Package: updoc (via r-universe)

November 25, 2026

Title Live Preview Server for 'pkgdown' Sites

Version 0.1.0

Description Serves live previews of 'pkgdown' sites while you edit your package. Watches for saved changes, rebuilds affected pages, refreshes the browser, and displays build progress, warnings, and errors. Keeps the last working preview available if a build fails, and leaves generated files in your source package untouched while previewing.

License MIT + file LICENSE

Copyright See file inst/COPYRIGHTS.

URL https://updoc.leightonpayne.dev, https://github.com/leightonpayne/updoc

BugReports https://github.com/leightonpayne/updoc/issues

Depends R (>= 4.1.0)

Imports callr, cli (>= 3.6.0), fs, httpuv, jsonlite, later, mirai (>= 2.0.0), pkgdown (>= 2.2.0), promises, rmarkdown, roxygen2

Suggests pkgload, testthat (>= 3.1.7)

Config/testthat/edition 3

SystemRequirements pandoc (>= 2.10.1)

Encoding UTF-8

Roxygen list(markdown = TRUE)

Config/roxygen2/version 8.1.0

Config/pak/sysreqs cmake libfontconfig1-dev libfreetype6-dev libfribidi-dev make libharfbuzz-dev libicu-dev libjpeg-dev libpng-dev libtiff-dev libuv1-dev libwebp-dev libxml2-dev libssl-dev zlib1g-dev

Repository https://leightonpayne.r-universe.dev

Date/Publication 2026-11-25 17:51:26 UTC

RemoteUrl https://github.com/leightonpayne/updoc

RemoteRef HEAD

RemoteSha a84c03e383e61b10dee46d1e31dc8d8ddcb960d1

Contents

build 2
check 3
preview 4
serve 6

Index **9**

`build` *Build your pkgdown site for publishing*

Description

Builds a complete pkgdown site ready to deploy. Use `serve()` or `preview()` for a live preview while you edit, or `check()` to verify the site in a temporary copy without modifying files in your package.

Usage

```
build(
  pkg = ".",
  destination = NULL,
  document = TRUE,
  lazy = FALSE,
  quiet = FALSE,
  pandoc = getOption("updoc.pandoc", NULL)
)
```

Arguments

`pkg`	Path to an R package (or any file or folder inside it). Defaults to the current directory (`"."`).
`destination`	Optional output folder to write the site into instead of pkgdown's default. Relative paths are resolved from the package root.
`document`	Whether to run roxygen2 before building. Set to `FALSE` if you manage `man/` files yourself. Even when `FALSE`, `README.Rmd` is still rendered if present.
`lazy`	Whether to skip rebuilding reference pages and articles whose output is already newer than their source files.
`quiet`	Whether to hide detailed pkgdown output in the console. Build progress, warnings, and errors are still shown.
`pandoc`	Path to the directory containing the pandoc binary (version 2.10.1 or newer). When `NULL` (the default), updoc uses the Pandoc found by **rmarkdown**. Set `options(updoc.pandoc = "/path/to/bin")` to reuse a specific directory across builds. updoc never downloads Pandoc or changes your system installation.

Details

Unlike a live preview, `build()` writes directly to your package: it updates roxygen documentation (unless `document = FALSE`), renders `README.Rmd` to `README.md` if present, and builds the site into your configured pkgdown output folder (usually `docs/`). It does not upload the site anywhere; publish that folder with your usual hosting setup.

Value

Invisibly, an `updoc_build` object with `package_root`, `site_dir`, `duration`, `lazy`, and `build_log`. The full build log is saved in the current R session's temporary directory; if a build fails, the error message includes the log path and the error condition carries it in `$build_log`.

Examples

```
if (interactive()) {
  # Run from your package directory when you are ready to publish.
  build()
}
```

---

check *Check a pkgdown site without modifying your package*

Description

Validates your package sources and builds the pkgdown site in a temporary copy, leaving your `man/` files, `NAMESPACE`, `README.md`, and `docs/` folder untouched. Handy in CI, scripts, and AI agent edit-verify loops.

