# Package 'RLumBuild'

September 21, 2019

```
Type Package
Title RLum Universe Package Building
Version 0.1.4.9000-13
Date 2019-09-21
Author Sebastian Kreutzer [aut, cre] (<a href="https://orcid.org/0000-0002-0734-2199">https://orcid.org/0000-0002-0734-2199</a>),
      Christoph Burow [aut] (<a href="https://orcid.org/0000-0002-5023-4046">https://orcid.org/0000-0002-5023-4046</a>)
Maintainer Sebastian Kreutzer < sebastian.kreutzer@u-bordeaux-montaigne.fr>
Description Build packages from the RLum-universe.
      A collection of tools and scripts to unify the building of packages.
License GPL-3
BugReports https://github.com/R-Lum/RLumBuild/issues
URL https://github.com/R-Lum/RLumBuild
Depends R (>= 3.4.0),
      utils
Imports crayon (>= 1.3.4),
      rmarkdown (>= 1.12),
      cli (>= 1.1.0),
      codemetar (>= 0.1.8),
      devtools (\geq 2.0.2),
      miniCRAN (>= 0.2.11),
      pander (>= 0.6.3),
      pkgbuild (>= 1.0.3),
      roxygen2 (>= 6.1.1),
      Rcpp (>= 1.0.1),
      R2HTML (>= 2.3.2),
      stringi (>= 1.4.3),
      stringr (>= 1.4.0),
      tools,
      xtable (>= 1.8-4)
Encoding UTF-8
LazyData true
RoxygenNote 6.1.1
```

2 build\_package

## **R** topics documented:

RLuml	Build-package RLum Universe Package Building #'	
Index		13
	module_mine_i and dollarst	
	module write FunctionList	
	module_write_codemetar	
	module_write_BibTeX	
	module_verify_ExampleTimings	
	module_update_datalist	
	module_set_VersionNumber	
	module_knit_README	
	module_knit_NEWS	
	module_create_DependencyGraph	$\epsilon$
	module_compile_Attributes	6
	module_check_ReverseDependencies	5
	module_build_documentation	5
	module_add_RLumTeam	4
	module_add_HowToCite	3
	build_package	2
	RLumBuild-package	2

## Description

Build packages from the RLum-universe. A collection of tools and scripts to unify the building of packages.

## **Details**

## **Funding**

In 2019, the work of Sebastian Kreutzer as maintainer of the package was supported by the LabEx LaScArBxSK (ANR - n. ANR-10-LABX-52).

build\_package

Check and Build Package

## Description

Central function to run the package build process.

## Usage

```
build_package(path = ".", exclude = NULL, write_Rbuildignore = TRUE,
  as_cran = FALSE)
```

#### **Arguments**

```
path character (with default): set package path
exclude character (optional): names of build modules you want to exclude]
write_Rbuildignore
```

logical (optional): writes are master build-ignore

as\_cran logical (with default): enable/disable --as-cran check

#### **Function version**

0.1.0

#### How to cite

Kreutzer, S., 2019. build\_package(): Check and Build Package. Function version 0.1.0. In: Kreutzer, S., Burow, C., 2019. RLumBuild: RLum Universe Package BuildingR package version 0.1.4.9000-13. https://github.com/R-Lum/RLumBuild

## Author(s)

Sebastian Kreutzer, IRAMAT-CRP2A, UMR 5060, CNRS - Université Bordeaux Montaigne (France) , RLum Developer Team

#### **Examples**

```
print("This is only to silence the CRAN check")
## Not run:
build_package()
## End(Not run)
```

 ${\tt module\_add\_HowToCite} \quad \textit{Add How to Cite Section}$ 

## **Description**

Adds a function tailored section 'How to Cite' to each manual page as long as author names and a section 'Function version' exists.

#### Usage

```
module_add_HowToCite()
```

#### **Details**

### **Output example**

Burow, C., Kreutzer, S. (2019). module\_add\_HowToCite(): Add How to Cite Section. Function version 0.1.0. In: Kreutzer, S., Burow, C. (2019). RLumBuild: RLum Universe Package BuildingR package version 0.1.1.9000-5. https://github.com/R-Lum/RLumBuild

#### **Function version**

0.3.0

#### How to cite

Burow, C., Kreutzer, S., 2019. module\_add\_HowToCite(): Add How to Cite Section. Function version 0.3.0. In: Kreutzer, S., Burow, C., 2019. RLumBuild: RLum Universe Package BuildingR package version 0.1.4.9000-13. https://github.com/R-Lum/RLumBuild

#### Author(s)

Christoph Burow (Germany), Sebastian Kreutzer, IRAMAT-CRP2A, UMR 5060, CNRS - Université Bordeaux Montaigne (Frange), RLum Developer Team

module\_add\_RLumTeam

Module: add RLum-Team and update version timestamp

## **Description**

If the package was supported by the RLumTeam (the standard) the RLum-Team is added as author to all functions.

