to hold placeholder substitution text (Word only)
- meta: Metadata read in from the yaml file
- mapping: Mapping yaml file
- msgs: Vector of messages indicating any errors that were encountered

Examples

```
obnd = read_template(
      template = file.path(system.file(package="onbrand"), "templates", "report.pptx"),
      mapping  = file.path(system.file(package="onbrand"), "templates", "report.yaml"))

obnd = read_template(
      template = file.path(system.file(package="onbrand"), "templates", "report.docx"),
      mapping  = file.path(system.file(package="onbrand"), "templates", "report.yaml"))
```

---

report_add_doc_content

Add Content to Body of a Word Document Report

Description

Appends content to the body of a Word document

Usage

```
report_add_doc_content(
  obnd,
  type = NULL,
  content = NULL,
  fig_start_at = NULL,
  tab_start_at = NULL,
  verbose = TRUE
)
```

Arguments

obnd	onbrand report object
type	Type of content to add
content	Content to add
fig_start_at	Indicates that you want to restart figure numbering at the specified value (e.g. 1) after adding this content a value of NULL (default) will ignore this option.
tab_start_at	Indicates that you want to restart figure numbering at the specified value (e.g. 1) after adding this content a value of NULL (default) will ignore this option.
verbose	Boolean variable when set to TRUE (default) messages will be displayed on the terminal; Messages will be included in the returned onbrand object.

Details

For each content types listed below the different content outlined is expected. Text can be specified in different formats: "text" indicates plain text, "fpar" is formatted text defined by the fpar command from the officer package, "ftext" is a list of formatted text defined by the ftext command, and "md" is text formatted in markdown format (?md_to_officer for markdown details).

- "break" page break, content is (NULL) and a page break will be inserted here
- "ph" adds placeholder text substitution
  - "name" placeholder name (value in body of text surrounded by three equal signs, e.g. if you have "===MYPH===". in the document the name is just "MYPH")
  - "value" value to be substituted into the placeholder ("my text")
  - "location" document location where the placeholder will be located (either "header", "footer", or "body")
- "toc" generates the table of contents, and content is a list that must contain __one__ of the following.
  - "level" number indicating the depth of the contents to display (default: 3)
  - "style" string containing the onbrand style name to use to build the TOC
- "section" formats the current document section
  - "section_type" type of section to apply, either "columns", "continuous", "landscape", "portrait", "columns", or "columns_landscape"
  - "width" override the default page width with this value in inches (NULL)
  - "height" override the default page height with this value in inches (NULL)
  - "widths" column widths in inches, number of columns set by number of values (NULL)
  - "space" space in inches between columns (NULL)
  - "sep" Boolean value controlling line separating columns (FALSE)
- "text" content is a list containing a paragraph of text with the following elements
  - "text" string containing the text content either a string or the output of "fpar" for formatted text.
  - "style" string containing the style to use (default NULL will use the doc_def, Text style)
  - "format" string containing the format, either "text", "fpar", or "md" (default NULL assumes "text" format)

- "imagefile" content is a list containing information describing an image file with the following elements
  - image string containing path to image file
  - caption caption of the image (NULL)
  - caption_format string containing the format, either "text", "ftext", or "md" (default NULL assumes "text" format)
  - notes notes to add under the image (NULL)
  - notes_format string containing the format, either "text", "ftext", or "md" (default NULL assumes "text" format)
  - key unique key for cross referencing e.g. "FIG_DATA" (NULL)
  - height height of the image (NULL)
  - width width of the image (NULL)
- "ggplot" content is a list containing a ggplot object, (eg. p = ggplot() + ...) with the following elements
  - image ggplot object
  - caption caption of the image (NULL)
  - caption_format string containing the format, either "text", "ftext", or "md" (default NULL assumes "text" format)
  - notes notes to add under the image (NULL)
  - notes_format string containing the format, either "text", "ftext", or "md" (default NULL assumes "text" format)
  - key unique key for cross referencing e.g. "FIG_DATA" (NULL)
  - height height of the image (NULL)
  - width width of the image (NULL)
- "table" content is a list containing the table content and other options with the following elements:
  - table data frame containing the tabular data
  - "style" string containing the style to use (default NULL will use the doc_def, Table style)
  - caption caption of the table (NULL)
  - caption_format string containing the format, either "text", "ftext", or "md" (default NULL assumes "text" format)
  - notes notes to add under the image (NULL)
  - notes_format string containing the format, either "text", "ftext", or "md" (default NULL assumes "text" format)
  - key unique key for cross referencing e.g. "TAB_DATA" (NULL)
  - header Boolean variable to control displaying the header (TRUE)
  - first_row Boolean variable to indicate that the first row contains header information (TRUE)
- "flextable" content is a list containing flextable content and other options with the following elements (defaults in parenthesis):
  - table data frame containing the tabular data
  - caption caption of the table (NULL)