Usage

```
check(
  pkg = ".",
  document = TRUE,
  quiet = FALSE,
  format = c("text", "json"),
  error = TRUE,
  pandoc = getOption("updoc.pandoc", NULL)
)
```

Arguments

`pkg`	Path to an R package (or any file or folder inside it). Defaults to the current directory (`"."`).
`document`	Whether to run roxygen2 in the temporary copy before building. Set to `FALSE` if you manage `man/` files yourself. R syntax is still checked, and `README.Rmd` is still rendered if present.

quiet	Whether to hide detailed pkgdown output. Always treated as TRUE when format = "json" so standard output stays valid JSON.
format	Output format: • "text" (default): print a readable summary and structured diagnostics. • "json": print one JSON object (ok, package_root, duration, warnings, error, and build_log) to standard output.
error	Whether to signal an error if the build fails. Defaults to TRUE so Rscript -e "updoc::check()" exits with a non-zero status on failure. Set to FALSE to inspect the returned updoc_check object without throwing.
pandoc	Path to the directory containing the pandoc binary (version 2.10.1 or newer). When NULL (the default), updoc uses the Pandoc found by **rmarkdown**. Set options(updoc.pandoc = "/path/to/bin") to reuse a specific directory across builds. updoc never downloads Pandoc or changes your system installation.

Details

Like serve() and preview(), check() checks R syntax and article YAML front matter, runs roxygen2 (unless document = FALSE), renders README.Rmd if present, and builds the site in isolation. Temporary site files are deleted before returning, while the full build log stays in the current R session's temporary directory.

Value

Invisibly, an updoc_check object with ok, package_root, duration, warnings, error, and build_log. When error = TRUE and the check fails, the thrown error message includes the log path and the condition carries $build_log and $check.

Examples

```
if (interactive()) {
  # Verify the site without touching generated files in your package.
  check()

  # Emit machine-readable JSON for scripts or AI agents.
  check(format = "json", error = FALSE)
}
```

---

preview *Start a background live pkgdown preview*

Description

Starts the same live preview server as serve(), then returns right away so you can keep working in the R console. Assign the result (for example, site <- preview()) to check status, trigger rebuilds, or stop the server later.

Usage

```
preview(
  pkg = ".",
  document = TRUE,
  strategy = c("smart", "lazy", "full"),
  port = 4321,
  browse = interactive(),
  quiet = FALSE,
  theme = getOption("updoc.theme", "auto"),
  pandoc = getOption("updoc.pandoc", NULL)
)
```

Arguments

pkg	Path to an R package (or any file or folder inside it). Defaults to the current directory (`"."`).
document	Whether to re-run roxygen2 when files in `R/` change. Set to `FALSE` if you manage `man/` files yourself. R syntax is still checked, and `README.Rmd` is still rendered when edited.
strategy	How to rebuild after you save a file: • `"smart"` (default): rebuilds only the pages affected by your edit, and does a full build for broader changes like `_pkgdown.yml`, `DESCRIPTION`, or R code. • `"lazy"`: lets pkgdown skip reference pages and articles that are already up to date. • `"full"`: rebuilds the whole site on every save.
port	Preferred local port for the preview server (defaults to `4321`). Use `0` to pick any free local port automatically. If a specific port is already in use, updoc picks another free port.
browse	Whether to open the preview in your browser right away. Defaults to `TRUE` in interactive R sessions and `FALSE` otherwise.
quiet	Whether to hide detailed pkgdown output in the console. Build progress, warnings, and errors are still shown.
theme	Color scheme for the in-browser status popup: • `"auto"` (default): matches the site's light or dark theme, falling back to your system preference. • `"inverse"`: uses the opposite of `"auto"` for extra contrast. • `"light"` or `"dark"`: keeps the popup in that theme. Override the default across sessions with `options(updoc.theme = ...)`.
pandoc	Path to the directory containing the pandoc binary (version 2.10.1 or newer). When `NULL` (the default), updoc uses the Pandoc found by **rmarkdown**. Set `options(updoc.pandoc = "/path/to/bin")` to reuse a specific directory across builds. updoc never downloads Pandoc or changes your system installation.

