

Package ‘plume’

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Type Package

Title A Simple Author Handler for Scientific Writing

Version 0.2.4

Description Handles and formats author information in scientific writing in 'R Markdown' and 'Quarto'. 'plume' provides easy-to-use and flexible tools for injecting author metadata in 'YAML' headers as well as generating author and contribution lists (among others) as strings from tabular data.

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URL <https://arnaudgallou.github.io/plume/>,
<https://github.com/arnaudgallou/plume>

BugReports <https://github.com/arnaudgallou/plume/issues>

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credit_roles	<i>CRedit roles</i>
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Description

Helper function returning the 14 contributor roles of the **Contributor Roles Taxonomy** (CRedit). This function is the default argument of the `roles` and `role_cols` parameters in plume classes and `plm_template()`, respectively.

Usage

```
credit_roles(oxford_spelling = TRUE)
```

Arguments

`oxford_spelling`
Should the suffix `-ize/-ization` be used?

Value

A named vector.

Examples

```
credit_roles()
```

encyclopedists	<i>Famous encyclopedists</i>
----------------	------------------------------

Description

Data on four famous authors of the Encyclopédie (originally "Encyclopédie, ou dictionnaire raisonné des sciences, des arts et des métiers") published in France in the second half of the 18th century. The data set is available in English (encyclopedists) and French (encyclopedists_fr).

Usage

```
encyclopedists
encyclopedists_fr
```

Format

A tibble with 4 rows and 10 variables:

given_name,prénom authors' given names
family_name,nom authors' family names
email,courriel authors' email addresses
phone,téléphone authors' phone numbers
orcid authors' ORCID
affiliation_1,affiliation_2 authors' affiliations
supervision authors that supervised the project
writing,rédaction authors involved in the writing
note special notes about authors

Examples

```
encyclopedists
encyclopedists_fr
```

enumerate	<i>Enumerate vector elements</i>
-----------	----------------------------------

Description

Wrapper around `glue_collapse()` using `sep = ", "` and `last = " and "` as default arguments.

Usage

```
enumerate(x, sep = ", ", last = " and ")
```

Arguments

<code>x</code>	A character vector.
<code>sep</code>	Separator used to separate the terms.
<code>last</code>	Separator used to separate the last two items if <code>x</code> has at least 2 items.

Value

A character string with the same class as `x`.

Examples

```
aut <- Plume$new(encyclopedists)
aut$get_author_list() |> enumerate()
```

orcid	<i>ORCID icon</i>
-------	-------------------

Description

Helper function to control the size and colour of the ORCID icon.

Usage

```
orcid(size = 16, bw = FALSE)
```

Arguments

<code>size</code>	Size (in pixels) of the icon.
<code>bw</code>	Should the black and white version of the icon be used?

Value

A plume icon.

Examples

```
aut <- Plume$new(encyclopedists, orcid_icon = orcid(bw = TRUE))
```

plm_template	<i>Create a table template for plume classes</i>
--------------	--

Description

This helper function allows you to generate an empty `tibble` that you can use as a template to supply author data.

Usage

```
plm_template(minimal = TRUE, role_cols = credit_roles(), credit_roles = FALSE)
```

Arguments

<code>minimal</code>	If TRUE, returns an empty tibble with the following columns: <code>given_name</code> , <code>family_name</code> , <code>email</code> , <code>orcid</code> , <code>affiliation</code> and <code>note</code> . Otherwise the function returns a template with all columns that can be supplied to plume classes that are not PlumeQuarto-specific.
<code>role_cols</code>	A vector of names defining role columns to create. If the vector contains key-value pairs, columns will be named after the keys.
<code>credit_roles</code>	[Deprecated] It is now recommended to use <code>role_cols = credit_roles()</code> to use the Contributor Roles Taxonomy .

Value

An empty tibble.

Examples

```
plm_template()
plm_template(role_cols = paste0("role_", 1:5))
```

Plume	<i>Plume class</i>
-------	--------------------

Description

Class that generates author lists and other author-related information as character strings.

Super classes

```
plume::NameHandler -> plume::PlumeHandler -> plume::StatusSetter -> plume::StatusSetterPlume
-> Plume
```

Methods

Public methods:

- [Plume\\$new\(\)](#)
- [Plume\\$get_author_list\(\)](#)
- [Plume\\$get_affiliations\(\)](#)
- [Plume\\$get_notes\(\)](#)
- [Plume\\$get_orcids\(\)](#)
- [Plume\\$get_contact_details\(\)](#)
- [Plume\\$get_contributions\(\)](#)
- [Plume\\$clone\(\)](#)

Method `new()`: Create a Plume object.

Usage:

```
Plume$new(
  data,
  names = NULL,
  symbols = NULL,
  roles = credit_roles(),
  credit_roles = FALSE,
  initials_given_name = FALSE,
  family_name_first = FALSE,
  interword_spacing = TRUE,
  orcid_icon = orcid(),
  by = NULL
)
```

Arguments:

`data` A data frame containing author-related data.

