reference

October 31, 2022

Title What the Package Does (One Line, Title Case)

Version 0.0.0.9000

Description What the package does (one paragraph).

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Encoding UTF-8

Roxygen list(markdown = TRUE)

RoxygenNote 7.2.0

Collate utils.R project.sirius.v4.R tools-colors.R tools-methods.R
tools-default_visualize.R tools-modify_ggset.R tools-export.R
tools-MSnbase-MODIFIED_compareSpectra.R tools-yaml.R tools-report.R
base-generic.R extra-generic.R main-generic.R
class-VIRTUAL_slots.R class-melody.R
class-project_conformation.R class-project_metadata.R
class-project_api.R class-project_dataset.R class-project.R
class-statistic_set.R class-mcn_dataset.R
class-msframe.R class-command.R class-ggset.R class-report.R
class-section.R class-nebula.R class-mcnebula.R
methods-initialize_mcnebula.R
extraMethods-collate_data.R methods-filter_structure.R
methods-filter_formula.R methods-filter_ppcp.R
methods-create_hierarchy.R methods-create_reference.R
methods-create_features_annotation.R
methods-create_stardust_classes.R methods-cross_filter_stardust.R
methods-backtrack_stardust.R methods-create_nebula_index.R
methods-compute_spectral_similarity.R
methods-create_parent_nebula.R methods-create_child_nebulae.R
methods-create_parent_layout.R methods-create_child_layouts.R
methods-activate_nebulae.R methods-visualize.R
extraMethods-draw_structures.R extraMethods-draw_nodes.R
methods-annotate_nebula.R extraMethods-binary_comparison.R
extraMethods-report.R

Suggests testthat (>= 3.0.0)

Config/testthat/edition 3

Imports BiocStyle,
bookdown,
crayon,
data.table,
dplyr,
ggimage,
ggraph,
ggsci,
ggtext,
grid,
gridExtra,
grImport2,
igraph,
knitr,
pbapply,
rlang,
rmarkdown,
stringr,
styler,
svglite,
tidyr

Depends ggplot2

R topics documented:

`activate_nebulae,mcnebula,function,function-method`

...

Description

...

`activate_nebulae()`: get the default parameters for the method `activate_nebulae`.

`activate_nebulae(x, ...)`: use the default parameters whatever 'missing' while performing the method `activate_nebulae`.

FUNCTION_DESCRIPTION

...

Usage

```
## S4 method for signature 'mcnebula,`function`,`function`'
activate_nebulae(x, fun_default_parent, fun_default_child)

## S4 method for signature 'missing,missing,missing'
activate_nebulae()

## S4 method for signature 'mcnebula,ANY,ANY'
activate_nebulae(x, fun_default_parent, fun_default_child)

ggset_activate_parent_nebula(x)

ggset_activate_child_nebulae(x)
```

Arguments

```
x                 ...
fun_default_parent
                  ...
fun_default_child
                  ...
```

Details

...

DETAILS

...

Value

...

OUTPUT_DESCRIPTION

...

Examples

```
## Not run:
activate_nebulae(...)

## End(Not run)
## Not run:
if(interactive()){
 #EXAMPLE1
 }

## End(Not run)
## Not run:
if(interactive()){
```

```
#EXAMPLE1
}

## End(Not run)
```

---

annotate_nebula,ANY,character-method
...

Description

...

Usage

```
## S4 method for signature 'ANY,character'
annotate_nebula(x, nebula_name)
```

Arguments

x	...
nebula_name	...

Details

...

Value

...

See Also

draw_nodes, draw_structures...

Examples

```
## Not run:
annotate_nebula(...)

## End(Not run)
```

backtrack-class *Share slots and methods for classes inherite from VIRTUAL_backtrack*

Description

...

backtrack, backtrack<-: getter and setter for the backtrack slot of the object.

Usage

```
## S4 method for signature 'ANY'
backtrack(x)

## S4 replacement method for signature 'ANY'
backtrack(x) <- value
```

Arguments

value	The value for the slot.

Slots

backtrack ...

---

backtrack_stardust,mcnebula,missing,missing,missing-method
...

Description

...

...

...

Usage

```
## S4 method for signature 'mcnebula,missing,missing,missing'
backtrack_stardust(x)

## S4 method for signature 'mcnebula,character,missing,ANY'
backtrack_stardust(x, class.name, remove)

## S4 method for signature 'mcnebula,missing,numeric,ANY'
backtrack_stardust(x, rel.index, remove)
```

Arguments

x	...
class.name	...
remove	...
rel.index	...

Details

...

Value

...

See Also

cross_filter_stardust

Examples

```
## Not run:
backtrack_stardust(...)

## End(Not run)
## Not run:
backtrack_stardust(...)

## End(Not run)
## Not run:
backtrack_stardust(...)

## End(Not run)
```

---

binary_comparison,ANY,formula,function,ANY,character-method

...

Description

...

binary_comparison(): get the default parameters for the method binary_comparison.

binary_comparison(x, ...): use the default parameters whatever 'missing' while performing the method binary_comparison.

Usage

```
## S4 method for signature 'ANY,formula,`function`,ANY,character'
binary_comparison(x, formula, fun_norm, top_coef, contrasts)

## S4 method for signature 'missing,missing,missing,missing,missing'
binary_comparison()

## S4 method for signature 'ANY,ANY,ANY,ANY,ANY'
binary_comparison(x, ..., formula, fun_norm, top_coef, contrasts)
```

Arguments

x	...
formula	...
fun_norm	...
top_coef	...
contrasts	...
...	...

Details

...

Value

...

See Also

stats::model.matrix(), limma::makeContrasts(), limma::lmFit(), limma::eBayes(), limma::contrasts.fit(), limma::topTable()...

Examples

```
## Not run:
binary_comparison(...)

## End(Not run)
```

code_block-class ...

Description

...

...

...

code_block, code_block<-: getter and setter for the code_block slot of the object.

codes, codes<-: getter and setter for the codes slot of the object.

new_code_block: ...

new_code_block(): get the default parameters for the method new_code_block.

new_code_block(x, ...): use the default parameters whatever 'missing' while performing the method new_code_block.

new_code_block_figure: ...

new_code_block_table: ...

call_command: Format 'code_block' object as character.

Usage

```
## S4 method for signature 'code_block'
show(object)

## S4 method for signature 'code_block_table'
show(object)

## S4 method for signature 'code_block_figure'
show(object)

## S4 method for signature 'heading'
show(object)

## S4 method for signature 'section'
show(object)

## S4 method for signature 'ANY'
code_block(x)

## S4 replacement method for signature 'ANY'
code_block(x) <- value

## S4 method for signature 'code_block'
codes(x)
```

```
## S4 replacement method for signature 'code_block'
codes(x) <- value

## S4 method for signature 'character,character,list,logical,`function`'
new_code_block(language, codes, args, prettey, fun_prettey)

## S4 method for signature 'missing,missing,missing,missing,missing'
new_code_block()

## S4 method for signature 'ANY,ANY,ANY,ANY,ANY'
new_code_block(language, codes, args, prettey, fun_prettey)

## S4 method for signature 'character'
new_code_block_figure(name, caption, ...)

## S4 method for signature 'character'
new_code_block_table(name, ...)

## S4 method for signature 'code_block'
call_command(x)
```

Arguments

value	The value for the slot.
language	...
codes	...
args	...
prettey	...
fun_prettey	...
name	...
caption	...
...	...

Slots

codes ...

command_name ...

command_function ...

command_args ...

See Also

command-class

Other call_commands: ggset-class, report-class, section-class

Examples

```
## Not run:
new('code_block', ...)

## End(Not run)
## Not run:
new('code_block_table', ...)

## End(Not run)
## Not run:
new('code_block_figure', ...)

## End(Not run)
## Not run:
new_code_block(...)

## End(Not run)
## Not run:
new_code_block_figure(...)

## End(Not run)
## Not run:
new_code_block_table(...)

## End(Not run)
## Not run:
call_command(...)

## End(Not run)
```

`collate_data,ANY,character,function-method`
...

