

# Package ‘NVIpackager’

January 26, 2023

**Title** Tools to facilitate Development of NVIverse Packages

**Version** 0.4.0

**Date** 2023-01-26

**Description** Provides tools to facilitate development of NVIverse packages. You should use 'create\_NVIpkg\_skeleton' to make a package skeleton in accord with NVIverse standards. For further development and maintenance there are tools for updating documentation and installing development versions. The NVIpackager functions are to a large extent wrappers for devtools and usethis functions. In addition, the templates folder keeps templates for standard files like sections of README and CONTRIBUTING.

**License** BSD\_3\_clause + file LICENSE

**URL** <https://github.com/NorwegianVeterinaryInstitute/NVIdvpkg>

**BugReports** <https://github.com/NorwegianVeterinaryInstitute/NVIdvpkg/issues>

**Encoding** UTF-8

**Language** en-GB

**LazyData** true

**Roxygen** list(markdown = FALSE)

**RoxygenNote** 7.2.3

**Depends** R (>= 4.0.0)

**Imports** checkmate (>= 2.0.0),  
desc,  
devtools,  
knitr,  
remotes,  
rmarkdown,  
shiny,  
stringi,  
styler (>= 1.3.2),  
usethis (>= 2.1.0),  
withr,  
NVIrpackages,  
R.rsp

**Suggests** covr,  
testthat (>= 3.0.0)

**Remotes** github::NorwegianVeterinaryInstitute/NVIrpackages

**VignetteBuilder** knitr, R.rsp

**Config/testthat/edition** 3

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create\_NVIpkg\_skeleton

*Create the package skeleton for NVIverse packages*

---

### Description

Creates the package skeleton in agreement with the conventions developed for NVIverse packages. `create_NVIpkg_skeleton` should be run once after a GitHub repository has been synchronized with the the package directory.

### Usage

```
create_NVIpkg_skeleton(
  pkg = stringi::stri_extract_last_words(usethis::proj_path()),
  pkg_path = usethis::proj_path(),
  license_keyword = "BSD_3_clause"
)
```

### Arguments

<code>pkg</code>	[character] The package name, defaults to <code>stringi::stri_extract_last_words(usethis::proj_path())</code> .
<code>pkg_path</code>	[character] The path to the package directory, defaults to <code>usethis::proj_path()</code> .
<code>license_keyword</code>	[character] The keyword for the package's license in accord with list of license keywords, defaults to "BSD_3_clause".

## Details

create\_NVIpkg\_skeleton is a wrapper for several usethis -functions. It sets up the package directory with standard files and standard sub-directories. Modifies the DESCRIPTION, .gitignore, and .Rbuildignore in agreement with standard dependencies for NVIverse.

Standard values are input to DESCRIPTION. For modifying these values, you need to modify set\_description\_default.

In addition README.Rmd-template, CONTRIBUTING, CODE\_OF\_CONDUCT, and the vignette Contribute\_to\_NVIpkg are copied to the package directory and develop.R is copied to ".notes/".

The function accepts a short list of the listed license keywords accepted at Cran in ".share/license/license.db" in R home. If you need any other license than in the short list, submit an issue.

## Value

None. Sets up the package directories and writes and modifies several files, see details.

## Author(s)

Petter Hopp Petter.Hopp@vetinst.no

## Examples

```
## Not run:
# Attach packages and set up with temporary directory
library(NVIpkager)
td <- tempdir()
if (!dir.exists(file.path(td, "NVItest"))) {
  dir.create(file.path(td, "NVItest"))
}
# Create package skeleton in temporary directory
create_NVIpkg_skeleton(pkg = "NVItest", pkg_path = file.path(td, "NVItest"))

## End(Not run)
```

---

document\_NVIpkg

---

Update styling and documentation of a package

---

## Description

A wrapper around functions for styling, write the help files and update README and CONTRIBUTING.md.