  - caption_format string containing the format, either "text", "ftext", or "md" (default NULL assumes "text" format)
  - notes notes to add under the image (NULL)
  - notes_format string containing the format, either "text", "ftext", or "md" (default NULL assumes "text" format)
  - key unique key for cross referencing e.g. "TAB_DATA" (NULL)
  - header_top, header_middle, header_bottom (NULL) a list with the same names as the data frame names containing the tabular data and values with the header text to show in the table
  - header_format string containing the format, either "text", or "md" (default NULL assumes "text" format)
  - merge_header (TRUE) Set to true to combine column headers with the same information
  - table_body_alignment, table_header_alignment ("center") Controls alignment
  - table_autofit (TRUE) Automatically fit content, or specify the cell width and height with cwidth (0.75) and cheight (0.25)
  - table_theme ("theme_vanilla") Table theme

- "flextable_object" content is a list specifying the a user defined flextable object with the following elements:
  - ft flextable object
  - caption caption of the table (NULL)
  - caption_format string containing the format, either "text", "ftext", or "md" (default NULL assumes "text" format)
  - notes notes to add under the image (NULL)
  - notes_format string containing the format, either "text", "ftext", or "md" (default NULL assumes "text" format)
  - key unique key for cross referencing e.g. "TAB_DATA" (NULL)

Value

onbrand object with the content added to the body or isgood set to FALSE with any messages in the msgs field. The isgood value is a Boolean variable indicating the current state of the object.

Examples

```
# Read  Word template into an onbrand object
obnd = read_template(
 template = file.path(system.file(package="onbrand"), "templates", "report.docx"),
 mapping  = file.path(system.file(package="onbrand"), "templates", "report.yaml"))

# The examples below use the following packages
library(ggplot2)
library(flextable)
library(officer)

# Adding text
obnd = report_add_doc_content(obnd,
  type     = "text",
```

```
  content  = list(text="Text with no style specified will use the doc_def text format."))


# Text formatted with fpar
fpartext = fpar(
ftext("Formatted text can be created using the ", prop=NULL),
ftext("fpar ", prop=fp_text(color="green")),
ftext("command from the officer package.", prop=NULL))

obnd = report_add_doc_content(obnd,
 type     = "text",
 content  = list(text   = fpartext,
                 format = "fpar",
                 style  = "Normal"))

# Text formatted with markdown
mdtext = "Formatted text can be created using
**<color:green>markdown</color>** formatting"
obnd = report_add_doc_content(obnd,
 type     = "text",
 content  = list(text   = mdtext,
                 format = "md",
                 style  = "Normal"))


# Adding figures
p = ggplot() + annotate("text", x=0, y=0, label = "picture example")
imgfile = tempfile(pattern="image", fileext=".png")
ggsave(filename=imgfile, plot=p, height=5.15, width=9, units="in")

# From an image file:
obnd = report_add_doc_content(obnd,
type     = "imagefile",
content  = list(image   = imgfile,
                caption = "This is an example of an image from a file."))

# From a ggplot object
obnd = report_add_doc_content(obnd,
type     = "imagefile",
content  = list(image   = imgfile,
                caption = "This is an example of an image from a file."))


#Adding tables
tdf =    data.frame(Parameters = c("Length", "Width", "Height"),
                 Values     = 1:3,
                 Units      = c("m", "m", "m") )

# Word table
tab_cont = list(table   = tdf,
                caption = "Word Table.")
obnd = report_add_doc_content(obnd,
 type     = "table",
```

```
 content  = tab_cont)

# onbrand flextable abstraction:
tab_cont = list(table   = tdf,
                caption = "Word Table.")
obnd = report_add_doc_content(obnd,
type     = "table",
content  = tab_cont)

# flextable object
tab_fto = flextable(tdf)
obnd = report_add_doc_content(obnd,
 type     = "flextable_object",
 content  = list(ft=tab_fto,
                 caption  = "Flextable object created by the user."))

# Saving the report output
save_report(obnd, tempfile(fileext = ".docx"))
```