Description

...

`collate_data()`: get the default parameters for the method `collate_data`.

`collate_data(x, ...)`: use the default parameters whatever 'missing' while performing the method `collate_data`.

...

Usage

```
## S4 method for signature 'ANY,character,`function`'
collate_data(x, subscript, fun_collate, ...)

## S4 method for signature 'missing,missing,missing'
```

```
collate_data()

## S4 method for signature 'ANY,ANY,ANY'
collate_data(x, subscript, fun_collate, ...)

## S4 method for signature
## 'ANY,
##   project_metadata,
##   character,
##   missing,
##   missing,
##   missing,
##   missing,
##   missing'
read_data(x, project_metadata, subscript)

## S4 method for signature
## 'missing,
##   missing,
##   character,
##   character,
##   character,
##   character,
##   `function`,
##   `function`'
read_data(subscript, path, .features_id, .candidates_id, fun_read, fun_format)
```

Arguments

x	...
subscript	...
fun_collate	...
...	...
project_metadata	...
path	...
.features_id	...
.candidates_id	...
fun_read	...
fun_format	...

Details

...

Value

...

Examples

```
## Not run:
collate_data(...)

## End(Not run)
## Not run:
read_data(...)

## End(Not run)
```

---

command-class ...

Description

...

command_name, command_name<-: getter and setter for the command_name slot of the object.

command_function, command_function<-: getter and setter for the command_function slot of the object.

command_args, command_args<-: getter and setter for the command_args slot of the object.

new_command: ...

call_command: ...

Usage

```
## S4 method for signature 'command'
show(object)

## S4 method for signature 'command'
command_name(x)

## S4 replacement method for signature 'command'
command_name(x) <- value

## S4 method for signature 'command'
command_function(x)

## S4 replacement method for signature 'command'
command_function(x) <- value

## S4 method for signature 'command'
command_args(x)

## S4 replacement method for signature 'command'
command_args(x) <- value
```

```
## S4 method for signature '`function`,character'
new_command(fun, ..., name)

## S4 method for signature '`function`,missing'
new_command(fun, ..., name)

## S4 method for signature 'command'
call_command(x)
```

Arguments

value	The value for the slot.
fun	...
...	...
name	...

Slots

command_name ...

command_function ...

command_args ...

Examples

```
## Not run:
new('command', ...)

## End(Not run)
## Not run:
new_command(...)

## End(Not run)
## Not run:
call_command(...)

## End(Not run)
```

---

compute_spectral_similarity,mcnebula,logical,logical,missing,missing-method

...

Description

...

compute_spectral_similarity(): get the default parameters for the method compute_spectral_similarity.

compute_spectral_similarity(x, ...): use the default parameters whatever 'missing' while performing the method compute_spectral_similarity.

Usage

```
## S4 method for signature 'mcnebula,logical,logical,missing,missing'
compute_spectral_similarity(x, within_nebula, recompute)

## S4 method for signature 'missing,missing,missing,missing,missing'
compute_spectral_similarity()

## S4 method for signature 'mcnebula,ANY,ANY,ANY,ANY'
compute_spectral_similarity(x, within_nebula, recompute, sp1, sp2)

## S4 method for signature
## 'missing,missing,missing,lightSpectrum,lightSpectrum'
compute_spectral_similarity(sp1, sp2)

## S4 method for signature 'missing,missing,missing,data.frame,data.frame'
compute_spectral_similarity(sp1, sp2)
```

Arguments

x	...
within_nebula	...
recompute	...
sp1	...
sp2	...

Details

...

Value

...

Examples

```
## Not run:
compute_spectral_similarity(...)

## End(Not run)
```

`create_child_layouts,mcnebula,ANY,ANY,ANY,ANY,ANY,ANY-method`
...

Description

...

`create_child_layouts(x, ...)`: use the default parameters whatever 'missing' while performing the method `create_child_layouts`.

`create_child_layouts()`: get the function for generating default parameters for the method `create_child_layouts`.

Usage

```
## S4 method for signature 'mcnebula,ANY,ANY,ANY,ANY,ANY,ANY'
create_child_layouts(
  x,
  ggraph_layouts,
  seeds,
  grid_layout,
  viewports,
  panel_viewport,
  legend_viewport
)

## S4 method for signature
## 'missing,missing,missing,missing,missing,missing,missing'
create_child_layouts()
```

Arguments

x	...
ggraph_layouts	...
seeds	...
grid_layout	...
viewports	...
panel_viewport	...
legend_viewport	...

Details

...

Value

...

Examples

```
## Not run:
create_child_layouts(...)

## End(Not run)
```

`create_child_nebulae,mcnebula,numeric,numeric,logical-method`
...

Description

...

`create_child_nebulae()`: get the default parameters for the method `create_child_nebulae`.

`create_child_nebulae(x, ...)`: use the default parameters whatever 'missing' while performing the method `create_child_nebulae`.

Usage

```
## S4 method for signature 'mcnebula,numeric,numeric,logical'
create_child_nebulae(x, edge_cutoff, max_edge_number, use_tracer)

## S4 method for signature 'missing,missing,missing,missing'
create_child_nebulae()

## S4 method for signature 'mcnebula,ANY,ANY,ANY'
create_child_nebulae(x, edge_cutoff, max_edge_number, use_tracer)
```

Arguments

`x`	...
`edge_cutoff`	...
`max_edge_number`	...

Details

...

Value

...

Examples

```
## Not run:
create_child_nebulae(...)

## End(Not run)
```

---

create_features_annotation,mcnebula,missing,missing-method
...

Description

...

Usage

```
## S4 method for signature 'mcnebula,missing,missing'
create_features_annotation(x)

## S4 method for signature 'mcnebula,data.frame,numeric'
create_features_annotation(x, extra_data, column)

## S4 method for signature 'mcnebula,data.frame,missing'
create_features_annotation(x, extra_data)
```

Arguments

x	...
extra_data	...
column	...

Details

...

Value

...

Examples

```
## Not run:
create_features_annotation(...)

## End(Not run)
```

create_hierarchy,mcnebula,function-method
...

Description

...

`create_hierarchy()`: get the default parameters for the method `create_hierarchy`.

`create_hierarchy(x, ...)`: use the default parameters whatever 'missing' while performing the method `create_hierarchy`.

Usage

```
## S4 method for signature 'mcnebula,`function`'
create_hierarchy(x, fun_organize)

## S4 method for signature 'missing,missing'
create_hierarchy()

## S4 method for signature 'mcnebula,ANY'
create_hierarchy(x, fun_organize)
```

Arguments

x	...
fun_organize	...

Details

...

Value

...

Examples

```
## Not run:
create_hierarchy(...)

## End(Not run)
```

`create_nebula_index,mcnebula,logical-method` ...

Description

...

`create_nebula_index()`: get the default parameters for the method `create_nebula_index`.

`create_nebula_index(x, ...)`: use the default parameters whatever 'missing' while performing the method `create_nebula_index`.

Usage

```
## S4 method for signature 'mcnebula,logical'
create_nebula_index(x, force)

## S4 method for signature 'missing,missing'
create_nebula_index()

## S4 method for signature 'mcnebula,ANY'
create_nebula_index(x, force)
```

Arguments

x	...
force	...

Details

...

Value

...

Examples

```
## Not run:
create_nebula_index(...)

## End(Not run)
```

create_parent_layout,mcnebula,character,numeric-method
...

Description

...

`create_parent_layout()`: get the default parameters for the method `create_parent_layout`.

`create_parent_layout(x, ...)`: use the default parameters whatever 'missing' while performing the method `create_parent_layout`.

Usage

```
## S4 method for signature 'mcnebula,character,numeric'
create_parent_layout(x, ggraph_layout, seed)

## S4 method for signature 'missing,missing,missing'
create_parent_layout()

## S4 method for signature 'mcnebula,ANY,ANY'
create_parent_layout(x, ggraph_layout, seed)
```

Arguments

x	...
ggraph_layout	...
seed	...