## Usage

```
document_NVIpkg(
  pkg = stringi::stri_extract_last_words(usethis::proj_path()),
  pkg_path = usethis::proj_path(),
  style = FALSE,
  manual = "update",
  contributing = FALSE,
  readme = FALSE,
  ...
)
```

**Arguments**

pkg	[character] The package name, defaults to <code>stringi::stri_extract_last_words(usethis::proj_path())</code> .
pkg_path	[character] The path to the package directory, defaults to <code>usethis::proj_path()</code> .
style	[logical] Should the package be styled, defaults to <code>FALSE</code> .
manual	[character] Should a reference manual be included, updated or removed. Defaults to <code>manual = "update"</code> that will update the manual if exists and do nothing if it doesn't exist.
contributing	[logical] Should <code>CONTRIBUTING.md</code> and the vignette "Contribute to NVIpkg" be updated, defaults to <code>FALSE</code> .
readme	[logical] Should <code>README</code> be updated, defaults to <code>FALSE</code> .
...	Other arguments to be passed to <code>styler::style_pkg</code> .

**Details**

The help files for R-functions will always be generated. Whether styling should be performed and `README` and `CONTRIBUTING.md` should be updated are controlled by input arguments.

Default value for styling is `scope = "spaces"`. Input to `scope` can be any subset of `c("spaces", "indentation", "line_breaks", "tokens")`. For indentation, rather use `Ctrl+I` than `scope = "indentation"`. Be careful if using `scope = "tokens"` as code may be broken.

**Value**

none. Updated help files for all functions and, depending on argument input, can updated style, `CONTRIBUTING.md`, and `README`

**Author(s)**

Petter Hopp [Petter.Hopp@vetinst.no](mailto:Petter.Hopp@vetinst.no)

**Examples**

```
## Not run:

# Attach packages and set up with temporary directory
library(NVIpackager)
td <- tempdir()
if (!dir.exists(file.path(td, "NVItest"))) {
  dir.create(file.path(td, "NVItest"))
}
if (!dir.exists(file.path(td, "NVItest", "vignettes"))) {
  dir.create(file.path(td, "NVItest", "vignettes"))
}

document_NVIpkg(pkg = "NVItest",
  pkg_path = file.path(td, "NVItest"),
  style = FALSE,
```

```

contributing = TRUE,
readme = TRUE)

## End(Not run)

```

---

```
increase_NVIpkg_version
```

*Increase the package version*

---

## Description

Increase the package version in the DESCRIPTION and NEWS files. As a default, the help and the reference manual will be styled and updated.

## Usage

```

increase_NVIpkg_version(
  pkg = stringi::stri_extract_last_words(usethis::proj_path()),
  pkg_path = usethis::proj_path(),
  type = "develop",
  document = FALSE,
  ...
)

```

## Arguments

pkg	[character] The package name, defaults to stringi::stri_extract_last_words(usethis::proj_path()).
pkg_path	[character] The path to the package directory, defaults to usethis::proj_path().
type	[character(1)]. The type of update to perform, can be one of c("major", "minor", "fix", "develop", "first"). Defaults to "develop".
document	[logical(1)]. Should styling be performed and documentation be updated. Defaults to FALSE.
...	Other arguments to be passed to document_NVIpkg.

## Details

When publishing a new release, use type = one of c("major", "minor", "fix"), depending of which release type it is.

When type = "first", the NEWS will be created with the template for the first release. If create\_NVIpkg\_skeleton has been used to create the package, the DESCRIPTION and NEWS files should already have been created with correct version number and NEWS template.

When type = "develop", the NEWS will be created with the template for the next release if the previous version was a release. If not, it increased the development version.

## Value

None. Modifies NEWS and DESCRIPTION and eventually updates help.

