

# Package ‘r2pptx’

July 23, 2025

**Type** Package

**Title** Object Oriented R -> PowerPoint

**Version** 0.1.0

**Description** Provides a friendly, object oriented API for creating PowerPoint slide decks in R.

**URL** <https://mattle24.github.io/r2pptx/>,  
<https://github.com/mattle24/r2pptx>

**BugReports** <https://github.com/mattle24/r2pptx/issues>

**License** GPL-3

**Encoding** UTF-8

**RoxygenNote** 7.1.1

**Depends** methods, R (>= 3.6.0)

**Imports** glue, officer

**Suggests** datasets, ggplot2, testthat (>= 3.0.0), knitr, rmarkdown

**Collate** 'location.R' 'generics.R' 'element.R' 'slide.R'  
'presentation.R' 'methods.R' 'utils.R' 'zzz.R'

**Config/testthat/edition** 3

**VignetteBuilder** knitr

**NeedsCompilation** no

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**Repository** CRAN

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Contents

|                                                    |           |
|----------------------------------------------------|-----------|
| +,R2Pptx,R2PptxSlide-method . . . . .              | 2         |
| +,R2PptxSlide,R2PptxElement-method . . . . .       | 3         |
| +,R2PptxSlide,R2PptxSlideList-method . . . . .     | 3         |
| +,R2PptxSlideList,R2PptxSlideList-method . . . . . | 4         |
| get_layouts . . . . .                              | 4         |
| get_layout_properties . . . . .                    | 5         |
| get_slides,R2PptxSlideList-method . . . . .        | 5         |
| length,R2PptxSlide-method . . . . .                | 6         |
| new_element . . . . .                              | 6         |
| new_presentation . . . . .                         | 7         |
| new_slide . . . . .                                | 7         |
| new_slidelist . . . . .                            | 8         |
| plot_layout . . . . .                              | 8         |
| R2PptxElement-class . . . . .                      | 9         |
| R2PptxLocation-class . . . . .                     | 9         |
| R2PptxPresentation-class . . . . .                 | 9         |
| R2PptxSlide-class . . . . .                        | 9         |
| R2PptxSlideList-class . . . . .                    | 10        |
| template_path . . . . .                            | 10        |
| template_path<- . . . . .                          | 11        |
| write_pptx . . . . .                               | 11        |
| <b>Index</b>                                       | <b>13</b> |

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|                             |
|-----------------------------|
| +,R2Pptx,R2PptxSlide-method |
| <i>Add R2Pptx slide</i>     |

---

Description

Add an ‘R2PptxSlide’ object to something else compatible.

Usage

```
## S4 method for signature 'R2Pptx,R2PptxSlide'
e1 + e2
```

Arguments

- e1            An object that a slide can be added to, such as an ‘R2PptxPresentation’, ‘R2PptxSlide’, or ‘R2PptxSlideList’.
- e2            ‘R2PptxSlide’ object

Value

If e1 is an object of class R2PptxPresentation then returns an object of class R2PptxPresentation. Otherwise returns an object of class R2PptxSlideList

---

*+,R2PptxSlide,R2PptxElement-method*  
*Add element to slide*

---

### **Description**

Add an R2PptxElement object to an R2PptxSlide object.

### **Usage**

```
## S4 method for signature 'R2PptxSlide,R2PptxElement'
e1 + e2
```

### **Arguments**

|    |                      |
|----|----------------------|
| e1 | R2PptxSlide object   |
| e2 | R2PptxElement object |

### **Value**

An object of class R2PptxSlide, which is e1 with an additional element e2

---

*+,R2PptxSlide,R2PptxSlideList-method*  
*Add slide to slidelist*

---

### **Description**

Add slide to slidelist

### **Usage**

```
## S4 method for signature 'R2PptxSlide,R2PptxSlideList'
e1 + e2
```

### **Arguments**

|    |                        |
|----|------------------------|
| e1 | R2PptxSlide object     |
| e2 | R2PptxSlideList object |

### **Value**

An object of class R2PptxSlideList which is the R2PptxSlideList list e1 with an additional slide which is e2.

---

```
+ ,R2PptxSlideList,R2PptxSlideList-method
```

*Add slidelist to slidelist*

---

### Description

Add slidelist to slidelist

### Usage

```
## S4 method for signature 'R2PptxSlideList,R2PptxSlideList'
e1 + e2
```

### Arguments

```
e1          R2PptxSlideList object
e2          R2PptxSlideList object
```

### Value

An object of class R2PptxSlideList which is e1 with additional slides (all the slides in e2).