Details

...

Value

...

Examples

```
## Not run:
create_parent_layout(...)

## End(Not run)
```

`create_parent_nebula,mcnebula,numeric,logical-method` ...

Description

...

`create_parent_nebula()`: get the default parameters for the method `create_parent_nebula`.

`create_parent_nebula(x, ...)`: use the default parameters whatever 'missing' while performing the method `create_parent_nebula`.

Usage

```
## S4 method for signature 'mcnebula,numeric,logical'
create_parent_nebula(x, edge_cutoff, remove_isolate)

## S4 method for signature 'mcnebula,missing,missing'
create_parent_nebula(x)

## S4 method for signature 'mcnebula,numeric,missing'
create_parent_nebula(x, edge_cutoff)
```

Arguments

`x`	...
`edge_cutoff`	...
`remove_isolate`	...

Details

...

Value

...

Examples

```
## Not run:
create_parent_nebula(...)

## End(Not run)
```

create_reference,mcnebula,ANY,ANY,ANY,ANY,logical,ANY-method
...

Description

...

Usage

```
## S4 method for signature 'mcnebula,ANY,ANY,ANY,ANY,logical,ANY'
create_reference(x, from, subscript, data, columns, fill, MoreArgs)

## S4 method for signature
## 'mcnebula,missing,missing,missing,missing,missing,missing'
create_reference(x)

## S4 method for signature
## 'mcnebula,character,missing,missing,missing,missing,missing'
create_reference(x, from)

## S4 method for signature
## 'mcnebula,missing,character,missing,missing,missing,missing'
create_reference(x, subscript)

## S4 method for signature
## 'mcnebula,missing,missing,data.frame,character,missing,missing'
create_reference(x, data, columns)

## S4 method for signature
## 'mcnebula,missing,missing,data.frame,integer,missing,missing'
create_reference(x, data, columns)

## S4 method for signature
## 'mcnebula,missing,missing,data.frame,missing,missing,missing'
create_reference(x, data)
```

Arguments

x	...
from	...
subscript	...
data	...
columns	...
fill	...
MoreArgs	...

Details

...

Value

...

Examples

```
## Not run:
create_reference(...)

## End(Not run)
```

`create_stardust_classes,mcnebula,numeric,numeric,logical,logical-method`
...

Description

...

`create_stardust_classes()`: get the default parameters for the method `create_stardust_classes`.

`create_stardust_classes(x, ...)`: use the default parameters whatever 'missing' while performing the method `create_stardust_classes`.

Usage

```
## S4 method for signature 'mcnebula,numeric,numeric,logical,logical'
create_stardust_classes(
  x,
  pp.threashold,
  hierarchy_priority,
  position_isomerism,
  inherit_dataset
)

## S4 method for signature 'missing,missing,missing,missing,missing'
create_stardust_classes()

## S4 method for signature 'mcnebula,ANY,ANY,ANY,ANY'
create_stardust_classes(
  x,
  pp.threashold,
  hierarchy_priority,
  position_isomerism,
  inherit_dataset
)
```

Arguments

x	...
pp.threashold	...
hierarchy_priority	...
position_isomerism	...
inherit_dataset	...

Details

...

Value

...

Examples

```
## Not run:
create_stardust_classes(...)

## End(Not run)
```

`cross_filter_stardust,missing-method` ...

Description

`cross_filter_stardust()`: get the default parameters for the method `cross_filter_stardust`.

`cross_filter_stardust(x, ...)`: use the default parameters whatever 'missing' while performing the method `cross_filter_stardust`.

`cross_filter_stardust` include 3 parts: `cross_filter_quantity`,

...

...

...

Usage

```
## S4 method for signature 'missing'
cross_filter_stardust()

## S4 method for signature 'mcnebula'
cross_filter_stardust(
  x,
  min_number,
  max_ratio,
  types,
  cutoff,
  tolerance,
  hierarchy_range,
  identical_factor
)

## S4 method for signature 'mcnebula,numeric,numeric'
cross_filter_quantity(x, min_number, max_ratio)

## S4 method for signature 'mcnebula,character,numeric,numeric'
cross_filter_score(x, types, cutoff, tolerance)

## S4 method for signature 'mcnebula,numeric,numeric'
cross_filter_identical(x, hierarchy_range, identical_factor)
```

Arguments

x	...
min_number	...
max_ratio	...
types	...
cutoff	...
tolerance	...
hierarchy_range	...
identical_factor	...

cross_filter_score, cross_filter_identical.

Details

...

...

...

Value

...

...

...

Examples

```
## Not run:
cross_filter_quantity(...)

## End(Not run)
## Not run:
cross_filter_score(...)

## End(Not run)
## Not run:
cross_filter_identical(...)

## End(Not run)
```

`dataset-class` *Share slots and methods for classes inherite from VIRTUAL_dataset*

Description

...

`dataset`, `dataset<-`: getter and setter for the `dataset` slot of the object.

Usage

```
## S4 method for signature 'ANY'
dataset(x)

## S4 replacement method for signature 'ANY'
dataset(x) <- value
```

Arguments

`value`	The value for the slot.

Slots

`dataset` ...

See Also

Other datasets: `mcn_dataset-class`, `project_dataset-class`

draw_nodes,mcnebula,character,character,logical,logical,logical,logical-method
...

Description

...

draw_nodes(): get the function for generating default parameters for the method draw_nodes.

draw_nodes(x, ...): use the default parameters whatever 'missing' while performing the method draw_nodes.

show_node(): get the default parameters for the method show_node.

...

show_node(x, ...): use the default parameters whatever 'missing' while performing the method show_node.

FUNCTION_DESCRIPTION

Usage

```
## S4 method for signature
## 'mcnebula,character,character,logical,logical,logical,logical'
draw_nodes(
  x,
  nebula_name,
  nodes_color,
  add_id_text,
  add_structure,
  add_ppcp,
  add_ration
)

## S4 method for signature
## 'missing,missing,missing,missing,missing,missing,missing'
draw_nodes()

## S4 method for signature 'mcnebula,character,ANY,ANY,ANY,ANY,ANY'
draw_nodes(
  x,
  nebula_name,
  nodes_color,
  add_id_text,
  add_structure,
  add_ppcp,
  add_ration
)
```

```
## S4 method for signature 'missing,missing,missing,missing'
show_node()

## S4 method for signature 'ANY,character,ANY,ANY'
show_node(x, .features_id, panel_viewport, legend_viewport)

ggset_activate_nodes(
  x,
  .features_id,
  nodes_color = "#FFF9F2",
  add_ppcp = T,
  add_ration = T
)
```

Arguments

x	...
nebula_name	...
nodes_color	...
add_id_text	...
add_structure	...
add_ppcp	...
add_ration	...
.features_id	...
panel_viewport	...
legend_viewport	...

Details

...

...

DETAILS

Value

...

...

OUTPUT_DESCRIPTION

Examples

```
## Not run:
draw_nodes(...)

## End(Not run)
```

```
## Not run:
show_node(...)

## End(Not run)
## Not run:
if(interactive()){
 #EXAMPLE1
 }

## End(Not run)
```

---

draw_structures,mcnebula,character-method
...

Description

...

...

Usage

```
## S4 method for signature 'mcnebula,character'
draw_structures(x, nebula_name)

## S4 method for signature 'ANY,character'
show_structure(x, .features_id)
```

Arguments

x	...
nebula_name	...
.features_id	...

Details

...

Value

...

Examples

```
## Not run:
draw_structures(...)

## End(Not run)
## Not run:
show_structure(...)

## End(Not run)
```

`export-class` *Share slots and methods for classes inherite from VIRTUAL_export*

Description

...

`export_name`, `export_name<-`: getter and setter for the `export_name` slot of the object.

`export_path`, `export_path<-`: getter and setter for the `export_path` slot of the object.