**Author(s)**

Petter Hopp Petter.Hopp@vetinst.no

**Examples**

```
## Not run:
# Modifies \code{NEWS} and \code{DESCRIPTION} with new version number.
# You need to be in a package directory at you PC for the code to work.
pkg <- stringi::stri_extract_last_words(usethis::proj_path())
pkg_path = usethis::proj_path()

NVIpackager::increase_NVIpkg_version(pkg = pkg,
                                     pkg_path = pkg_path,
                                     type = "develop")

# If you publish a new release, you want to ensure that documentation is up to date.
NVIpackager::increase_NVIpkg_version(pkg = pkg,
                                     pkg_path = pkg_path,
                                     type = "minor",
                                     document = TRUE)

## End(Not run)
```

---

install\_NVIpkg

---

*Install an NVIverse Package during the Development Phase*


---

**Description**

Installation of an NVIverse package from github or from local directory. Mainly intended for installation of a package during development to test new code in the package scripts .

**Usage**

```
install_NVIpkg(
  pkg = stringi::stri_extract_last_words(usethis::proj_path()),
  pkg_path = usethis::proj_path(),
  lib = R.home(),
  rsource,
  username = "NorwegianVeterinaryInstitute",
  ...
)
```

**Arguments**

pkg	[character] The package name, defaults to stringi::stri_extract_last_words(usethis::proj_path()).
pkg_path	[character] The path to the package directory, defaults to usethis::proj_path().
lib	[character] The library directory where to install, defaults to R.home().

rsource	[character] One of c("github", "local").
username	[character] The github username where the repository is found, defaults to "NorwegianVeterinaryInstitute".
...	Other arguments to be passed to remotes::install_github or devtools::install.

### Details

When rsource = "github", the default is to install the latest version in the main branch at the NorwegianVeterinaryInstitute package repository. During package development one will usually change the username to your own.

The repository can be changed by giving more arguments that will be passed to install\_github, see [install\\_github](#) for full description of the arguments repo = , username = , and ref = .

When rsource = "local", it installs the package from a local copy of the package repository. It defaults to install the active branch. Use rsource = "local" to test new code during development.

For installing the latest released versions of NVIverse packages, use [install\\_github](#) or [use\\_NVIverse](#).

### Value

None. Installs a package.

### Author(s)

Petter Hopp Petter.Hopp@vetinst.no

### Examples

```
## Not run:
# Installs a package from local PC
# You need to be in a package directory at you PC for the code to work.
pkg <- stringi::stri_extract_last_words(usethis::proj_path())
pkg_path = usethis::proj_path()

NVIpackager::install_NVIpkg(pkg = pkg, pkg_path = pkg_path, rsource = "local")

## End(Not run)
```

---

```
set_description_default
```

*Set default Values for the DESCRIPTION file*

---

### Description

Set default Values for the DESCRIPTION file. The values are saved as the option usethis.description.

### Usage

```
set_description_default(
  pkg = stringi::stri_extract_last_words(usethis::proj_path()),
  license_keyword = "BSD_3_clause"
)
```

**Arguments**

`pkg` [character]  
The package name, defaults to `stringi::stri_extract_last_words(usethis::proj_path())`.

`license_keyword` [character]  
The keyword for the package's license in accord with list of license keywords, defaults to "BSD\_3\_clause".

**Details**

These options are used when creating the package skeleton in the script `create_NVIPackage_skeleton.R`. The following standard values are given:

- "Petter Hopp" with role `c("aut", "cre")`
- "Norwegian Veterinary Institute" with role = "cph"
- `registertype` (categories for locations and addresses)
- URL: "https://github.com/NorwegianVeterinaryInstitute/NVIpkg"
- BugReports: "https://github.com/NorwegianVeterinaryInstitute/NVIpkg/issues"
- License: `license_keyword` "+ file LICENSE",
- Language: "en-GB",
- Depends:= "R (>= 4.0.0)"

The function accepts a short list of the listed license keywords accepted at Cran in `./share/license/license.db` in R home. If you need any other license than in the short list, submit an issue.

**Value**

None. Writes the options to the option `usethis.description`.