## Usage

module\_add\_RLumTeam()

## **Function version**

0.1.0

## How to cite

Kreutzer, S., 2019. module\_add\_RLumTeam(): Module: add RLum-Team and update version timestamp. Function version 0.1.0. In: Kreutzer, S., Burow, C., 2019. RLumBuild: RLum Universe Package BuildingR package version 0.1.4.9000-13. https://github.com/R-Lum/RLumBuild

## Author(s)

module\_build\_documentation

Module: Build Documentation

## **Description**

Create documentation using roxygen2

## Usage

module\_build\_documentation()

#### **Function version**

0.1.0

#### How to cite

Kreutzer, S., 2019. module\_build\_documentation(): Module: Build Documentation. Function version 0.1.0. In: Kreutzer, S., Burow, C., 2019. RLumBuild: RLum Universe Package BuildingR package version 0.1.4.9000-13. https://github.com/R-Lum/RLumBuild

## Author(s)

Sebastian Kreutzer, IRAMAT-CRP2A, UMR 5060, CNRS - Université Bordeaux Montaigne (France) , RLum Developer Team

module\_check\_ReverseDependencies

Check Reverse Dependencies

## Description

Check the reverse dependencies of the package

## Usage

module\_check\_ReverseDependencies()

#### **Function version**

0.1.0

## How to cite

Kreutzer, S., 2019. module\_check\_ReverseDependencies(): Check Reverse Dependencies. Function version 0.1.0. In: Kreutzer, S., Burow, C., 2019. RLumBuild: RLum Universe Package BuildingR package version 0.1.4.9000-13. https://github.com/R-Lum/RLumBuild

#### Author(s)

Sebastian Kreutzer, IRAMAT-CRP2A, UMR 5060, CNRS - Université Bordeaux Montaigne (France) , RLum Developer Team

module\_compile\_Attributes

Module: Compile attributes

## **Description**

Compile C++ attributes if such code is part of the package

#### Usage

```
module_compile_Attributes()
```

#### **Function version**

0.1.0

#### How to cite

Kreutzer, S., 2019. module\_compile\_Attributes(): Module: Compile attributes. Function version 0.1.0. In: Kreutzer, S., Burow, C., 2019. RLumBuild: RLum Universe Package BuildingR package version 0.1.4.9000-13. https://github.com/R-Lum/RLumBuild

## Author(s)

Sebastian Kreutzer, IRAMAT-CRP2A, UMR 5060, CNRS - Université Bordeaux Montaigne (France) , RLum Developer Team

module\_create\_DependencyGraph

Create Dependency Graph

#### **Description**

Create package dependency graph

#### Usage

```
module_create_DependencyGraph(Rversion = paste(R.version[c("major",
    "minor")], collapse = "."))
```

## **Arguments**

Rversion [character] (with default): R version for which the graph is created

module\_knit\_NEWS 7

#### **Details**

The script based on:

#### **Function version**

0.1.0

## How to cite

Kreutzer, S., 2019. module\_create\_DependencyGraph(): Create Dependency Graph. Function version 0.1.0. In: Kreutzer, S., Burow, C., 2019. RLumBuild: RLum Universe Package BuildingR package version 0.1.4.9000-13. https://github.com/R-Lum/RLumBuild

#### Note

Module currently not acctivated

## Author(s)

Sebastian Kreutzer, IRAMAT-CRP2A, UMR 5060, CNRS - Université Bordeaux Montaigne (France) , RLum Developer Team

module\_knit\_NEWS Ma

Module: Knit NEWS

## **Description**

Create NEWS.md from NEWS.Rmd

## Usage

module\_knit\_NEWS()

## **Function version**

0.1.0

#### How to cite

Kreutzer, S., 2019. module\_knit\_NEWS(): Module: Knit NEWS. Function version 0.1.0. In: Kreutzer, S., Burow, C., 2019. RLumBuild: RLum Universe Package BuildingR package version 0.1.4.9000-13. https://github.com/R-Lum/RLumBuild

## Author(s)

## **Description**

Create README.md from README.Rmd

#### Usage

```
module_knit_README()
```

#### **Function version**

0.1.0

#### How to cite

Kreutzer, S., 2019. module\_knit\_README(): Module: Knit README. Function version 0.1.0. In: Kreutzer, S., Burow, C., 2019. RLumBuild: RLum Universe Package BuildingR package version 0.1.4.9000-13. https://github.com/R-Lum/RLumBuild

## Author(s)

Sebastian Kreutzer, IRAMAT-CRP2A, UMR 5060, CNRS - Université Bordeaux Montaigne (France) , RLum Developer Team

module\_set\_VersionNumber

Module: set\_VersionNumber

#### **Description**

Automatically set version number in DESCRIPTION file if the pattern '.9000' is found.

#### Usage

```
module_set_VersionNumber()
```

## **Details**

If the package is under development it is somehow meaningful to easily distinguish between different build versions. In the R community the pattern '.9000' in a version number is used to declare a package under development. If such pattern is found, the module either adds '-1' or if already their, increase such number by '1' every time the package is built.