Usage

```
## S4 method for signature 'ANY'
export_name(x)

## S4 replacement method for signature 'ANY'
export_name(x) <- value

## S4 method for signature 'ANY'
export_path(x)

## S4 replacement method for signature 'ANY'
export_path(x) <- value
```

Arguments

`value`	The value for the slot.

Slots

`export_path` ...

`export_name` ...

filter_formula,mcnebula,function,logical-method
...

Description

...

filter_formula(): get the default parameters for the method filter_formula.

filter_formula(x, ...): use the default parameters whatever 'missing' while performing the method filter_formula.

Usage

```
## S4 method for signature 'mcnebula,`function`,logical'
filter_formula(x, fun_filter, ..., by_reference)

## S4 method for signature 'missing,missing,missing'
filter_formula()

## S4 method for signature 'mcnebula,ANY,ANY'
filter_formula(x, fun_filter, ..., by_reference)
```

Arguments

param	...

Details

...

Value

...

Examples

```
## Not run:
filter_formula(...)

## End(Not run)
```

filter_msframe,msframe,function,formula-method
...

Description

...

Usage

```
## S4 method for signature 'msframe,`function`,formula'
filter_msframe(x, fun_filter, f, ...)
```

Arguments

x	...
fun_filter	...
f	...
...	...

Details

...

Value

...

Examples

```
## Not run:
filter_msframe(...)

## End(Not run)
```

filter_ppcp,mcnebula,function,logical-method
...

Description

...

`filter_ppcp()`: get the default parameters for the method `filter_ppcp`.

`filter_ppcp(x, ...)`: use the default parameters whatever 'missing' while performing the method `filter_ppcp`.

Usage

```
## S4 method for signature 'mcnebula,`function`,logical'
filter_ppcp(x, fun_filter, ..., by_reference)

## S4 method for signature 'missing,missing,missing'
filter_ppcp()

## S4 method for signature 'mcnebula,ANY,ANY'
filter_ppcp(x, fun_filter, ..., by_reference)
```

Arguments

param	...

Details

...

Value

...

Examples

```
## Not run:
filter_ppcp(...)

## End(Not run)
```

`filter_structure,missing,missing,missing-method`
...

Description

`filter_structure()`: get the default parameters for the method `filter_structure`.

`filter_structure(x, ...)`: use the default parameters whatever 'missing' while performing the method `filter_structure`.

...

Usage

```
## S4 method for signature 'missing,missing,missing'
filter_structure()

## S4 method for signature 'mcnebula,ANY,ANY'
filter_structure(x, fun_filter, ..., by_reference)
```

```
## S4 method for signature 'mcnebula,`function`,logical'
filter_structure(x, fun_filter, ..., by_reference)
```

Arguments

x	mcnebula object.
fun_filter	function. e.g., dplyr::filter(), dplyr::slice() head()...
...	parameters pass to 'fun_filter'.
by_reference	...

Details

...

Value

...

Examples

```
## Not run:
filter_structure(...)

## End(Not run)
```

---

fun_modify ...

Description

...

modify_default_child: ...

modify_set_labs_and_unify_scale_limits: ...

modify_annotate_child: ...

modify_rm_legend: ...

modify_set_margin: ...

modify_unify_scale_limits: ...

modify_set_labs: ...

Usage

```
modify_default_child(ggset, x)

modify_set_labs_and_unify_scale_limits(ggset, x)

modify_annotate_child(ggset, x)

modify_rm_legend(ggset)

modify_set_margin(ggset, margin = grid::unit(rep(-8, 4), "lines"))

modify_unify_scale_limits(ggset, x)

modify_set_labs(ggset, x)
```

Arguments

ggset	...
x	...

Details

...

---

ggset-class ...

Description

...

show_layers: ...

new_ggset: ...

mutate_layer: ...

call_command: plot as 'ggplot' object.

Usage

```
## S4 method for signature 'ggset'
show_layers(x)

## S4 method for signature 'ANY'
new_ggset(...)

## S4 method for signature 'ggset,numeric'
mutate_layer(x, layer, ...)
```

```
## S4 method for signature 'ANY,character'
mutate_layer(x, layer, ...)

## S4 method for signature 'ggset'
call_command(x)
```

Arguments

x	...
...	...
layer	...

Slots

layers ...

See Also

Other layerSets: layerSet-class, report-class

Other call_commands: code_block-class, report-class, section-class

Examples

```
## Not run:
new('ggset', ...)

## End(Not run)
## Not run:
show_layers(...)

## End(Not run)
## Not run:
new_ggset(...)

## End(Not run)
## Not run:
mutate_layer(...)

## End(Not run)
```

---

history_rblock,numeric,missing,missing,numeric-method

...

Description

...

`history_rblock()`: get the default parameters for the method `history_rblock`.

`history_rblock(x, ...)`: use the default parameters whatever 'missing' while performing the method `history_rblock`.

Usage

```
## S4 method for signature 'numeric,missing,missing,numeric'
history_rblock(nrow, exclude)

## S4 method for signature 'missing,missing,missing,missing'
history_rblock()

## S4 method for signature 'numeric,ANY,ANY,ANY'
history_rblock(nrow, pattern_start, pattern_end, exclude)

## S4 method for signature 'missing,character,character,ANY'
history_rblock(pattern_start, pattern_end, exclude)
```

Arguments

`nrow`	...
`exclude`	...
`pattern_start`	...
`pattern_end`	...

Details

...

Value

...

See Also

`report-class`, `code_block-class`...

Examples

```
## Not run:
history_rblock(...)

## End(Not run)
```

include_figure,character,character,character-method
...

Description

...

Usage

```
## S4 method for signature 'character,character,character'
include_figure(file, name, caption)
```

Arguments

file	...
name	...
caption	...

Details

...

Value

...

See Also

report-class, code_block-class...

Examples

```
## Not run:
include_figure(...)

## End(Not run)
```

include_table,data.frame,character,character-method
...

Description

...

Usage

```
## S4 method for signature 'data.frame,character,character'
include_table(data, name, caption)
```

Arguments

data	...
name	...
caption	...

Details

...

Value

...

Examples

```
## Not run:
include_table(...)

## End(Not run)
```

initialize_mcnebula,mcnebula,ANY-method
...

Description

...

...

Usage

```
## S4 method for signature 'mcnebula,ANY'
initialize_mcnebula(x, sirius_version, sirius_project, output_directory)

## S4 method for signature 'melody,ANY'
initialize_mcnebula(x)
```

Arguments

x	melody object.
sirius_version	character. e.g., "sirius.v4".
sirius_project	character. The path of SIRIUS project space.
output_directory	character. The path for output.

Details

...

...

Value

mcnebula object.

melody object.

See Also

ggsci::pal_simpsons(), ggsci::pal_igv(), ggsci::pal_ucscgb(), ggsci::pal_d3()...

Examples

```
## Not run:
initialize_mcnebula(...)

## End(Not run)
## Not run:
initialize_mcnebula(...)

## End(Not run)
```

`layerSet-class` *Share slots and methods for classes inherite from VIRTUAL_layerSet*

Description

...

`layers`, `layers<-`: getter and setter for the `layers` slot of the object.

`add_layers`: ...

`delete_layers`: ...

`move_layers`: ...

Usage

```
## S4 method for signature 'layerSet'
layers(x)

## S4 replacement method for signature 'layerSet'
layers(x) <- value

## S4 method for signature 'layerSet'
show(object)

## S4 method for signature 'layerSet'
add_layers(x, ...)

## S4 method for signature 'layerSet,numeric'
delete_layers(x, layers)

## S4 method for signature 'layerSet,numeric,numeric'
move_layers(x, from, to)
```

Arguments

`x`	...
`value`	The value for the slot.
`...`	...
`layers`	...
`from`	...
`to`	...

Slots

`layers` ...

See Also

Other layerSets: ggset-class, report-class

Examples

```
## Not run:
add_layers(...)

## End(Not run)
## Not run:
delete_layers(...)

## End(Not run)
## Not run:
move_layers(...)

## End(Not run)
```

---

mcnebula-class ...