`report_add_slide` *Add Slide and Content*

Description

Creates a report slide and populates the content in placeholders and arbitrary locations.

Usage

```
report_add_slide(
  obnd,
  template = NULL,
  elements = NULL,
  user_location = NULL,
  verbose = TRUE
)
```

Arguments

`obnd`	onbrand report object
`template`	Name of slide template to use (name from templates in yaml mapping file)
`elements`	Content and type for each placeholder you wish to fill for this slide: This is a list with names set to placeholders for the specified template. Each placeholder is a list and should have a content element and a type element (see Details below).
`user_location`	List with arbitrary element names (see Details below)
`verbose`	Boolean variable when set to TRUE (default) messages will be displayed on the terminal; Messages will be included in the returned onbrand object.

Details

To add content based on placeholder names consider the mapping information for the slide template `title_slide` with the two place holders `title` and `subtitle`.

```
rpptx:
 master: Office Theme
 templates:
   title_slide:
     title:
       type:         ctrTitle
       index:        1
       ph_label:     Title 1
       content_type: text
     subtitle:
       type:         subTitle
       index:        1
       ph_label:     Subtitle 2
       content_type: text
```

This shows how to populate a title slide with text:

```
obnd = report_add_slide(obnd,
 template = "title_slide",
 elements = list(
    title     = list( content      = "Slide Title",
                      type         = "text"),
    subtitle  = list( content      = "Subtitle",
                      type         = "text")))
```

To add content based on user defined locations you need to supply a list with the content, type, starting point and stopping point. You can use any template you wish, and you need to populate the `user_location` input. This consists of lists. The name of these lists can be arbitrary (text_example and fig_example below). Each list has a content and type, this is the same used in elements above. The start and stop each represent x and y coordinates. This is the fraction of the width and height of the slide measured from the upper left. So the `start = c(0.5, 0)` below means the box holding that content would start at the middle of the slide width and the top of the slide.

```
 #'obnd = report_add_slide(obnd,
 template = "two_content_header_text",
 user_location = list(
    text_example  = list( content      = "This is text",
                          type         = "text",
                          start        = c(.01,.02),
                          stop         = c(.3,.15)),
    fig_example   = list( content      = ggplot2::ggplot(),
                          type         = "ggplot",
                          start        = c(.5,0),
                          stop         = c(1,.5))
```

```
 )
)
```

See the function add_pptx_ph_content for a list of allowed values for type. Note that if mapping defines the content_type as text, you cannot use a list type. Similarly, if the content_type is defined as list, you cannot use a text type.

Value

onbrand report object with either the content added or isgood set to FALSE with any messages in the msgs field. The isgood value is a Boolean variable indicating the current state of the object.

See Also

add_pptx_ph_content view_layout

Examples

```
obnd = read_template(
      template = file.path(system.file(package="onbrand"), "templates", "report.pptx"),
      mapping  = file.path(system.file(package="onbrand"), "templates", "report.yaml"))

# Adding content based on placeholder elements
obnd = report_add_slide(obnd,
 template = "content_text",
 elements = list(
    title         = list( content      = "Text Example",
                          type         = "text"),
    sub_title     = list( content      = "Adding a slide with a block of text",
                          type         = "text"),
    content_body  = list( content      = "A block of text",
                          type         = "text")))

# Adding content based on specified locations
obnd = report_add_slide(obnd,
 template = "two_content_header_text",
 user_location = list(
    text_example  = list( content      = "This is text",
                          type         = "text",
                          start        = c(.01,.02),
                          stop         = c(.3,.15))))
```

---

save_report *Save Onbrand Report to a File*

Description

Saves report in onbrand object to the specified file.