---

```
get_layouts          Get layouts
```

---

### Description

A thin wrapper around `officer::layout_summary()` to get layouts for R2PpptxPresentation objects.

### Usage

```
get_layouts(x)
```

### Arguments

```
x          R2PpptxPresentation object
```

### Value

An object of class `data.frame` with fields for the layout name and the name of the slide theme (master).

---

`get_layout_properties` *Gets layout properties*

---

**Description**

A thin wrapper around `officer::plot_layout_properties()` to get layouts properties for `R2PptxPresentation` objects.

**Usage**

```
get_layout_properties(x, layout)
```

**Arguments**

|                     |                                                      |
|---------------------|------------------------------------------------------|
| <code>x</code>      | <code>R2PptxPresentation</code> object               |
| <code>layout</code> | character. Name of the layout to see properties for. |

**Value**

An object of class `data.frame` with fields for placeholder attributes and one row per placeholder element.

---

`get_slides,R2PptxSlideList-method`  
*method to get slides*

---

**Description**

method to get slides

**Usage**

```
## S4 method for signature 'R2PptxSlideList'  
get_slides(x)
```

**Arguments**

|                |                                     |
|----------------|-------------------------------------|
| <code>x</code> | <code>R2PptxSlideList</code> object |
|----------------|-------------------------------------|

**Value**

List, a list of `R2PptxSlide` objects.

---

length, R2PptxSlide-method  
*Get slide length*

---

### Description

Returns the number of elements in a slide

### Usage

```
## S4 method for signature 'R2PptxSlide'
length(x)

## S4 method for signature 'R2PptxPresentation'
length(x)
```

### Arguments

x                      'R2PptxSlide' object

### Value

Integer, number of elements in the R2PptxSlide object  
 Integer, the number of slides in the presentation.

---

new\_element              *New Element*

---

### Description

Make a new 'R2PptxElement'. Element represent text, a flextable, an image, a ggplot2, etc to add to a slide.

### Usage

```
new_element(key, value)
```

### Arguments

key                      character. Name of the placeholder label for this element.  
 value                    object. Object to put into a PowerPoint slide, eg text or a plot.

### Value

An object of class R2PptxElement representing something to put on a slide.

---

|                  |                         |
|------------------|-------------------------|
| new_presentation | <i>New Presentation</i> |
|------------------|-------------------------|

---

**Description**

Make a new ‘R2PptxPresentation’. Presentations represent PowerPoint decks.

**Usage**

```
new_presentation(  
  template_path = getOption("default_pptx_template"),  
  slides = list()  
)
```

**Arguments**

|               |                                                                                                                                 |
|---------------|---------------------------------------------------------------------------------------------------------------------------------|
| template_path | character. Path of the file that has the PowerPoint template to use. Defaults to path set in ‘options("default_pptx_template")’ |
| slides        | list. Optional. List of slides to initiate the presentation with.                                                               |

**Value**

An object of class R2PptxPresentation representing a future PowerPoint presentation.

---

|           |                  |
|-----------|------------------|
| new_slide | <i>New slide</i> |
|-----------|------------------|

---

**Description**

Make a ‘R2PptxSlide’ object representing a PowerPoint slide.

**Usage**

```
new_slide(layout, elements = list())
```

**Arguments**

|          |                                                                                      |
|----------|--------------------------------------------------------------------------------------|
| layout   | character. Name of the PowerPoint layout to use for this slide.                      |
| elements | list. List of ‘R2PptxElements’ to initialize the slide with. Defaults to empty list. |

**Value**

An object of class R2PptxSlide representing a future PowerPoint slide.

---

|               |                       |
|---------------|-----------------------|
| new_slidelist | <i>New slide list</i> |
|---------------|-----------------------|

---

**Description**

Make a R2PptxSlideList object representing a list of PowerPoint slides

**Usage**

```
new_slidelist(slides = list())
```

**Arguments**

|        |                                                                                        |
|--------|----------------------------------------------------------------------------------------|
| slides | list. List of R2PptxSlide objects to initialize the list with. Defaults to empty list. |
|--------|----------------------------------------------------------------------------------------|

**Value**

An object of class R2PptxSlideList representing a list of R2pptxSlide object.

---

|             |                    |
|-------------|--------------------|
| plot_layout | <i>Plot layout</i> |
|-------------|--------------------|

---

**Description**

A thin wrapper around `officer::plot_layout_properties()` to plot layouts for R2PpptxPresentation objects.

