Package ‘rxode2mrgsolvebridge’

May 18, 2026

Type Package

Title Convert Models Between 'rxode2' and 'mrgsolve'

Version 0.1.0

Description Provides an intermediate representation and file-oriented helpers for converting pharmacometric model code between 'rxode2' and 'mrgsolve'. The conversion uses a package-specific intermediate representation described by Hammami F (2026) ``rxode2-mrgsolve-bridge'' <https://gitlab.com/fiha1/rxode2-mrgsolve-bridge>.

URL https://gitlab.com/fiha1/rxode2-mrgsolve-bridge

BugReports https://gitlab.com/fiha1/rxode2-mrgsolve-bridge/-/issues

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Encoding UTF-8

RoxygenNote 7.3.2

Imports stats

Suggests mrgsolve, rxode2, testthat (>= 3.0.0), withr

Config/testthat/edition 3

NeedsCompilation no

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Repository CRAN

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rxode2mrgsolvebridge *Convert models between rxode2 and mrgsolve*

Description

Provides a shared intermediate representation and file-oriented helpers for converting model code between rxode2 and mrgsolve.

Usage

```
parse_rxode2_model(rx_mod, theta, model_name = NULL, description = NULL)

parse_mrgsolve_model(model_code, model_name = NULL, description = NULL)

parse_mrgsolve_file(path, model_name = NULL, description = NULL)

ir_to_mrgsolve(ir, tab = "  ")

ir_to_rxode2(ir, model_name = NULL, include_observables_block = FALSE)

export_mrgsolve_model(ir, file, overwrite = TRUE)

export_rxode2_files(
  ir,
  out_dir = NULL,
  model_name = NULL,
  theta_name = "theta",
  model_file = "model_rxode2.R",
  theta_file = "theta.R",
  overwrite = TRUE
)

convert_rxode2_to_mrgsolve(
  rx_model,
  theta_file,
  theta_name = "theta",
  output_file = NULL,
  output_basename = NULL,
  out_dir = NULL,
  model_name = NULL,
  overwrite = TRUE
)

convert_mrgsolve_to_rxode2(
  mrgsolve_file,
  output_basename = NULL,
  out_dir = NULL,
```

```
  rx_model_name = NULL,
  theta_name = "theta",
  model_file = NULL,
  theta_file = NULL,
  overwrite = TRUE
)
```

Arguments

rx_mod, rx_model	An rxode2 model object, rxode2 model code string, or, for rx_model, a path to an R file containing a named model object.
theta	Named numeric vector of parameter values.
theta_file	R file containing a named numeric theta vector.
theta_name	Name of the theta vector object to read or write.
model_code	Character string containing mrgsolve model code.
path, mrgsolve_file	Path to an mrgsolve model file.
ir	Model intermediate representation list.
file, output_file	Output mrgsolve file path.
out_dir	Output directory. Must be supplied explicitly by writing helpers; use tempdir() or tempfile()-based directories in examples and tests.
model_name, rx_model_name	Model name for metadata, lookup, or generated rxode2 object names.
model_file	Output file name for the rxode2 model file.
output_basename	Basename used to derive default output file names.
description	Optional model description.
tab	Indentation used when rendering mrgsolve code.
include_observables_block	Whether to render an explicit rxode2 observables block.
overwrite	Whether existing output files may be overwritten.

Details

Default wrapper output names are derived from the input basename: <input>_mrgsolve.cpp for rxode2 to mrgsolve, and <input>_rxode.R plus <input>_rxode_theta.R for mrgsolve to rxode2. The wrappers only use these generated names after the caller supplies an explicit output directory, or after the caller supplies a complete output file path.

Value

Parsing functions return an intermediate representation list. Rendering functions return character code or code/theta lists. Export and conversion functions return output paths invisibly.

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