Details

Previews build in a temporary copy of your package, leaving your `man/` files, `README.md`, and `docs/` folder untouched. Edits to `README.Rmd` are rendered automatically, and if a build fails, your last working preview stays up until you fix the error and save again.

Value

Invisibly, an `updoc_preview` handle with `url` and `package_root` fields. Print the handle to see its current status, or call its methods:

- `$status()`: inspect build status, warnings, errors, and the `build_log` file path (kept for the current R session).
- `$wait(timeout = 60, after = NULL)`: check for any newly saved changes, wait until the preview finishes building (or until `timeout` seconds pass), and return the current status. Pass `after` (a previous `rebuild_count`) to wait until a newer build finishes or fails.
- `$rebuild(full = FALSE)`: trigger a manual rebuild (pass `full = TRUE` to rebuild the entire site).
- `$open()`: open the preview in your browser again.
- `$stop()`: stop watching files and shut down the server.

Examples

```
if (interactive()) {
  # Run from your package directory.
  site <- preview()
  site$status()
  site$rebuild()
  # Stop the server when you are done.
  site$stop()
}
```

---

serve *Serve a live pkgdown preview*

Description

Builds your pkgdown site, opens it in your browser, and automatically rebuilds and refreshes whenever you save a change. The R console stays busy until you press Ctrl+C to stop the server; use `preview()` instead if you want to keep using R while the preview runs.

Usage

```
serve(
  pkg = ".",
  document = TRUE,
  strategy = c("smart", "lazy", "full"),
  port = 4321,
```

```
  browse = interactive(),
  quiet = FALSE,
  theme = getOption("updoc.theme", "auto"),
  pandoc = getOption("updoc.pandoc", NULL)
)
```

Arguments

pkg	Path to an R package (or any file or folder inside it). Defaults to the current directory (`"."`).
document	Whether to re-run roxygen2 when files in `R/` change. Set to `FALSE` if you manage `man/` files yourself. R syntax is still checked, and `README.Rmd` is still rendered when edited.
strategy	How to rebuild after you save a file: • `"smart"` (default): rebuilds only the pages affected by your edit, and does a full build for broader changes like `_pkgdown.yml`, `DESCRIPTION`, or R code. • `"lazy"`: lets pkgdown skip reference pages and articles that are already up to date. • `"full"`: rebuilds the whole site on every save.
port	Preferred local port for the preview server (defaults to `4321`). Use `0` to pick any free local port automatically. If a specific port is already in use, updoc picks another free port.
browse	Whether to open the preview in your browser right away. Defaults to `TRUE` in interactive R sessions and `FALSE` otherwise.
quiet	Whether to hide detailed pkgdown output in the console. Build progress, warnings, and errors are still shown.
theme	Color scheme for the in-browser status popup: • `"auto"` (default): matches the site's light or dark theme, falling back to your system preference. • `"inverse"`: uses the opposite of `"auto"` for extra contrast. • `"light"` or `"dark"`: keeps the popup in that theme. Override the default across sessions with `options(updoc.theme = ...)`.
pandoc	Path to the directory containing the `pandoc` binary (version 2.10.1 or newer). When `NULL` (the default), updoc uses the Pandoc found by **rmarkdown**. Set `options(updoc.pandoc = "/path/to/bin")` to reuse a specific directory across builds. updoc never downloads Pandoc or changes your system installation.

Details

Previews run in a temporary copy of your package, so your `man/` files, `README.md`, and `docs/` folder stay untouched. Use `check()` for a one-shot non-destructive build check, or `build()` when you are ready to build the site for publishing.

Value

Invisibly, the stopped `updoc_preview` handle.

Examples

```
if (interactive()) {
  # Run from your package directory. Press Ctrl+C to stop.
  serve()
}
```

Index

build, 2
build(), *7*

check, 3
check(), *2*, *7*

preview, 4
preview(), *2*, *4*, *6*

serve, 6
serve(), *2*, *4*