Description

...

latest(x, slot, subscript): get the data in slot (mcn_dataset(object) or prject_dataset(object)) and format as 'tbl'.

latest(): get the default parameters for the method latest.

latest(x, ...): use the default parameters whatever 'missing' while performing the method latest.

creation_time, creation_time<-: getter and setter for the creation_time slot of the object.

ion_mode, ion_mode<-: getter and setter for the ion_mode slot of the object.

palette_set, palette_gradient, palette_stat, palette_col: fast channel to obtain the downstream slot. For palette_set, e.g., getter for the palette_set slot in sub-object of melody slot of the object. palette_set(melody(object)) equals to palette_set(object).

reference: fast channel to obtain the downstream slot, getter for the reference slot in sub-object of mcn_dataset slot of the object. reference(mcn_dataset(object)) equals to reference(object).

specific_candidate, hierarchy, stardust_classes, nebula_index, spectral_similarity, features_annotation, features_quantification, sample_metadata: fast channel to obtain data (mostly 'tbl' or 'data.frame') inside the downstream slot ('list'). e.g., getter for the data named specific_candidate in reference slot (a 'list') in sub-object of mcn_dataset slot of the object. reference(mcn_dataset(object))$specific_candidate equals to specific_candidate(object).

spectral_similarity<-, features_quantification<-, sample_metadata<-: fast channel to replace data (mostly 'tbl' or 'data.frame') inside the downstream slot ('list'). e.g., setter for the data named spectral_similarity in reference slot (a 'list') in sub-object of mcn_dataset slot of the

object. `reference(mcn_dataset(object))$spectral_similarity<-` similar to `spectral_similarity(object)<-`. But the latter not only replace and also validate.

`classification`: fast channel to obtain data deeply inside the downstream slot ('list'), getter for the data named `".canopus"` in `dataset` slot (a 'list') in sub-object of `project_dataset` slot of the object. `tibble::as_tibble(entity(dataset(project_dataset(object))$.canopus))` equals to `classification(object)`.

Usage

```
## S4 method for signature 'mcnebula'
show(object)

## S4 method for signature 'mcnebula,character,ANY'
latest(x, slot, subscript)

## S4 method for signature 'missing,missing,missing'
latest()

## S4 method for signature 'mcnebula,ANY,ANY'
latest(x, slot, subscript)

## S4 method for signature 'mcnebula'
creation_time(x)

## S4 replacement method for signature 'mcnebula'
creation_time(x) <- value

## S4 method for signature 'mcnebula'
ion_mode(x)

## S4 replacement method for signature 'mcnebula'
ion_mode(x) <- value

## S4 method for signature 'mcnebula'
palette_set(x)

## S4 method for signature 'mcnebula'
palette_gradient(x)

## S4 method for signature 'mcnebula'
palette_stat(x)

## S4 method for signature 'mcnebula'
palette_col(x)

## S4 method for signature 'mcnebula'
palette_label(x)
```

```
## S4 method for signature 'mcnebula'
reference(x)

## S4 method for signature 'mcnebula'
specific_candidate(x)

## S4 method for signature 'mcnebula'
hierarchy(x)

## S4 method for signature 'mcnebula'
stardust_classes(x)

## S4 method for signature 'mcnebula'
nebula_index(x)

## S4 method for signature 'mcnebula'
spectral_similarity(x)

## S4 replacement method for signature 'mcnebula'
spectral_similarity(x) <- value

## S4 method for signature 'mcnebula'
features_annotation(x)

## S4 method for signature 'mcnebula'
features_quantification(x)

## S4 replacement method for signature 'mcnebula'
features_quantification(x) <- value

## S4 method for signature 'mcnebula'
sample_metadata(x)

## S4 replacement method for signature 'mcnebula'
sample_metadata(x) <- value

## S4 method for signature 'mcnebula'
classification(x)
```

Arguments

x	mcnebula object
slot	Character. Slot name.
subscript	numeric or character. The sequence or name for dataset in the 'list'.
value	The value for the slot.

Slots

creation_time ...

ion_mode ...

melody ...

mcn_dataset ...

statistic_set ...

project_version ...

project_path ...

project_conformation ...

project_metadata ...

project_api ...

project_dataset ...

parent_nebula ...

child_nebulae ...

export_path ...

export_name ...

See Also

tibble::as_tibble()

Other nebulae: nebula-class

Other latests: mcn_dataset-class, msframe-class, project_dataset-class

Other subscripts: msframe-class, subscript-class

Examples

```
## Not run:
new('mcnebula', ...)

## End(Not run)
## Not run:
latest(x)
latest(x, "project_dataset")
latest(x, "mcn_dataset")

## End(Not run)
```

MCnebula2 ...

Description

...

Arguments

...	...

Details

...

---

mcn_dataset-class ...

Description

...

mcn_dataset, mcn_dataset<-: getter and setter for the mcn_dataset slot of the object.

latest: get the first data in dataset slot and format as "tbl".

extract_mcnset: For fast extract data in object which containing mcn_dataset slot. Normally not used.

Usage

```
## S4 method for signature 'ANY'
mcn_dataset(x)

## S4 replacement method for signature 'ANY'
mcn_dataset(x) <- value

## S4 method for signature 'mcn_dataset,ANY,ANY'
latest(x)

## S4 method for signature 'ANY,character'
extract_mcnset(x, subscript)
```

Arguments

x	...
value	The value for the slot.
subscript	...

Slots

dataset ...

reference ...

backtrack ...

See Also

Other datasets: dataset-class, project_dataset-class

Other latests: mcnebula-class, msframe-class, project_dataset-class

Examples

```
## Not run:
new('mcn_dataset', ...)

## End(Not run)
## Not run:
latest(...)

## End(Not run)
## Not run:
extract_mcnset(...)

## End(Not run)
```

---

melody-class ...

Description

...

melody, melody<-: getter and setter for the melody slot of the object.

palette_set, palette_set<-: getter and setter for the palette_set slot of the object.

palette_gradient, palette_gradient<-: getter and setter for the palette_gradient slot of the object.

palette_stat, palette_stat<-: getter and setter for the palette_stat slot of the object.

palette_col, palette_col<-: getter and setter for the palette_col slot of the object.

palette_label, palette_label<-: getter and setter for the palette_label slot of the object.

Usage

```
## S4 method for signature 'melody'
show(object)

## S4 method for signature 'ANY'
melody(x)

## S4 replacement method for signature 'ANY'
melody(x) <- value

## S4 method for signature 'melody'
palette_set(x)

## S4 replacement method for signature 'melody'
palette_set(x) <- value

## S4 method for signature 'melody'
palette_gradient(x)

## S4 replacement method for signature 'melody'
palette_gradient(x) <- value

## S4 method for signature 'melody'
palette_stat(x)

## S4 replacement method for signature 'melody'
palette_stat(x) <- value

## S4 method for signature 'melody'
palette_col(x)

## S4 replacement method for signature 'melody'
palette_col(x) <- value

## S4 method for signature 'melody'
palette_label(x)

## S4 replacement method for signature 'melody'
palette_label(x) <- value
```

Arguments

value	The value for the slot.

Slots

palette_set ...

palette_gradient ...

palette_stat ...

palette_col ...

palette_label ...

See Also

ggsci::pal_simpsons(), ggsci::pal_igv(), ggsci::pal_ucscgb(), ggsci::pal_d3()...

Examples

```
## Not run:
new('melody', ...)

## End(Not run)
```

---

msframe-class ...

Description

...

msframe, msframe<-: getter and setter for the msframe slot of the object.

latest: get data inside entity(object) and format as 'tbl'.

entity, entity<-: getter and setter for the entity slot of the object.

...