**Author(s)**

Petter Hopp `Petter.Hopp@vetinst.no`

**Examples**

```
## Not run:
library(NVIpakager)
set_description_default()

## End(Not run)

# set up standards for DESCRIPTION file ----
```



---

update_contributing	<i>Update CONTRIBUTING.md</i>
---------------------	-------------------------------

---

**Description**

Update CONTRIBUTING.md and the vignette "Contribute\_to\_NVIpkg.Rmd" from the template in NVIpackager. If the files don't exist, they are created.

**Usage**

```
update_contributing(
  pkg = stringi::stri_extract_last_words(usethis::proj_path()),
  pkg_path = usethis::proj_path()
)
```

**Arguments**

pkg	[character] The package name, defaults to stringi::stri_extract_last_words(usethis::proj_path()).
pkg_path	[character] The path to the package directory, defaults to usethis::proj_path().

**Details**

The template is found in NVIpackager. Any change in the text must be done in the template.

**Value**

None. Writes the vignette "Contribute\_to\_NVIpkg.Rmd" and the file CONTRIBUTING.md.

**Author(s)**

Petter Hopp Petter.Hopp@vetinst.no

**Examples**

```
## Not run:
# Attach packages and set up with temporary directory
library(NVIpackager)
td <- tempdir()
if (!dir.exists(file.path(td, "NVIttest"))) {
  dir.create(file.path(td, "NVIttest"))
}
if (!dir.exists(file.path(td, "NVIttest", "vignettes"))) {
  dir.create(file.path(td, "NVIttest", "vignettes"))
}

use_contributing(pkg = "NVIttest",
  pkg_path = file.path(td, "NVIttest"))

## End(Not run)
```

---

update_develop	<i>Update</i> develop.R
----------------	-------------------------

---

**Description**

Update develop.R from the template in NVIpackager. If the file already exist, it is overwritten.

**Usage**

```
update_develop(
  pkg = stringi::stri_extract_last_words(usethis::proj_path()),
  pkg_path = usethis::proj_path()
)
```

**Arguments**

pkg	[character] The package name, defaults to stringi::stri_extract_last_words(usethis::proj_path()).
pkg_path	[character] The path to the package directory, defaults to usethis::proj_path().

**Details**

"develop.R" is a script comprising code for creating, documenting, testing and installing a package during development and maintainance. All code should be written without reference to a specific package, so that the script can be used without modification in development and maintainance of all NVIverse packages.

The template is found in NVIpackager. Any change in the script should be done in the template. Thereby, it is easier to keep the script updated in all packages.

**Value**

None. Writes the R script "develop.R" to "./notes/".

**Author(s)**

Petter Hopp Petter.Hopp@vetinst.no

**Examples**

```
## Not run:
# Updates the script develop.R
update_develop()

## End(Not run)
```

---

update_logo	<i>Update logo</i>
-------------	--------------------

---

## Description

Update the logo to be used in the README file.

## Usage

```
update_logo(
  pkg = stringi::stri_extract_last_words(usethis::proj_path()),
  pkg_path = usethis::proj_path()
)
```

## Arguments

pkg	[character] The package name, defaults to <code>stringi::stri_extract_last_words(usethis::proj_path())</code> .
pkg_path	[character] The path to the package directory, defaults to <code>usethis::proj_path()</code> .

## Details

If the package logo has been created, the logo is copied from `NVIRpackages` to the package directory `./man/figures/`. If the logo already exists, the logo is overwritten.

## Value

None. Copies the the logo file to the directory `./man/figures/`.

## Author(s)

Petter Hopp [Petter.Hopp@vetinst.no](mailto:Petter.Hopp@vetinst.no)

## Examples

```
## Not run:
# Attach packages and set up with temporary directory
library(NVIRpackager)
update_logo()

## End(Not run)
```

---

update\_news

*Update NEWS*


---

### Description

Create or update the NEWS file. It will include a template for New section if relevant and update the version number.

