

Package ‘rqualify’

April 16, 2026

Type Package

Title Qualification of R Software Installations

Version 1.0.2

Description Qualify R software installations using R Markdown as the foundation for the Installation Qualification (IQ) and Operational Qualification (OQ) when used in environments (such as regulated clinical trials) where such processes may be required.

License GPL-2

URL <https://github.com/Medtronic-Biostatistics/rqualify>,
<https://medtronic-biostatistics.github.io/rqualify/>

BugReports <https://github.com/Medtronic-Biostatistics/rqualify/issues>

Depends R (>= 4.4.0)

Imports pandoc, rmarkdown, tinytex

Suggests knitr, testthat (>= 3.0.0)

Encoding UTF-8

VignetteBuilder knitr

RoxygenNote 7.3.2

Config/testthat/edition 3

NeedsCompilation no

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Repository CRAN

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Description

Run IQ-OQ on an installation of R software

Usage

```
rqualify(
  path_save,
  setup_tinytex = TRUE,
  setup_pandoc = TRUE,
  render_latex = TRUE,
  verbose = TRUE
)
```

Arguments

| | |
|---------------|--|
| path_save | Character. Path to save the R-validation folder. Ensure a folder named R-validation does not already exist at this location. |
| setup_tinytex | Logical. If TRUE, sets up TinyTeX for LaTeX document generation. Note, this does not install the tinytex R package, but the TinyTeX LaTeX bundle. It is a convenient wrapper for installing TinyTeX using <code>tinytex::install_tinytex()</code> , and adding the TinyTeX location to the environment. The function installs the "TinyTeX" bundle and the additional package <code>grfext</code> , and sets the TinyTeX installation path on the system PATH. |
| setup_pandoc | Logical. If TRUE, sets up pandoc for document conversion. Note, this does not install the pandoc R package, but the Pandoc software. It is a convenient wrapper around <code>pandoc::pandoc_install()</code> and <code>'pandoc::pandoc_activate()'</code> , which are called internally. |
| render_latex | Logical. If TRUE, renders the generated LaTeX file to PDF using <code>tinytex::pdflatex()</code> . |
| verbose | Logical. If TRUE, prints progress messages to the console. |

Details

This function creates a folder named R-validation at the specified path, allows users to conveniently install TinyTeX and Pandoc, renders an RMarkdown file to LaTeX, compiles the LaTeX to PDF, and saves the output in the created folder.

The validation process involves running a series of tests on the R installation and can be quite time consuming. The function will print progress messages to the console if `verbose` is set to TRUE.

The following steps are carried out using default arguments:

1. Create the folder tree R-validation/IQ-OQ-TestOutput at `path_save`

2. Install TinyTeX and necessary LaTeX packages
3. Install Pandoc
4. Copy RMarkdown validation file to the R-validation folder
5. Execute the IQ-OQ by rendering the RMarkdown file to LaTeX
6. Compile the LaTeX file to pdf

Value

The path to the R-validation folder. The primary purpose of this function is its side effects, rendering an RMarkdown document.

Examples

```
# Render the R-validation report, must have TinyTeX and Pandoc installed for
# this example, otherwise set setup_tinytex and setup_pandoc to TRUE.
rqualify(path_save = tempdir(),
         setup_tinytex = FALSE,
         setup_pandoc = FALSE)
```

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