

# Package: renderthis (via r-universe)

August 31, 2024

**Title** Render Slides to Different Formats

**Version** 0.2.1

**Description** Render slides to different formats, including 'html', 'pdf', 'png', 'gif', 'pptx', and 'mp4', as well as a 'social' output, a 'png' of the first slide re-sized for sharing on social media.

**License** MIT + file LICENSE

**URL** <https://jhelvy.github.io/renderthis/>,  
<https://github.com/jhelvy/renderthis>

**BugReports** <https://github.com/jhelvy/renderthis/issues>

**Depends** R (>= 3.4.0)

**Imports** cli (>= 3.0.0), digest, fs, jsonlite, magick (>= 2.7.1),  
pagedown, progress, quarto, rmarkdown, withr, xaringan, zip

**Suggests** av, chromote, knitr, lifecycle, officer, pdftools, testthat  
(>= 3.0.0), webshot2

**Config/testthat/edition** 3

**Config/Needs/website** xaringanExtra

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**Roxygen** list(markdown = TRUE)

**VignetteBuilder** knitr

**Repository** <https://gadenbuie.r-universe.dev>

**RemoteUrl** <https://github.com/jhelvy/renderthis>

**RemoteRef** main

**RemoteSha** b7223e165b7bb11f074922c86bf6563164b4f169

## Contents

build_all	2
to_gif	3
to_html	4
to_mp4	5
to_pdf	6
to_png	8
to_pptx	9
to_social	10

<b>Index</b>	<b>12</b>
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build_all	<i>Build slides to multiple outputs.</i>
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## Description

### [Deprecated]

Build slides to multiple outputs. Options are "html", "social", "pdf", "png", "gif", "mp4", and "pptx". See each individual build\_\*() function for details about each output type.

## Usage

```
build_all(
  input,
  include = c("html", "social", "pdf", "png", "gif", "mp4", "pptx"),
  exclude = NULL,
  complex_slides = FALSE,
  partial_slides = FALSE,
  delay = 1,
  density = 100,
  slides = "all",
  fps = 1
)
```

## Arguments

input	Path to an .Rmd or .qmd file of slides.
include	A vector of the different output types to build. Options are "html", "social", "pdf", "png", "gif", "mp4", and "pptx". Defaults to c("html", "social", "pdf", "png", "gif", "mp4", "pptx").
exclude	A vector of the different output types to NOT build. Options are "html", "social", "pdf", "png", "gif", "mp4", and "pptx". Defaults to NULL, in which case all output types are built.

complex_slides	For "complex" slides (e.g. slides with panelsets or other html widgets or advanced features), set complex_slides = TRUE. Defaults to FALSE. This will use the chromote package to iterate through the slides at a pace set by the delay argument. Requires a local installation of Chrome.
partial_slides	Should partial (continuation) slides be included in the output? If FALSE, the default, only the complete slide is included in the PDF.
delay	Seconds of delay between advancing to and printing a new slide. Only used if complex_slides = TRUE or partial_slides = TRUE.
density	Resolution of the resulting PNGs in each slide file. Defaults to 100.
slides	A numeric or integer vector of the slide number(s) to render as PNG files, or one of "all", "first", or "last". Negative integers select which slides <i>not</i> to include. If more than one slide are included, PNGs will be returned as a ZIP file. Defaults to "all", in which case all slides are included.
fps	Frames per second of the resulting .mp4 file.

### Value

Builds slides to multiple output formats.

### Examples

```
if (interactive()) {
  # Both of these build html and pdf outputs
  # (PDF outputs require Google Chrome for {pagedown})
  with_example("slides.Rmd", requires_chrome = TRUE, {
    build_all("slides.Rmd", include = c("html", "pdf"))
  })
}
```

---

to\_gif

*Render slides as a GIF file.*


---

### Description

Render slides as a GIF video file. The function renders to the PDF, converts each slide in the PDF to a PNG, and then converts the deck of PNG files to a GIF file.