**Usage**

```
plot_layout(x, layout)
```

**Arguments**

|        |                                                      |
|--------|------------------------------------------------------|
| x      | R2PpptxPresentation object                           |
| layout | character. Name of the layout to see properties for. |

**Value**

No return value, called for side effects

---

|                     |                |
|---------------------|----------------|
| R2PptxElement-class | <i>Element</i> |
|---------------------|----------------|

---

**Description**

An S4 An class to represent text, a flextable, an image, a ggplot2, etc we add to a slide.

---

|                      |                 |
|----------------------|-----------------|
| R2PptxLocation-class | <i>Location</i> |
|----------------------|-----------------|

---

**Description**

A Location is used to place an element on a slide. For now this will just be a placeholder name, but eventually it could expand to be an arbitrary location

---

|                          |                     |
|--------------------------|---------------------|
| R2PptxPresentation-class | <i>Presentation</i> |
|--------------------------|---------------------|

---

**Description**

An S4 class to represent a PowerPoint presentation.

**Slots**

slides list. List of 'R2PptxSlide' objects.

template\_path character. File path to the PowerPoint template used for this presentation.

---

|                   |              |
|-------------------|--------------|
| R2PptxSlide-class | <i>Slide</i> |
|-------------------|--------------|

---

**Description**

An S4 class to represent a PowerPoint slide

**Slots**

layout character. Name of the PowerPoint layout to use for this slide.

elements list. List of 'R2PptxElement' objects.

---

R2PptxSlideList-class *Slide list*

---

### Description

R2PptxSlideList is an S4 class to contain groups of R2PptxSlide objects that are not part of a presentation. It is meant to be used to create lists of slides and then be able to add the list easily to a presentation.

### Slots

slides list. A list of R2PptxSlide objects

---

template\_path *Get template path*

---

### Description

Get template path

### Usage

```
template_path(x)

## S4 method for signature 'R2PptxPresentation'
template_path(x)
```

### Arguments

x object to get the template path for.

### Value

Character, the file path this R2PptxPresentation points to.

### Methods (by class)

- R2PptxPresentation: Get the template path of an R2PptxPresentation object.

---

|                 |                          |
|-----------------|--------------------------|
| template_path<- | <i>Set template path</i> |
|-----------------|--------------------------|

---

**Description**

Set template path

**Usage**

```
template_path(x) <- value

## S4 replacement method for signature 'R2PptxPresentation'
template_path(x) <- value
```

**Arguments**

|       |                                          |
|-------|------------------------------------------|
| x     | object to set the template path of.      |
| value | character. File path of the new template |

**Value**

The R2PptxPresentation object x with the changed template path.

**Functions**

- template\_path<- ,R2PptxPresentation-method: Set the template path of an R2PptxPresentation object.

---

|            |                   |
|------------|-------------------|
| write_pptx | <i>Write pptx</i> |
|------------|-------------------|

---

**Description**

Write an object to a ‘.pptx’ file.

**Usage**

```
write_pptx(x, path)

## S4 method for signature 'R2PptxPresentation'
write_pptx(x, path)
```

**Arguments**

|      |                                   |
|------|-----------------------------------|
| x    | object                            |
| path | character. File path to write to. |

**Value**

Returns the R2PptxPresentation object given to the function.

**Methods (by class)**

- R2PptxPresentation: Write a presentation to a '.pptx' file

# Index

- [+, R2Pptx, R2PptxSlide-method, 2](#)
  - [+, R2PptxSlide, R2PptxElement-method, 3](#)
  - [+, R2PptxSlide, R2PptxSlideList-method, 3](#)
  - [+, R2PptxSlideList, R2PptxSlideList-method, 4](#)
- [get\\_layout\\_properties, 5](#)
- [get\\_layouts, 4](#)
- [get\\_slides, R2PptxSlideList-method, 5](#)
- [length, R2PptxPresentation-method \(length, R2PptxSlide-method\), 6](#)
- [length, R2PptxSlide-method, 6](#)
- [new\\_element, 6](#)
- [new\\_presentation, 7](#)
- [new\\_slide, 7](#)
- [new\\_slidelist, 8](#)
- [plot\\_layout, 8](#)
- [R2PptxElement-class, 9](#)
- [R2PptxLocation-class, 9](#)
- [R2PptxPresentation-class, 9](#)
- [R2PptxSlide-class, 9](#)
- [R2PptxSlideList-class, 10](#)
- [template\\_path, 10](#)
- [template\\_path, R2PptxPresentation-method \(template\\_path\), 10](#)
- [template\\_path<-, 11](#)
- [template\\_path<-, R2PptxPresentation-method \(template\\_path<-\), 11](#)
- [write\\_pptx, 11](#)
- [write\\_pptx, R2PptxPresentation-method \(write\\_pptx\), 11](#)