Usage

```
## S4 method for signature 'msframe'
show(object)

## S4 method for signature 'ANY'
msframe(x)

## S4 replacement method for signature 'ANY'
msframe(x) <- value

## S4 method for signature 'msframe,ANY,ANY'
latest(x)

## S4 method for signature 'msframe'
entity(x)

## S4 replacement method for signature 'msframe'
entity(x) <- value
```

```
## S4 method for signature 'msframe,missing,missing,missing,missing,`function`'
format_msframe(x, fun_format)

## S4 method for signature
## 'data.frame,missing,missing,missing,missing,`function`'
format_msframe(x, fun_format)

## S4 method for signature
## 'msframe,character,missing,character,missing,missing'
format_msframe(x, names, types)

## S4 method for signature 'msframe,missing,missing,missing,missing,missing'
format_msframe(x)

## S4 method for signature
## 'msframe,missing,`function`,missing,`function`,missing'
format_msframe(x, fun_names, fun_types)

## S4 method for signature 'msframe,`function`,missing'
filter_msframe(x, fun_filter, f, ...)
```

Arguments

x	...
value	The value for the slot.
fun_format	...
names	...
types	...
fun_names	...
fun_types	...

Details

...

Slots

entity ...

subscript ...

See Also

tibble::as_tibble()

Other subscripts: mcnebula-class, subscript-class

Other latests: mcn_dataset-class, mcnebula-class, project_dataset-class

Examples

```
## Not run:
new('msframe', ...)

## End(Not run)
## Not run:
latest(...)

## End(Not run)
## Not run:
format_msframe(...)

## End(Not run)
```

---

nebula-class ...

Description

...

...

...

parent_nebula, parent_nebula<-: getter and setter for the parent_nebula slot of the object.

child_nebulae, child_nebulae<-: getter and setter for the child_nebulae slot of the object.

igraph, igraph<-: getter and setter for the igraph slot of the object.

tbl_graph, tbl_graph<-: getter and setter for the tbl_graph slot of the object.

layout_ggraph, layout_ggraph<-: getter and setter for the layout_ggraph slot of the object.

grid_layout, grid_layout<-: getter and setter for the grid_layout slot of the object.

viewports, viewports<-: getter and setter for the viewports slot of the object.

ggset, ggset<-: getter and setter for the ggset slot of the object.

panel_viewport, panel_viewport<-: getter and setter for the panel_viewport slot of the object.

legend_viewport, legend_viewport<-: getter and setter for the legend_viewport slot of the object.

structures_grob, structures_grob<-: getter and setter for the structures_grob slot of the object.

nodes_ggset, nodes_ggset<-: getter and setter for the nodes_ggset slot of the object.

nodes_grob, nodes_grob<-: getter and setter for the nodes_grob slot of the object.

ppcp_data, ppcp_data<-: getter and setter for the ppcp_data slot of the object.

ration_data, ration_data<-: getter and setter for the ration_data slot of the object.

ggset_annotate, ggset_annotate<-: getter and setter for the ggset_annotate slot of the object.

Usage

```
## S4 method for signature 'parent_nebula'
show(object)

## S4 method for signature 'child_nebulae'
show(object)

## S4 method for signature 'ANY'
parent_nebula(x)

## S4 replacement method for signature 'ANY'
parent_nebula(x) <- value

## S4 method for signature 'ANY'
child_nebulae(x)

## S4 replacement method for signature 'ANY'
child_nebulae(x) <- value

## S4 method for signature 'ANY'
igraph(x)

## S4 replacement method for signature 'ANY'
igraph(x) <- value

## S4 method for signature 'ANY'
tbl_graph(x)

## S4 replacement method for signature 'ANY'
tbl_graph(x) <- value

## S4 method for signature 'ANY'
layout_ggraph(x)

## S4 replacement method for signature 'ANY'
layout_ggraph(x) <- value

## S4 method for signature 'ANY'
grid_layout(x)

## S4 replacement method for signature 'ANY'
grid_layout(x) <- value

## S4 method for signature 'ANY'
viewports(x)

## S4 replacement method for signature 'ANY'
viewports(x) <- value
```

```
## S4 method for signature 'ANY'
ggset(x)

## S4 replacement method for signature 'ANY'
ggset(x) <- value

## S4 method for signature 'ANY'
panel_viewport(x)

## S4 replacement method for signature 'ANY'
panel_viewport(x) <- value

## S4 method for signature 'ANY'
legend_viewport(x)

## S4 replacement method for signature 'ANY'
legend_viewport(x) <- value

## S4 method for signature 'ANY'
structures_grob(x)

## S4 replacement method for signature 'ANY'
structures_grob(x) <- value

## S4 method for signature 'ANY'
nodes_ggset(x)

## S4 replacement method for signature 'ANY'
nodes_ggset(x) <- value

## S4 method for signature 'ANY'
nodes_grob(x)

## S4 replacement method for signature 'ANY'
nodes_grob(x) <- value

## S4 method for signature 'ANY'
ppcp_data(x)

## S4 replacement method for signature 'ANY'
ppcp_data(x) <- value

## S4 method for signature 'ANY'
ration_data(x)

## S4 replacement method for signature 'ANY'
ration_data(x) <- value
```

```
## S4 method for signature 'ANY'
ggset_annotate(x)

## S4 replacement method for signature 'ANY'
ggset_annotate(x) <- value
```

Arguments

value	The value for the slot.

Slots

parent_nebula ...

child_nebulae ...

igraph ...

tbl_graph ...

layout_ggraph ...

grid_layout ...

viewports ...

panel_viewport ...

legend_viewport ...

ggset ...

structures_grob ...

nodes_ggset ...

nodes_grob ...

ppcp_data ...

ration_data ...

ggset_annotate ...

See Also

Other nebulae: mcnebula-class

Examples

```
## Not run:
new('nebula', ...)

## End(Not run)
## Not run:
new('parent_nebula', ...)

## End(Not run)
## Not run:
new('child_nebulae', ...)
```

```
## End(Not run)
```

---

project-class ...

Description

...

project_version, project_version<-: getter and setter for the project_version slot of the object.

project_path, project_path<-: getter and setter for the project_path slot of the object.

file_name, file_api, attribute_name: fast channel to obtain the downstream slot. e.g., getter for the file_name slot in sub-object of project_conformation slot of the object. file_name(project_conformation(obj equals to file_name(object).

project_metadata: fast channel to obtain the downstream slot, getter for the project_metadata slot in sub-object of project_metadata slot of the object. project_metadata(project_metadata(object)) equals to project_metadata(object).

methods_read, methods_format, methods_match: fast channel to obtain the downstream slot. e.g., getter for the methods_read slot in sub-object of project_api slot of the object. methods_read(project_api(object equals to methods_read(object).

match.candidates_id, match.features_id: fast channel to obtain data (mostly 'tbl' or 'data.frame') inside the downstream slot ('list'), getter for the data named match.candidates_id in methods_match slot (a 'list') in sub-object of project_api slot of the object. methods_match(project_api(object))$match.candidates equals to match.candidates_id(object).

get_upper_dir_subscript: ...

Usage

```
## S4 method for signature 'ANY'
project_version(x)

## S4 replacement method for signature 'ANY'
project_version(x) <- value

## S4 method for signature 'ANY'
project_path(x)

## S4 replacement method for signature 'ANY'
project_path(x) <- value

## S4 method for signature 'ANY'
file_name(x)

## S4 method for signature 'ANY'
```

```
file_api(x)

## S4 method for signature 'ANY'
attribute_name(x)

## S4 method for signature 'ANY'
metadata(x)

## S4 method for signature 'ANY'
methods_read(x)

## S4 method for signature 'ANY'
methods_format(x)

## S4 method for signature 'ANY'
methods_match(x)

## S4 method for signature 'ANY'
match.candidates_id(x)

## S4 method for signature 'ANY'
match.features_id(x)

## S4 method for signature 'ANY,character,missing'
get_upper_dir_subscript(x, subscript)
```

Arguments

x	...
value	The value for the slot.
subscript	...

Slots

project_version ...

project_path ...

project_conformation ...

project_metadata ...

project_api ...

project_dataset ...