### Usage

```
update_news(
  pkg = stringi::stri_extract_last_words(usethis::proj_path()),
  pkg_path = usethis::proj_path(),
  template = NULL
)
```

### Arguments

pkg	[character] The package name, defaults to <code>stringi::stri_extract_last_words(usethis::proj_path())</code> .
pkg_path	[character] The path to the package directory, defaults to <code>usethis::proj_path()</code> .
template	The template to add to the NEWS file Can be <code>c("first", "develop")</code> . Defaults to <code>NULL</code> .

### Details

Default is `template = NULL` that will only update the version number. Use `template = "first"` to make the NEWS template for the first release of the package. Use `template = "develop"` to make the NEWS template for the successive releases of the package.

### Value

None. Creates or updates the NEWS file in the package directory.

### Author(s)

Petter Hopp [Petter.Hopp@vetinst.no](mailto:Petter.Hopp@vetinst.no)

### Examples

```
## Not run:
# Create the first NEWS file
library(NVIpakager)
update_news(template = "first")

## End(Not run)
```

---

update_readme	<i>Update</i> README.md
---------------	-------------------------

---

## Description

Update README.md from README.Rmd and child templates in NVIpackager. If the file don't exist, it is created.

## Usage

```
update_readme(
  pkg = stringi::stri_extract_last_words(usethis::proj_path()),
  pkg_path = usethis::proj_path()
)
```

## Arguments

pkg	[character] The package name, defaults to stringi::stri_extract_last_words(usethis::proj_path()).
pkg_path	[character] The path to the package directory, defaults to usethis::proj_path().

## Details

The child templates are found in NVIpackager. Any change in this text must be done in the templates.

## Value

None. Writes the file README.md.

## Author(s)

Petter Hopp Petter.Hopp@vetinst.no

## Examples

```
## Not run:
# Attach packages and set up with temporary directory
library(NVIpackager)
td <- tempdir()
if (!dir.exists(file.path(td, "NVItest"))) {
  dir.create(file.path(td, "NVItest"))
}

update_readme(pkg = "NVItest",
              pkg_path = file.path(td, "NVItest"))

## End(Not run)
```

---

update\_reference\_manual

*Update reference manual*


---

## Description

Update the PDF reference manual and save it together with the vignettes.

## Usage

```
update_reference_manual(
  pkg = stringi::stri_extract_last_words(usethis::proj_path()),
  pkg_path = usethis::proj_path(),
  manual = "update"
)
```

## Arguments

pkg	[character] The package name, defaults to <code>stringi::stri_extract_last_words(usethis::proj_path())</code> .
pkg_path	[character] The path to the package directory, defaults to <code>usethis::proj_path()</code> .
manual	Can be <code>c("include", "update", "remove")</code> , see details. Standard is <code>manual = "update"</code> that will update the reference manual if it exists, but will do nothing if it doesn't exist.

## Details

Standard is `manual = "update"` that will update the reference manual if it exists, but will do nothing if it doesn't exist. Use `manual = "include"` to make the reference manual for the first time. For both `manual = c("include", "update")`, the DESCRIPTION and .gitignore will be checked and modified if necessary and the "pkgname.pdf.asis" will be created in addition to the reference manual "pkgname.pdf".

Use `manual = "remove"` to remove the reference manual. This will remove the reference manual "pkgname.pdf" and the file "pkgname.pdf.asis" and modify .gitignore. Any changes that have been done to the DESCRIPTION will not be redone as these may also be used by other processes. If these should be removed, it must be done manually.

## Value

None. Creates or updates the PDF reference manual in directory `"/vignettes/"`. The reference manual is given the name "pkgname.pdf" where "pkgname" is the name of the package.

## Author(s)

Petter Hopp [Petter.Hopp@vetinst.no](mailto:Petter.Hopp@vetinst.no)

**Examples**

```
## Not run:  
# Update the reference manual if it already exists  
library(NVIpakager)  
update_reference_manual(manual = "update")  
  
## End(Not run)
```

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