### Usage

```
to_gif(
  from,
  to = NULL,
  density = 100,
  slides = "all",
  fps = 1,
  complex_slides = FALSE,
```

```

    partial_slides = FALSE,
    delay = 1,
    keep_intermediates = FALSE
  )

```

### Arguments

from	Path to an .Rmd, .qmd, .html, .pdf file, or a URL. If from is a URL to slides on a website, you must provide the full URL ending in ".html".
to	Name of the output .gif file.
density	Resolution of the resulting PNGs in each slide file. Defaults to 100.
slides	A numeric or integer vector of the slide number(s) to include in the GIF, or one of "all", "first", or "last". Negative integers select which slides <i>not</i> to include. Defaults to "all", in which case all slides are included.
fps	Frames per second in the animated GIF.
complex_slides	For "complex" slides (e.g. slides with panelsets or other html widgets or advanced features), set complex_slides = TRUE. Defaults to FALSE. This will use the chromote package to iterate through the slides at a pace set by the delay argument. Requires a local installation of Chrome.
partial_slides	Should partial (continuation) slides be included in the output? If FALSE, the default, only the complete slide is included in the PDF.
delay	Seconds of delay between advancing to and printing a new slide. Only used if complex_slides = TRUE or partial_slides = TRUE.
keep_intermediates	Should we keep the intermediate files used to render the final output? The default is FALSE.

### Value

Slides are rendered as a .gif file.

### Examples

```

with_example("slides.Rmd", requires_chrome = TRUE, {
  # Render gif from Rmd, html, pdf, or direct URL
  to_gif("slides.Rmd")
})

```

---

to\_html

*Render slides as html file.*


---

### Description

Render xaringan or Quarto slides as an html file. In generally, it is the same thing as `rmarkdown::render()` or `quarto::quarto_render()` except that the `self_contained` option is forced to TRUE if the HTML file is built into a directory other than the one containing from.

**Usage**

```
to_html(from, to = NULL, self_contained = FALSE, render_args = NULL)
```

**Arguments**

<code>from</code>	Path to an .Rmd or .qmd file.
<code>to</code>	The name of the output file. If using NULL then the output file name will be based on file name for the <code>from</code> file. If a file name is provided, a path to the output file can also be provided.
<code>self_contained</code>	Should the output file be a self-contained HTML file where all images, CSS and JavaScript are included directly in the output file? This option, when TRUE, provides you with a single HTML file that you can share with others, but it may be very large. This feature is enabled by default when the <code>to</code> file is written in a directory other than the one containing the <code>from</code> R Markdown file.
<code>render_args</code>	A list of arguments passed to <code>rmarkdown::render()</code> or <code>quarto::quarto_render()</code> .

**Value**

Slides are rendered as an .html file.

**Examples**

```
with_example("slides.Rmd", {
  # Render html from Rmd file
  to_html("slides.Rmd")
})
```

---

to\_mp4

---

*Render slides as an MP4 video file.*


---

**Description**

Render slides as an MP4 video file. The function renders to the pdf, converts each slide in the pdf to a png, and then converts the deck of png files to a MP4 video file.

**Usage**

```
to_mp4(
  from,
  to = NULL,
  density = 100,
  slides = "all",
  fps = 1,
  complex_slides = FALSE,
  partial_slides = FALSE,
  delay = 1,
  keep_intermediates = FALSE
)
```

**Arguments**

from	Path to an .Rmd, .qmd, .html, .pdf file, or a URL. If from is a URL to slides on a website, you must provide the full URL ending in ".html".
to	Name of the output .mp4 file.
density	Resolution of the resulting PNGs in each slide file. Defaults to 100.
slides	A numeric or integer vector of the slide number(s) to include in the mp4, or one of "all", "first", or "last". Negative integers select which slides <i>not</i> to include. Defaults to "all", in which case all slides are included.
fps	Frames per second of the resulting .mp4 file.
complex_slides	For "complex" slides (e.g. slides with panelsets or other html widgets or advanced features), set complex_slides = TRUE. Defaults to FALSE. This will use the chromote package to iterate through the slides at a pace set by the delay argument. Requires a local installation of Chrome.
partial_slides	Should partial (continuation) slides be included in the output? If FALSE, the default, only the complete slide is included in the PDF.
delay	Seconds of delay between advancing to and printing a new slide. Only used if complex_slides = TRUE or partial_slides = TRUE.
keep_intermediates	Should we keep the intermediate files used to render the final output? The default is FALSE.