For release versions the patter '.9000' is removed from the DESCRIPTION file and nothing is done if the module is run.

## **Function version**

0.1.0

#### How to cite

Kreutzer, S., 2019. module\_set\_VersionNumber(): Module: set\_VersionNumber. Function version 0.1.0. In: Kreutzer, S., Burow, C., 2019. RLumBuild: RLum Universe Package BuildingR package version 0.1.4.9000-13. https://github.com/R-Lum/RLumBuild

#### Author(s)

Sebastian Kreutzer, IRAMAT-CRP2A, UMR 5060, CNRS - Université Bordeaux Montaigne (France) , RLum Developer Team

module\_update\_datalist

Update datalist

#### **Description**

Updates the file 'data/datalist' if available. The standard CRAN functionality only works for data > 1 MB. For whatever reason.

## Usage

module\_update\_datalist()

#### **Function version**

0.1.0

#### How to cite

Kreutzer, S., 2019. module\_update\_datalist(): Update datalist. Function version 0.1.0. In: Kreutzer, S., Burow, C., 2019. RLumBuild: RLum Universe Package BuildingR package version 0.1.4.9000-13. https://github.com/R-Lum/RLumBuild

#### Author(s)

Sebastian Kreutzer, IRAMAT-CRP2A, UMR 5060, CNRS - Université Bordeaux Montaigne (France) , RLum Developer Team

module\_verify\_ExampleTimings

Verify Example Timings

## Description

Check and display the timing results of the example checks to avoid too long example runs.

#### Usage

module\_verify\_ExampleTimings()

#### **Function version**

0.1.0

#### How to cite

Kreutzer, S., 2019. module\_verify\_ExampleTimings(): Verify Example Timings. Function version 0.1.0. In: Kreutzer, S., Burow, C., 2019. RLumBuild: RLum Universe Package BuildingR package version 0.1.4.9000-13. https://github.com/R-Lum/RLumBuild

#### Author(s)

Sebastian Kreutzer, IRAMAT-CRP2A, UMR 5060, CNRS - Université Bordeaux Montaigne (France) , RLum Developer Team

module\_write\_BibTeX

Create Package BibTeX file

## Description

A BibTeX file to be used to cite the package is automatically created.

## Usage

module\_write\_BibTeX()

## **Function version**

0.1.0

#### How to cite

Kreutzer, S., 2019. module\_write\_BibTeX(): Create Package BibTeX file. Function version 0.1.0. In: Kreutzer, S., Burow, C., 2019. RLumBuild: RLum Universe Package BuildingR package version 0.1.4.9000-13. https://github.com/R-Lum/RLumBuild

## Author(s)

module\_write\_codemetar

Create Codemetar JSON-LD file

## **Description**

Add JSON-LD file file to make the package more tracable

#### Usage

```
module_write_codemetar()
```

#### **Function version**

0.1.0

#### How to cite

Kreutzer, S., 2019. module\_write\_codemetar(): Create Codemetar JSON-LD file. Function version 0.1.0. In: Kreutzer, S., Burow, C., 2019. RLumBuild: RLum Universe Package BuildingR package version 0.1.4.9000-13. https://github.com/R-Lum/RLumBuild

#### Author(s)

Sebastian Kreutzer, IRAMAT-CRP2A, UMR 5060, CNRS - Université Bordeaux Montaigne (France) , RLum Developer Team

#### See Also

[codemetar::create\_codemeta]

```
module_write_FunctionList
```

Write Function Argument List

## Description

Create a spread-sheet table with all function arguments

Create a HTML and markdown list of all major functions in the package

#### Usage

```
module_write_FunctionList()
module_write_FunctionList()
```

## **Details**

Pevious versions were written by Michael Dietze and Sebastian Kreutzer. This version programmatically fetches all functions and arguments and does not rely on parsing the .Rd files with regular expressions.

#### **Function version**

0.1.0

0.1.0

## How to cite

Burow, C., Kreutzer, S., 2019. module\_write\_FunctionList(): Write Function Argument List. Function version 0.1.0. In: Kreutzer, S., Burow, C., 2019. RLumBuild: RLum Universe Package BuildingR package version 0.1.4.9000-13. https://github.com/R-Lum/RLumBuild

## Author(s)

Christoph Burow, Sebastian Kreutzer, IRAMAT-CRP2A, UMR 5060, CNRS - Université Bordeaux Montaigne (France)

# **Index**

```
* package
    RLumBuild-package, 2
build_package, 2
character, 3
logical, 3
module\_add\_HowToCite, 3
module_add_RLumTeam, 4
module_build_documentation, 5
module_check_ReverseDependencies, 5
module_compile_Attributes, 6
module_create_DependencyGraph, 6
module_knit_NEWS, 7
module_knit_README, 8
{\tt module\_set\_VersionNumber, 8}
module\_update\_datalist, 9
module_verify_ExampleTimings, 9
module_write_BibTeX, 10
module_write_codemetar, 11
module_write_FunctionList, 11
RLumBuild (RLumBuild-package), 2
RLumBuild-package, 2
```