`names` A vector of key-value pairs specifying custom names to use, where keys are default names and values their respective replacements.

`symbols` A list of key-value pairs defining the symbols to use to link authors and their metadata. Valid keys are "affiliation", "corresponding" and "note". By default, uses digits for affiliations, "*" for corresponding authors and "+", "‡", "§", "¶", "#", "***" for notes. Set a key to NULL to use numerals.

`roles` A vector of key-value pairs defining roles where keys identify role columns and values describe the actual roles to use.

`credit_roles` **[Deprecated]**

It is now recommended to use `roles = credit_roles()` to use the [Contributor Roles Taxonomy](#).

`initials_given_name` Should the initials of given names be used?

`family_name_first` Should literal names show family names first?

`interword_spacing` Should literal names use spacing? This parameter is only useful for people writing in languages that don't separate words with a space such as Chinese or Japanese.

`orcid_icon` The ORCID icon, as defined by `orcid()`, to be used.

`by` A character string defining the default variable used to assign specific metadata to authors in all `set_*`() methods. By default, uses authors' id.

Returns: A Plume object.

Method `get_author_list()`: Get author list.

Usage:

```
Plume$get_author_list(suffix = NULL, format = deprecated())
```

Arguments:

`suffix` A character string defining the format of symbols suffixing author names. See details.

`format` **[Deprecated]**

Please use the parameter `suffix` instead.

Details: `suffix` lets you choose which symbol categories to suffix authors with, using the following keys:

- a for affiliations
- c for corresponding authors
- n for notes
- o for ORCIDs

The order of the keys determines the order of symbol types. E.g. "ac" shows affiliation ids first and corresponding author mark second, when "ca" shows corresponding author mark first and affiliation ids second. Use ", " to separate and "^" to superscript symbols. Use NULL or an empty string to list author names without suffixes.

Returns: A character vector.

Method `get_affiliations()`: Get authors' affiliations.

Usage:

```
Plume$get_affiliations(superscript = TRUE, sep = "")
```

Arguments:

`superscript` Should affiliation ids be superscripted?

`sep` Separator used to separate affiliation ids and affiliations.

Returns: A character vector.

Method `get_notes()`: Get authors' notes.

Usage:

```
Plume$get_notes(superscript = TRUE, sep = "")
```

Arguments:

`superscript` Should note ids be superscripted?
`sep` Separator used to separate note ids and notes.

Returns: A character vector.

Method `get_orcids()`: Get authors' ORCID.

Usage:

```
Plume$get_orcids(compact = FALSE, icon = TRUE, sep = "")
```

Arguments:

`compact` Should links only display the 16-digit identifier?
`icon` Should the ORCID icon be shown?
`sep` Separator used to separate authors and their respective ORCID.

Returns: A character vector.

Method `get_contact_details()`: Get the contact details of corresponding authors.

Usage:

```
Plume$get_contact_details(
  format = "{details} ({name})",
  email = TRUE,
  phone = FALSE,
  fax = FALSE,
  url = FALSE,
  sep = ", "
)
```

Arguments:

`format` A [glue](#) specification that uses the variables `name` and/or `details`.
`email`, `phone`, `fax`, `url` Arguments equal to TRUE are evaluated and passed to the variable `details`. By default, only `email` is set to TRUE.
`sep` Separator used to separate details items.

Returns: A character vector.

Method `get_contributions()`: Get authors' contributions.

Usage:

```
Plume$get_contributions(
  roles_first = TRUE,
  by_author = FALSE,
  alphabetical_order = FALSE,
  dotted_initials = TRUE,
  literal_names = FALSE,
  divider = ": ",
  sep = ", ",
  sep_last = " and "
)
```


Arguments:

roles_first If TRUE, displays roles first and authors second. If FALSE, roles follow authors.
by_author Should roles be grouped by author?
alphabetical_order Should authors be listed in alphabetical order? By default, lists authors in the order they are defined in the data.
dotted_initials Should initials be dot-separated?
literal_names Should literal names be used?
divider Separator used to separate roles from authors.
sep Separator used to separate roles or authors.
sep_last Separator used to separate the last two roles or authors if more than one item is associated to a role or author.

Returns: A character vector.

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
Plume$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Examples

```

# Create a Plume instance
aut <- Plume$new(encyclopedists)

# Set the desired corresponding authors, using
# authors' id by default
aut$set_corresponding_authors(1, 4)

# Getting authors suffixed by affiliation ids
# and the corresponding author mark:
aut$get_author_list("^a,c^")

# Or maybe with the corresponding author mark
# coming before affiliation ids:
aut$get_author_list("^c,a^")

# Getting more author metadata
aut$get_affiliations()

aut$get_contributions()

# Use `symbols` to change the default symbols.
# E.g. to use letters as affiliation ids:
aut <- Plume$new(
  encyclopedists,
  symbols = list(affiliation = letters)
)

aut$get_author_list("^a^")

```

```

aut$get_affiliations()

# It is also possible to output contributions in the
# active voice
aut <- Plume$new(encyclopedists, roles = c(
  supervision = "supervised the project",
  writing = "contributed to the Encyclopédie"
))
aut$get_contributions(roles_first = FALSE, divider = " ")

```

PlumeQuarto

PlumeQuarto class

Description

Class that pushes author metadata in the YAML header of Quarto files.