**Value**

Slides are rendered as an .mp4 file.

**Examples**

```
with_example("slides.Rmd", requires_chrome = TRUE, requires_packages = "av", {
  # Render mp4 from Rmd, html, pdf, or direct URL
  to_mp4("slides.Rmd")
})
```

---

to\_pdf

*Render slides as PDF file.*


---

**Description**

Render slides as a PDF file. Requires a local installation of Chrome. If you set complex\_slides = TRUE or partial\_slides = TRUE, you will also need to install the chromote and pdftools packages.

**Usage**

```
to_pdf(
  from,
  to = NULL,
  complex_slides = FALSE,
  partial_slides = FALSE,
  delay = 1,
  keep_intermediates = NULL
)
```

**Arguments**

from	Path to an .Rmd, .qmd, .html file, or a URL. If from is a URL to slides on a website, you must provide the full URL ending in ".html".
to	The name of the output .pdf file. If NULL (the default) then the output filename will be based on filename for the from file. If a filename is provided, a path to the output file can also be provided.
complex_slides	For "complex" slides (e.g. slides with panelsets or other html widgets or advanced features), set complex_slides = TRUE. Defaults to FALSE. This will use the chromote package to iterate through the slides at a pace set by the delay argument. Requires a local installation of Chrome.
partial_slides	Should partial (continuation) slides be included in the output? If FALSE, the default, only the complete slide is included in the PDF.
delay	Seconds of delay between advancing to and printing a new slide. Only used if complex_slides = TRUE or partial_slides = TRUE.
keep_intermediates	Should we keep the intermediate HTML file? Only relevant if the from file is an .Rmd file. Default is TRUE if the to file is written into the same directory as the from argument, otherwise the intermediate file isn't kept.

**Value**

Slides are rendered as a .pdf file.

**Examples**

```
with_example("slides.Rmd", requires_chrome = TRUE, {
  # Render pdf from Rmd, html, or direct URL
  to_pdf("slides.Rmd")
})
```

to\_png

*Render slides as PNG file(s).***Description**

Render PNG image(s) of slides. The function renders to the PDF and then converts it into PNG files of each slide. The slide numbers defined by the `slides` argument are saved (defaults to 1, returning only the title slide). If `length(slides) > 1`, it will return the PNG files in a ZIP file. You can also get a ZIP file of all the slides as PNGs by setting `slides = "all"`.

**Usage**

```
to_png(
  from,
  to = NULL,
  density = 100,
  slides = 1,
  complex_slides = FALSE,
  partial_slides = FALSE,
  delay = 1,
  keep_intermediates = FALSE
)
```

**Arguments**

<code>from</code>	Path to an .Rmd, .qmd, .html, .pdf file, or a URL. If <code>from</code> is a URL to slides on a website, you must provide the full URL ending in ".html".
<code>to</code>	Name of the output .png or .zip file.
<code>density</code>	Resolution of the resulting PNGs in each slide file. Defaults to 100.
<code>slides</code>	A numeric or integer vector of the slide number(s) to render as PNG files, or one of "all", "first", or "last". Negative integers select which slides <i>not</i> to include. If more than one slide are included, PNGs will be returned as a ZIP file. Defaults to "all", in which case all slides are included.
<code>complex_slides</code>	For "complex" slides (e.g. slides with panelsets or other html widgets or advanced features), set <code>complex_slides = TRUE</code> . Defaults to FALSE. This will use the <code>chromote</code> package to iterate through the slides at a pace set by the <code>delay</code> argument. Requires a local installation of Chrome.
<code>partial_slides</code>	Should partial (continuation) slides be included in the output? If FALSE, the default, only the complete slide is included in the PDF.
<code>delay</code>	Seconds of delay between advancing to and printing a new slide. Only used if <code>complex_slides = TRUE</code> or <code>partial_slides = TRUE</code> .
<code>keep_intermediates</code>	Should we keep the intermediate files used to render the final output? The default is FALSE.