Usage

```
save_report(obnd, output_file = NULL, verbose = TRUE)
```

Arguments

obnd	onbrand report object
output_file	File name to save the report.
verbose	Boolean variable when set to TRUE (default) messages will be displayed on the terminal; Messages will be included in the returned onbrand object.

Value

List with the following elements

- isgood: Boolean variable indicating success or failure
- msgs: Vector of messages

Examples

```
obnd = read_template(
      template = file.path(system.file(package="onbrand"), "templates", "report.pptx"),
      mapping  = file.path(system.file(package="onbrand"), "templates", "report.yaml"))

save_report(obnd, tempfile(fileext = ".pptx"))

obnd = read_template(
      template = file.path(system.file(package="onbrand"), "templates", "report.docx"),
      mapping  = file.path(system.file(package="onbrand"), "templates", "report.yaml"))

save_report(obnd, tempfile(fileext = ".docx"))
```

---

set_officer_object *Places Officer Object Into Onbrand Report Object*

Description

After modifying a report object manually, you can return it to the onbrand object using this function.

Usage

```
set_officer_object(obnd, rpt = NULL, verbose = TRUE)
```

Arguments

obnd	onbrand report object
rpt	officer object
verbose	Boolean variable when set to TRUE (default) messages will be displayed on the terminal; Messages will be included in the returned onbrand object.

Value

onbrand object with the report replaced

See Also

fetch_officer_object

Examples

```
obnd = read_template(
      template = file.path(system.file(package="onbrand"), "templates", "report.pptx"),
      mapping  = file.path(system.file(package="onbrand"), "templates", "report.yaml"))

# pulling out the report
rpt = fetch_officer_object(obnd)$rpt

# Modifications would be made here with officer directly

# Replacing the report into the onbrand object
obnd = set_officer_object(obnd, rpt)
```

---

span_table *Spread Large Table Over Smaller Tables*

Description

Takes a large table and spreads it over smaller tables to paginate it. It will preserve common row information on the left and separate columns according to maximum specifications. The final tables will have widths less than or equal to both max_col and max_width, and heights less than or equal to both max_row and max_height.

Usage

```
span_table(
  table_body = NULL,
  row_common = NULL,
  table_body_head = NULL,
  row_common_head = NULL,
  header_format = "text",
  obnd = NULL,
  max_row = 20,
  max_col = 10,
  max_height = 7,
  max_width = 6.5,
  table_alignment = "center",
  inner_border = officer::fp_border(color = "black", width = 0.3),
  outer_border = officer::fp_border(color = "black", width = 2),
```

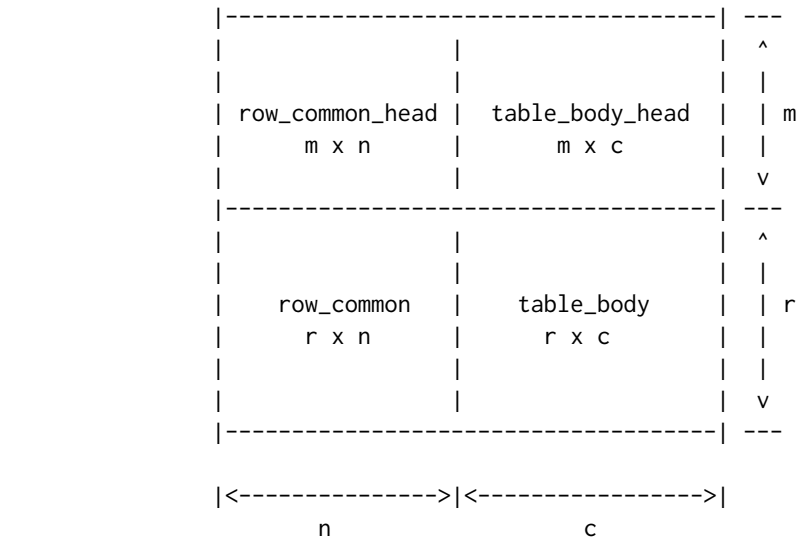
```
  set_header_inner_border_v = TRUE,
  set_header_inner_border_h = TRUE,
  set_header_outer_border = TRUE,
  set_body_inner_border_v = TRUE,
  set_body_inner_border_h = FALSE,
  set_body_outer_border = TRUE,
  notes_detect = NULL
)
```