Super classes

```

plume::NameHandler -> plume::PlumeHandler -> plume::StatusSetter -> plume::StatusSetterPlumeQuarto
-> PlumeQuarto

```

Methods

Public methods:

- [PlumeQuarto\\$new\(\)](#)
- [PlumeQuarto\\$to_yaml\(\)](#)
- [PlumeQuarto\\$clone\(\)](#)

Method `new()`: Create a `PlumeQuarto` object.

Usage:

```

PlumeQuarto$new(
  data,
  file,
  names = NULL,
  roles = credit_roles(),
  credit_roles = FALSE,
  initials_given_name = FALSE,
  by = NULL
)

```

Arguments:

`data` A data frame containing author-related data.

`file` A `.qmd` file to insert author data into.

`names` A vector of key-value pairs specifying custom names to use, where keys are default names and values their respective replacements.

`roles` A vector of key-value pairs defining roles where keys identify columns and values describe the actual roles to use.

`credit_roles` **[Deprecated]**

It is now recommended to use `roles = credit_roles()` to use the [Contributor Roles Taxonomy](#).

`initials_given_name` Should the initials of given names be used?

`by` A character string defining the default variable used to assign specific metadata to authors in all `set_*`() methods. By default, uses authors' id.

Returns: A PlumeQuarto object.

Method `to_yaml()`: Push or update author information in a YAML header. The generated YAML complies with Quarto's [author and affiliations schemas](#).

Usage:

```
PlumeQuarto$to_yaml()
```

Details: If missing, `to_yaml()` pushes author information into a YAML header. If already existing, the function replaces old author and affiliations values with the ones provided in the input data.

Returns: The input file invisibly.

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
PlumeQuarto$clone(deep = FALSE)
```

Arguments:

`deep` Whether to make a deep clone.

Examples

```
# Create a simple temporary file with a YAML header
# containing a title
tmp_file <- tempfile(fileext = ".qmd")
readr::write_lines("---\ntitle: Encyclopédie\n---", tmp_file)

# View the temporary file
cat(readr::read_file(tmp_file))

# Create a PlumeQuarto instance using the temporary file
# you've just created
aut <- PlumeQuarto$new(
  encyclopedists,
  file = tmp_file
)

# And push author data to the YAML header
aut$to_yaml()

cat(readr::read_file(tmp_file))

# Pushing again with new data updates the YAML
```

```
# header accordingly
aut <- PlumeQuarto$new(
  dplyr::slice(encyclopedists, 2),
  file = tmp_file
)
aut$to_yaml()

cat(readr::read_file(tmp_file))

# Clean up the temporary file
unlink(tmp_file)
```

sequential

Control the sequencing behaviour of character vectors

Description

Modifier function used to generate logical sequences of characters.

Usage

```
sequential(x)
```

Arguments

x A character vector.

Value

A character vector with parent S3 class sequential.

Examples

```
aut <- Plume$new(
  tibble::tibble(
    given_name = "X",
    family_name = "Y",
    affiliation = 1:60
  ),
  symbols = list(affiliation = sequential(letters))
)

aut$get_affiliations(sep = ": ", superscript = FALSE)
```

set_default_names	<i>Set new default names to a plume subclass</i>
-------------------	--

Description

This helper function allows you to set new default names to a plume subclass, e.g. to set default names to a language other than English.

Usage

```
set_default_names(..., .plume_quarto = FALSE)
```

Arguments

... Key-value pairs where keys are default names and values their respective replacements.

.plume_quarto Are you setting new names for [PlumeQuarto](#)?

Details

Available names are:

id, initials, literal_name, corresponding, contributor_rank, given_name, family_name, email, phone, fax, url, affiliation, role, note, orcid.

Using .plume_quarto = TRUE adds deceased, equal_contributor, number, dropping_particle and acknowledgements.

Value

A named list.

Examples

```
# Extending `Plume` with default names in French
PlumeFr <- R6::R6Class(
  classname = "PlumeFr",
  inherit = Plume,
  private = list(
    plume_names = set_default_names(
      initials = "initiales",
      literal_name = "nom_complet",
      corresponding = "correspondant",
      given_name = "prénom",
      family_name = "nom",
      email = "courriel",
      phone = "téléphone"
    )
  )
)
```

```
PlumeFr$new(encyclopedists_fr)
```

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