**Value**

Slides are rendered as a .png file (single) or .zip file of multiple .png files.

**Examples**

```
with_example("slides.Rmd", requires_chrome = TRUE, {
  # By default a png of only the first slide is built
  to_png("slides.Rmd", keep_intermediates = TRUE)

  # or render a zip file of multiple or all slides (`slides = "all"`)
  to_png("slides.pdf", slides = c(1, 3, 5))
})
```

to\_pptx

*Render slides as a PowerPoint file.***Description**

Render slides as a .pptx file. The function renders to the PDF and then converts it into PNG images that are inserted on each slide in the PowerPoint file.

**Usage**

```
to_pptx(
  from,
  to = NULL,
  density = 100,
  slides = "all",
  complex_slides = FALSE,
  partial_slides = FALSE,
  delay = 1,
  keep_intermediates = FALSE,
  ratio = NULL
)
```

**Arguments**

from	Path to an .Rmd, .qmd, .html, .pdf file, or a URL. If from is a URL to slides on a website, you must provide the full URL ending in ".html".
to	Name of the output .pptx file.
density	Resolution of the resulting PNGs in each slide file. Defaults to 100.
slides	A numeric or integer vector of the slide number(s) to include in the pptx, or one of "all", "first", or "last". Negative integers select which slides <i>not</i> to include. Defaults to "all", in which case all slides are included.

<code>complex_slides</code>	For "complex" slides (e.g. slides with panelsets or other html widgets or advanced features), set <code>complex_slides = TRUE</code> . Defaults to <code>FALSE</code> . This will use the <code>chromote</code> package to iterate through the slides at a pace set by the <code>delay</code> argument. Requires a local installation of Chrome.
<code>partial_slides</code>	Should partial (continuation) slides be included in the output? If <code>FALSE</code> , the default, only the complete slide is included in the PDF.
<code>delay</code>	Seconds of delay between advancing to and printing a new slide. Only used if <code>complex_slides = TRUE</code> or <code>partial_slides = TRUE</code> .
<code>keep_intermediates</code>	Should we keep the intermediate files used to render the final output? The default is <code>FALSE</code> .
<code>ratio</code>	PowerPoint slides ratio. Possible values are "4:3", "16:9". Default to <code>NULL</code> , meaning it will be guessed from the slides.

### Value

Slides are rendered as a pptx file.

### Examples

```
with_example("slides.Rmd", requires_chrome = TRUE, requires_packages = "officer", {
  # Render pptx from Rmd, html, pdf, or direct URL
  to_pptx("slides.Rmd")
})
```

---

`to_social`

*Render png image of first slide sized for social media sharing.*

---

### Description

Render png image of first slide for sharing on social media. Requires a local installation of Chrome as well as the `webshot2` package: `remotes::install_github("rstudio/webshot2")`.

### Usage

```
to_social(from, to = NULL)
```

### Arguments

<code>from</code>	Path to Rmd file of input media (e.g., xaringan slides).
<code>to</code>	The name of the output file. If using <code>NULL</code> then the output filename will be based on filename for the <code>from</code> file. If a filename is provided, a path to the output file can also be provided.

### Value

Slides are rendered as a png file.

**Examples**

```
if (interactive()) {  
  with_example("slides.Rmd", requires_chrome = TRUE, requires_packages = "webshot2", {  
    # Render png image of first slide from Rmd file  
    # sized for sharing on social media  
    to_social("slides.Rmd")  
  })  
}
```

# Index

`build_all`, [2](#)

`quarto::quarto_render()`, [4](#), [5](#)

`rmarkdown::render()`, [4](#), [5](#)

`to_gif`, [3](#)

`to_html`, [4](#)

`to_mp4`, [5](#)

`to_pdf`, [6](#)

`to_png`, [8](#)

`to_pptx`, [9](#)

`to_social`, [10](#)