Arguments

table_body	Data frame with the body of the large table.
row_common	Data frame with the common rows.
table_body_head	Data frame or matrix with headers for the table body.
row_common_head	Data frame or matrix with headers for the common rows.
header_format	Format of the header either "text" (default) or "md" for markdown.
obnd	Optional onbrand object used to format markdown. The default NULL value will use default formatting.
max_row	Maximum number of rows in output tables (A value of NULL will set max_row to the number of rows in the table).
max_col	Maximum number of columns in output tables (A value of NULL will set max_col to number of columns in the table).
max_height	Maximum height of the final table in inches (A value of NULL will use 100 inches).
max_width	Maximum width of the final table in inches (A value of NULL will use 100 inches).
table_alignment	Character string specifying the alignment #'of the table (body and headers). Can be "center" (default), "left", "right", or "justify"
inner_border	Border object for inner border lines defined using officer::fp_border()
outer_border	Border object for outer border lines defined using officer::fp_border()
set_header_inner_border_v	Boolean value to enable or disable inner vertical borders for headers
set_header_inner_border_h	Boolean value to enable or disable inner horizontal borders for headers
set_header_outer_border	Boolean value to enable or disable outer border for headers
set_body_inner_border_v	Boolean value to enable or disable inner vertical borders for the body
set_body_inner_border_h	Boolean value to enable or disable inner horizontal borders for the body
set_body_outer_border	Boolean value to enable or disable outer border borders for the body
notes_detect	Vector of strings to detect in output tables (example c("NC", "BLQ")).

Details

The way the data frames relate to each other are mapped out below. The dimensions of the different data frames are identified below (nrow x ncol)



Value

list with the following elements

- isgood: Boolean indicating the exit status of the function.
- one_body: Full table with no headers.
- one_table: Full table with headers.
- msgs: Vector of text messages describing any errors that were found.
- tables: Named list of tables. Each list element is of the output. format from `build_span()`.

See Also

`build_span` for the `relationship` of `inputs`.

Examples

```
if(interactive()){
trow = c(1:51)
tcol = c(1:63)
cht  = c(rep("A", 20),
         rep("B", 20),
         rep("C", 11))


table_body = NULL
for(cn in tcol){
  if(is.null(table_body)){
```

```
    tmp_cmd =  paste0("table_body = data.frame(C_",
                      cn,"= paste0(trow, ',', cn))")
  } else {
    tmp_cmd =  paste0("table_body = cbind(table_body, data.frame(C_",
                      cn,"= paste0(trow, ',', cn)))")
  }
  eval(parse(text=tmp_cmd))
}


table_body[1,]    = "BQL"
table_body[5,8]   = "NC"
table_body[20,]   = "BQL"
table_body[25,2]  = "NC"

row_common = data.frame(
    ID = trow,
    CH = cht)


row_common_head = data.frame(
    ID  = c("ID",     "ID", "ID"),
    CH  = c("Cohort", "Cohort", "Cohort"))



table_body_head = NULL

cidx = 1
for(cn in names(table_body)){

  units = "units"
  range = "range"

  if(cidx < 4){
    range = "R A"
  } else if(cidx < 12 ){
    range = "R B"
  } else if(cidx < 18 ){
    range = "R C"
  } else if(cidx < 28 ){
    range = "R D"
  } else if(cidx < 35 ){
    range = "R E"
  } else if(cidx < 48 ){
    range = "R F"
  } else if(cidx < 55 ){
    range = "R G"
  } else if(cidx < 60 ){
    range = "R H"
  } else {
    range = "R I"
  }
```

```
  if(cidx < 4){
    units = "U A"
  } else if(cidx < 8  ){
    units = "U B"
  } else if(cidx < 14 ){
    units = "U Q"
  } else if(cidx < 18 ){
    units = "U C"
  } else if(cidx < 28 ){
    units = "U D"
  } else if(cidx < 35 ){
    units = "U E"
  } else if(cidx < 48 ){
    units = "U F"
  } else if(cidx < 55 ){
    units = "U G"
  } else if(cidx < 60 ){
    units = "U H"
  } else {
    units = "U I"
  }

  if(is.null(table_body_head)){
    tmp_cmd =  paste0("table_body_head = data.frame(",
                      cn,'= c("', cn, '", units, range))')
  } else {
    tmp_cmd =  paste0("table_body_head = cbind(table_body_head, data.frame(",
                      cn,'= c("', cn, '", units, range)))')
  }

  eval(parse(text=tmp_cmd))
  cidx = cidx + 1
}

res =
span_table(table_body      = table_body,
           row_common      = row_common,
           table_body_head = table_body_head,
           row_common_head = row_common_head,
           max_row         = 20,
           max_col         = 10,
           notes_detect    = c("BQL", "NC"))

# Notes detected in the first table:
res[["tables"]][["Table 1"]][["notes"]]

# First table as a data frame:
res[["tables"]][["Table 1"]][["df"]]

# First table as a flextable:
res[["tables"]][["Table 1"]][["ft"]]
```

```
}
```