See Also

Other projects: project_api-class, project_conformation-class, project_dataset-class, project_metadata-class

Examples

```
## Not run:
new('project', ...)

## End(Not run)
## Not run:
get_upper_dir_subscript(...)

## End(Not run)
```

---

project_api-class ...

Description

...

project_api, project_api<-: getter and setter for the project_api slot of the object.

methods_read, methods_read<-: getter and setter for the methods_read slot of the object.

methods_format, methods_format<-: getter and setter for the methods_format slot of the object.

methods_match, methods_match<-: getter and setter for the methods_match slot of the object.

Usage

```
## S4 method for signature 'project_api'
show(object)

## S4 method for signature 'ANY'
project_api(x)

## S4 replacement method for signature 'ANY'
project_api(x) <- value

## S4 method for signature 'project_api'
methods_read(x)

## S4 replacement method for signature 'project_api'
methods_read(x) <- value

## S4 method for signature 'project_api'
methods_format(x)

## S4 replacement method for signature 'project_api'
methods_format(x) <- value

## S4 method for signature 'project_api'
methods_match(x)
```

```
## S4 replacement method for signature 'project_api'
methods_match(x) <- value
```

Arguments

value	The value for the slot.

Slots

`methods_read` ...

`methods_format` ...

`methods_match` ...

See Also

Other projects: `project-class`, `project_conformation-class`, `project_dataset-class`, `project_metadata-class`

Examples

```
## Not run:
new('project_api', ...)

## End(Not run)
```

---

project_conformation-class

...

Description

...

`project_conformation`, `project_conformation<-`: getter and setter for the `project_conformation` slot of the object.

`file_name`, `file_name<-`: getter and setter for the `file_name` slot of the object.

`file_api`, `file_api<-`: getter and setter for the `file_api` slot of the object.

`attribute_name`, `attribute_name<-`: getter and setter for the `attribute_name` slot of the object.

Usage

```
## S4 method for signature 'project_conformation'
show(object)

## S4 method for signature 'ANY'
project_conformation(x)
```

```
## S4 replacement method for signature 'ANY'
project_conformation(x) <- value

## S4 method for signature 'project_conformation'
file_name(x)

## S4 replacement method for signature 'project_conformation'
file_name(x) <- value

## S4 method for signature 'project_conformation'
file_api(x)

## S4 replacement method for signature 'project_conformation'
file_api(x) <- value

## S4 method for signature 'project_conformation'
attribute_name(x)

## S4 replacement method for signature 'project_conformation'
attribute_name(x) <- value
```

Arguments

value	The value for the slot.

Slots

`file_name` ...

`file_api` ...

`attribute_name` ...

See Also

Other projects: `project-class`, `project_api-class`, `project_dataset-class`, `project_metadata-class`

Examples

```
## Not run:
new('project_conformation', ...)

## End(Not run)
```

`project_dataset-class` ...

Description

...

`project_dataset`, `project_dataset<-`: getter and setter for the `project_dataset` slot of the object.

`latest`: get the first data in `dataset` slot ('list') and format as 'tbl'. The `latest(object)` equals to `tibble::as_tibble(entity(dataset(object)[[1]]))`

`extract_rawset`: For fast extract data in object which containing `project_dataset` slot. Normally not used.

Usage

```
## S4 method for signature 'ANY'
project_dataset(x)

## S4 replacement method for signature 'ANY'
project_dataset(x) <- value

## S4 method for signature 'project_dataset,ANY,ANY'
latest(x)

## S4 method for signature 'ANY,character,ANY'
extract_rawset(x, subscript)

## S4 method for signature 'ANY,character,`function`'
extract_rawset(x, subscript, fun_collate, ...)
```

Arguments

`x`	an object contain `project_dataset` slot.
`value`	The value for the slot.
`subscript`	character. Specified the data in `dataset` slot in `project_dataset` slot. See `VIRTUAL_subscript-class`.
`fun_collate`	function. If the specified data not exists in `dataset` slot, it will be used to collate data. This parameter is not for normal use.
`...`	parameters passed to 'fun_collate'.

Slots

`dataset` ...

See Also

tibble::as_tibble()

Other projects: project-class, project_api-class, project_conformation-class, project_metadata-class

Other datasets: dataset-class, mcn_dataset-class

Other latests: mcn_dataset-class, mcnebula-class, msframe-class

Examples

```
## Not run:
new('project_dataset', ...)

## End(Not run)
## Not run:
latest(object)

## End(Not run)
## Not run:
extract_rawset(object, ".f3_fingerid")

## End(Not run)
```

---

project_metadata-class

...

Description

...

project_metadata, project_metadata<-: getter and setter for the project_metadata slot of the object.

latest: get the first data in metadata slot and format as "tbl".

metadata, metadata<-: getter and setter for the metadata slot of the object.

add_dataset: ...

extract_metadata: ...

get_metadata: ...

Usage

```
## S4 method for signature 'project_metadata'
show(object)

## S4 method for signature 'ANY'
project_metadata(x)

## S4 replacement method for signature 'ANY'
```

```
project_metadata(x) <- value

## S4 method for signature 'project_metadata,ANY,ANY'
latest(x)

## S4 method for signature 'project_metadata'
metadata(x)

## S4 replacement method for signature 'project_metadata'
metadata(x) <- value

## S4 method for signature 'project_metadata,list'
add_dataset(x, list)

## S4 method for signature 'ANY,character'
extract_metadata(x, subscript)

## S4 method for signature 'ANY,character,ANY,ANY,ANY'
get_metadata(x, subscript)

## S4 method for signature
## 'missing,character,project_metadata,project_conformation,character'
get_metadata(subscript, project_metadata, project_conformation, path)
```

Arguments

x	...
value	The value for the slot.
list	...
subscript	...
project_metadata	...
project_conformation	...
path	...

Slots

metadata ...

See Also

Other projects: project-class, project_api-class, project_conformation-class, project_dataset-class

Examples

```
## Not run:
new('project_metadata', ...)
```

```
## End(Not run)
## Not run:
latest(...)

## End(Not run)
## Not run:
add_dataset(...)

## End(Not run)
## Not run:
extract_metadata(...)

## End(Not run)
## Not run:
get_metadata(...)

## End(Not run)
```

`reference-class` *Share slots and methods for classes inherite from VIRTUAL_reference*

Description

...

`reference`, `reference<-`: getter and setter for the `reference` slot of the object.

Usage

```
## S4 method for signature 'ANY'
reference(x)

## S4 replacement method for signature 'ANY'
reference(x) <- value
```

Arguments

`value`	The value for the slot.

Slots

`reference` ...

report-class ...

Description

...

show_layers: show layers slots in a pretty and readable style.

yaml, yaml<-: getter and setter for the yaml slot of the object.

new_report(): get the default parameters for the method new_report.

new_report(x, ...): use the default parameters whatever 'missing' while performing the method new_report.

new_report: ...

call_command: Format 'report' object as character, which can be output by writeLines() function as '.Rmd' file and than use rmarkdown::render as pdf, html, or other format files.

Usage

```
## S4 method for signature 'report'
show_layers(x)

## S4 method for signature 'ANY'
yaml(x)

## S4 replacement method for signature 'ANY'
yaml(x) <- value

## S4 method for signature 'missing'
new_report(..., yaml)

## S4 method for signature 'character'
new_report(..., yaml)

## S4 method for signature 'report'
call_command(x)
```

Arguments

value	The value for the slot.
...	...
yaml	...

Slots

yaml ...

See Also

writeLines(), rmarkdown::render()...

Other layerSets: ggset-class, layerSet-class

Other call_commands: code_block-class, ggset-class, section-class

Examples

```
## Not run:
new('report', ...)

## End(Not run)
## Not run:
show_layers(...)

## End(Not run)
## Not run:
new_report(...)

## End(Not run)
## Not run:
call_command(...)

## End(Not run)
```

---

section-class ...

