

Package ‘hera’

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Title Companion to the 'xeus-r' 'jupyter' Kernel

Version 0.1.1

Description Set of R functions to be coupled with the 'xeus-r' 'jupyter' kernel in order to drive execution of code in notebook input cells, how R objects are to be displayed in output cells, and handle two way communication with the front end through comms.

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Encoding UTF-8

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Imports cli, evaluate, glue, IRdisplay, jsonlite, R6, repr, rlang, tools, utils

URL <https://github.com/jupyter-xeus/xeus-r>

BugReports <https://github.com/jupyter-xeus/xeus-r/issues>

NeedsCompilation no

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cell_options	<i>Options for current jupyter cell</i>
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Description

Options for current jupyter cell

Usage

cell_options(...)

Arguments

... options to set locally to the notebook cell. Forwarded to `rlang::local_options()`.

Examples

```
## Not run:
cell_options(repr.plot.bg = "gray")

## End(Not run)
```

clear_output	<i>Clear output</i>
--------------	---------------------

Description

Clear output

Usage

clear_output(wait = FALSE)

Arguments

wait Should this wait

Value

NULL invisibly

Examples

```
## Not run:
  clear_output()

## End(Not run)
```

Comm	<i>Comm class</i>
------	-------------------

Description

Comm class

Comm class

Active bindings

id id of the comm. read only.

target_name name of the target for this comm

Methods**Public methods:**

- [Comm\\$new\(\)](#)
- [Comm\\$open\(\)](#)
- [Comm\\$close\(\)](#)
- [Comm\\$send\(\)](#)
- [Comm\\$on_close\(\)](#)
- [Comm\\$on_message\(\)](#)
- [Comm\\$print\(\)](#)
- [Comm\\$clone\(\)](#)

Method new():

Usage:

```
Comm$new(xp, description = "")
```

Arguments:

xp external pointer to an instance of the C++ class 'xeus::xcomm'

description description of this comm

Method open():

Usage:

```
Comm$open(data = NULL, metadata = NULL)
```

Arguments:

data data
metadata metadata

Method close():

Usage:

Comm\$close(data = NULL, metadata = NULL)

Arguments:

data data
metadata metadata

Method send():

Usage:

Comm\$send(data = NULL, metadata = NULL)

Arguments:

data data
metadata metadata

Method on_close():

Usage:

Comm\$on_close(handler)

Arguments:

handler function to call when the comm is closed

Method on_message():

Usage:

Comm\$on_message(handler)

Arguments:

handler function to call when receiving a message

Method print():

Usage:

Comm\$print()

Returns: information about the comm

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

Usage:

Comm\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

CommManagerClass	<i>Comm Manager class</i>
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Description

Instance of the [CommManagerClass](#) class.

Usage

```
CommManager
```

Format

An object of class CommManagerClass (inherits from R6) of length 11.

Methods

Public methods:

- [CommManagerClass\\$new\(\)](#)
- [CommManagerClass\\$register_comm_target\(\)](#)
- [CommManagerClass\\$unregister_comm_target\(\)](#)
- [CommManagerClass\\$new_comm\(\)](#)
- [CommManagerClass\\$comms\(\)](#)
- [CommManagerClass\\$target_callback\(\)](#)
- [CommManagerClass\\$preserve\(\)](#)
- [CommManagerClass\\$release\(\)](#)
- [CommManagerClass\\$get_comm_info\(\)](#)
- [CommManagerClass\\$clone\(\)](#)

Method `new()`:

Usage:

```
CommManagerClass$new(..., error_call = caller_env())
```

Arguments:

... currently unused

error_call see [rlang::args_error_context\(\)](#)

Method `register_comm_target()`:

Usage:

```
CommManagerClass$register_comm_target(  
  target_name,  
  callback = function(comm, message) {  
  }  
)
```

Arguments:

target_name name of the comm target, e.g. "jupyter.widgets"
callback callback function taking two arguments 'comm' and 'message'.

Method unregister_comm_target():

Usage:

CommManagerClass\$unregister_comm_target(target_name)

Arguments:

target_name name of the comm target

Method new_comm():

Usage:

CommManagerClass\$new_comm(target_name, description = "")

Arguments:

target_name name of the target

description description of the comm

Method comms():

Usage:

CommManagerClass\$comms()

Returns: the list of currently open comms

Method target_callback():

Usage:

CommManagerClass\$target_callback(target_name)

Arguments:

target_name name of the comm target

Returns: the callback for that target name

Method preserve():

Usage:

CommManagerClass\$preserve(comm)

Arguments:

comm [Comm](#) instance to preserve

Method release():

Usage:

CommManagerClass\$release(comm)

Arguments:

comm [Comm](#) instance to release

Method get_comm_info():

Usage:

CommManagerClass\$get_comm_info(target_name = NULL)

Arguments:

target_name name of the target to get info about all comm opens. If NULL, info for comms for all targets are returned.

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

complete

Code completion

Description

Code completion

Usage

```
complete(code, cursor_pos = nchar(code))
```

Arguments

code	R code to complete
cursor_pos	position of the cursor

Value

a list that contains potential completions as the first item

Examples

```
complete("rnorm(")
```

display_data	<i>Display data</i>
--------------	---------------------

Description

Display data

Usage

display_data(data = NULL, metadata = NULL)

Arguments

data	data to display
metadata	potential metadata

Examples

```
## Not run:  
display_data(mtcars)  
  
## End(Not run)
```

is_xeusr	<i>Is this a running xeusr jupyter kernel</i>
----------	---

Description

Is this a running xeusr jupyter kernel

Usage

is_xeusr()

Value

TRUE if the current session is running in a xeusr kernel

Examples

```
is_xeusr()
```

mime_bundle	<i>bundle an object</i>
-------------	-------------------------

Description

bundle an object

Usage

```
mime_bundle(x, mimetypes = mime_types(x), ...)
```

Arguments

x	an object
mimetypes	mime types
...	extra currently unused parameters

See Also

IRdisplay::prepare_mimebundle which this currently wraps around

Examples

```
mime_bundle(letters)
```

mime_types	<i>MIME types supported by an object</i>
------------	--

Description

MIME types supported by an object

Usage

```
mime_types(x)
```

Arguments

x	an object
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Value

a character vector of its supported mime types

Examples

```
mime_types(letters)
mime_types(mtcars)
```

View	<i>View</i>
------	-------------

Description

View

Usage

```
View(x, title)
```

Arguments

x	something to display
title	title of the display

Examples

```
## Not run:
  View(mtcars)

## End(Not run)
```

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