`template_details` *Show Template Details for 'onbrand' Object*

Description

Takes an onbrand object with a loaded template and displays relevant details about the template.

Usage

```
template_details(obnd, verbose = TRUE)
```

Arguments

obnd	onbrand report object
verbose	Boolean variable when set to TRUE (default) messages will be displayed on the terminal; Messages will be included in the returned results object.

Details

Provides relevant details about an onbrand object. For PowerPoint this contains the template names and elements present for that template. For Word it will contain defined text and table styles. This information can be displayed in the console, returned as text or formatted for use in RMarkdown documentation.

Value

list with the following elements:

- rpttype: Type of report (either PowerPoint or Word)
- msgs: Vector of messages with details or any errors that were encountered
- txt: Vector of template details in text format
- df: Vector of template details in a dataframe
- ft: Vector of template details in flextable format
- isgood: Boolean variable indicating the current state of the object

Examples

```
obnd = read_template(
   template = file.path(system.file(package="onbrand"), "templates", "report.pptx"),
   mapping  = file.path(system.file(package="onbrand"), "templates", "report.yaml"))
details = template_details(obnd)

obnd = read_template(
   template = file.path(system.file(package="onbrand"), "templates", "report.docx"),
   mapping  = file.path(system.file(package="onbrand"), "templates", "report.yaml"))
details = template_details(obnd)
```

view_layout *Generate Annotated Layout for Report Templates*

Description

Produces a report with each layout element labeled.

Usage

```
view_layout(
 template = file.path(system.file(package = "onbrand"), "templates", "report.pptx"),
  output_file = NULL,
  verbose = TRUE
)
```

Arguments

template	Name of PowerPoint or Word file to annotate (defaults to included PoerPoint template)
output_file	name of file to place the annotated layout information, set to NULL and it will generate a file named layout with the appropriate extension
verbose	Boolean variable when set to TRUE (default) messages will be

Details

Generates an Annotated report based on the template provided. Elements of slide masters are identified by placeholder labels. As PowerPoint masters are created the labels can be difficult to predict. Word documents are identified by style names. This function will create a layout file identifying all of the elements of each slide master for a PowerPoint template or each paragraph and table style for a Word template.

Value

List with the following elements

- isgood: Boolean variable indicating success or failure
- rpt: Officer with the annotated layout
- msgs: Vector of messages

Examples

```
lpptx = view_layout(
     template = file.path(system.file(package="onbrand"), "templates", "report.pptx"),
     output_file   = file.path(tempdir(), "layout.pptx"))

ldocx = view_layout(
     template = file.path(system.file(package="onbrand"), "templates", "report.docx"),
     output_file   = file.path(tempdir(), "layout.docx"))
```

Index