Description

...

...

heading, heading<-: getter and setter for the heading slot of the object.

level, level<-: getter and setter for the level slot of the object.

new_heading: ...

call_command: Format 'heading' object as character.

paragraph, paragraph<-: getter and setter for the paragraph slot of the object.

new_section(): get the default parameters for the method new_section.

new_section(x, ...): use the default parameters whatever 'missing' while performing the method new_section.

new_section: ...

call_command: Format 'section' object as character.

Usage

```
## S4 method for signature 'ANY'
heading(x)

## S4 replacement method for signature 'ANY'
heading(x) <- value

## S4 method for signature 'heading'
level(x)

## S4 replacement method for signature 'heading'
level(x) <- value

## S4 method for signature 'character,numeric'
new_heading(heading, level)

## S4 method for signature 'heading'
call_command(x)

## S4 method for signature 'section'
paragraph(x)

## S4 replacement method for signature 'section'
paragraph(x) <- value

## S4 method for signature 'missing,missing,missing,missing'
new_section(heading, level, paragraph, code_block)

## S4 method for signature 'ANY,ANY,ANY,ANY'
new_section(heading, level, paragraph, code_block)

## S4 method for signature 'character,numeric,character,maybe_code_block'
new_section(heading, level, paragraph, code_block)

## S4 method for signature '`NULL`,numeric,character,maybe_code_block'
new_section(heading, level, paragraph, code_block)

## S4 method for signature 'section'
call_command(x)

## S4 method for signature '`NULL`'
call_command(x)
```

Arguments

value	The value for the slot.
heading	...
level	...

paragraph ...

code_block ...

Slots

heading ...

paragraph ...

code_block ...

.Data ...

level ...

See Also

Other call_commands: code_block-class, ggset-class, report-class

Examples

```
## Not run:
new('section', ...)

## End(Not run)
## Not run:
new('heading', ...)

## End(Not run)
## Not run:
new_heading(...)

## End(Not run)
## Not run:
call_command(...)

## End(Not run)
## Not run:
new_section(...)

## End(Not run)
## Not run:
call_command(...)

## End(Not run)
```

---

set_nodes_color,mcnebula,character-method

...

Description

...

`set_nodes_color()`: list the recommended attribute for the method `set_nodes_color`.

Usage

```
## S4 method for signature 'mcnebula,character'
set_nodes_color(x, attribute)

## S4 method for signature 'mcnebula,missing'
set_nodes_color(x)
```

Arguments

`param`	...

Details

...

Value

...

See Also

`activate_nebulae()`, `visualize()`...

Examples

```
## Not run:
set_nodes_color(...)

## End(Not run)
```

`set_ppcp_data,mcnebula,character-method`

...

Description

...

`set_ppcp_data()`: get the function for generating default parameters for the method `set_ppcp_data`.

`set_ppcp_data(x, ...)`: use the default parameters whatever 'missing' while performing the method `set_ppcp_data`.

Usage

```
## S4 method for signature 'mcnebula,character'
set_ppcp_data(x, classes)

## S4 method for signature 'missing,missing'
set_ppcp_data()

## S4 method for signature 'mcnebula,ANY'
set_ppcp_data(x, classes)
```

Arguments

x	...
classes	...

Examples

```
## Not run:
set_ppcp_data(...)

## End(Not run)
```

`set_ration_data,mcnebula,logical-method` ...

Description

...

`set_ration_data()`: get the default parameters for the method `set_ration_data`.

`set_ration_data(x, ...)`: use the default parameters whatever 'missing' while performing the method `set_ration_data`.

Usage

```
## S4 method for signature 'mcnebula,logical'
set_ration_data(x, mean)

## S4 method for signature 'missing,missing'
set_ration_data()

## S4 method for signature 'mcnebula,ANY'
set_ration_data(x, mean)
```

Arguments

x	...
mean	...

Examples

```
## Not run:
set_ration_data(...)

## End(Not run)
```

---

set_tracer,mcnebula,character,character,character-method

...

Description

...

set_tracer(): get the function for generating default parameters for the method set_tracer.

set_tracer(x, ...): use the default parameters whatever 'missing' while performing the method set_tracer.

Usage

```
## S4 method for signature 'mcnebula,character,character,character'
set_tracer(x, .features_id, colors, rest)

## S4 method for signature 'missing,missing,missing,missing'
set_tracer()

## S4 method for signature 'mcnebula,ANY,ANY,ANY'
set_tracer(x, .features_id, colors, rest)
```

Arguments

x	...
.features_id	...
colors	...
rest	...

Details

...

Value

...

See Also

create_nebula_index()

Examples

```
## Not run:
set_tracer(...)

## End(Not run)
```

---

statistic_set-class ...

Description

...

statistic_set, statistic_set<-: getter and setter for the statistic_set slot of the object.

design_matrix, design_matrix<-: getter and setter for the design_matrix slot of the object.

contrast_matrix, contrast_matrix<-: getter and setter for the contrast_matrix slot of the object.

top_table, top_table<-: getter and setter for the top_table slot of the object.

Usage

```
## S4 method for signature 'ANY'
statistic_set(x)

## S4 replacement method for signature 'ANY'
statistic_set(x) <- value

## S4 method for signature 'ANY'
design_matrix(x)

## S4 replacement method for signature 'ANY'
design_matrix(x) <- value

## S4 method for signature 'ANY'
contrast_matrix(x)

## S4 replacement method for signature 'ANY'
contrast_matrix(x) <- value

## S4 method for signature 'ANY'
top_table(x)

## S4 replacement method for signature 'ANY'
top_table(x) <- value
```

Arguments

value	The value for the slot.

Slots

design_matrix ...

contrast_matrix ...

dataset ...

top_table ...

Examples

```
## Not run:
new('statistic_set', ...)

## End(Not run)
```

---

subscript-class *Share slots and methods for classes inherite from VIRTUAL_subscript*

Description

...

subscript, subscript<-: getter and setter for the subscript slot of the object.

Usage

```
## S4 method for signature 'ANY'
subscript(x)

## S4 replacement method for signature 'ANY'
subscript(x) <- value
```

Arguments

value	The value for the slot.

Slots

subscript ...

See Also

Other subscripts: mcnebula-class, msframe-class

visualize,mcnebula,character,function,missing-method
...

Description

...

`visualize(x)`: get a 'tbl' about child-nebulae candidates for `visualize` methods to visualize.

`visualize()`: get the default parameters for the method `visualize`.

`visualize(x, ...)`: use the default parameters whatever 'missing' while performing the method `visualize`.

`visualize_all()`: get the default parameters for the method `visualize_all`.

`visualize_all(x, ...)`: use the default parameters whatever 'missing' while performing the method `visualize_all`.

...

Usage

```
## S4 method for signature 'mcnebula,character,`function`,missing'
visualize(x, item, fun_modify)

## S4 method for signature 'mcnebula,missing,ANY,missing'
visualize(x, fun_modify)

## S4 method for signature 'missing,missing,missing,missing'
visualize()

## S4 method for signature 'mcnebula,ANY,ANY,ANY'
visualize(x, item, fun_modify, annotate)

## S4 method for signature 'mcnebula,numeric,`function`,missing'
visualize(x, item, fun_modify)

## S4 method for signature 'mcnebula,numeric_or_character,`function`,logical'
visualize(x, item, fun_modify, annotate)

## S4 method for signature 'missing,missing,missing,missing'
visualize_all()

## S4 method for signature 'mcnebula,ANY,ANY,ANY'
visualize_all(x, newpage, fun_modify, legend_hierarchy)

## S4 method for signature 'mcnebula,logical,`function`,logical'
visualize_all(x, newpage, fun_modify, legend_hierarchy)
```

Arguments

x	...
item	...
fun_modify	...
annotate	...
newpage	...
legend_hierarchy	...

Details

...

Examples

```
## Not run:
visualize(...)

## End(Not run)
## Not run:
visualize_all(...)

## End(Not run)
```

Index