

Package ‘IRdisplay’

September 24, 2018

Title 'Jupyter' Display Machinery

Description An interface to the rich display capabilities of 'Jupyter' front-ends (e.g. 'Jupyter Notebook') <<https://jupyter.org>>.

Designed to be used from a running 'IRkernel' session <<https://irkernel.github.io>>.

Version 0.6

Depends R (>= 3.0.1)

Suggests testthat, withr

Imports methods, repr

License MIT + file LICENSE

LazyData true

Encoding UTF-8

RoxygenNote 6.1.0

NeedsCompilation no

Author Thomas Kluyver [aut, cph],
Philipp Angerer [aut, cph, cre],
Jan Schulz [aut, cph]

Maintainer Philipp Angerer <phil.angerer@gmail.com>

Repository CRAN

Date/Publication 2018-09-24 08:40:03 UTC

R topics documented:

display	2
display_<image>	3
display_<text>	4
IRdisplay-options	4
publish_mimebundle	5

Index	6
--------------	----------

`display`*Create and use multiple available reprs*

Description

Both functions create a mimebundle for multiple reprs. `display` proceeds to publish it using [publish_mimebundle](#). `prepare_mimebundle` returns it (see *Value* for details)

Usage

```
display(obj)
```

```
prepare_mimebundle(obj,  
  mimetypes = getOption("jupyter.display_mimetypes"), metadata = NULL,  
  error_handler = stop)
```

Arguments

<code>obj</code>	The object to create representations for
<code>mimetypes</code>	Mimetypes to create reprs for. The defaults are defined by the option <code>jupyter.display_mimetypes</code> . (see: IRdisplay-options)
<code>metadata</code>	Metadata to attach to the result (can be expanded by additional metadata)
<code>error_handler</code>	Function used when errors in individual reprs occur

Value

`prepare_mimebundle` returns a list with items corresponding to the parameters of [publish_mimebundle](#) (data and metadata)

See Also

[publish_mimebundle](#)

Examples

```
bundle <- prepare_mimebundle(diag(3))  
  
## Not run: ## (Run inside of an IRkernel)  
display(help(display))  
## End(Not run)
```

display_<image> *Display a specific image output*

Description

Either data or file must be passed.

Usage

```
display_png(data = NULL, file = NULL, width = NULL, height = NULL)
```

```
display_jpeg(data = NULL, file = NULL, width = NULL, height = NULL)
```

```
display_pdf(data = NULL, file = NULL, width = NULL, height = NULL)
```

```
display_svg(data = NULL, file = NULL, width = NULL, height = NULL)
```

Arguments

data	The data as a raw vector (character vector for display_svg)
file	The path to a file or a connection containing the content
width	The width to display the image
height	The height to display the image

See Also

[display_<text>](#)

Examples

```
## Not run: ## (Run inside of an IRkernel)
display_png(file = 'image.png')
display_svg('
<svg xmlns="http://www.w3.org/2000/svg" viewBox="-1 -1 2 2">
  <circle r="1"/>
</svg>
')
display_jpeg(file = url('https://dummyimage.com/600x400.jpg', 'wb'), width = 100)
## End(Not run)
```

`display_<text>` *Display a specific textual output*

Description

Either data or file must be passed.

Usage

```
display_json(data = NULL, file = NULL)
```

```
display_javascript(data = NULL, file = NULL)
```

```
display_html(data = NULL, file = NULL)
```

```
display_markdown(data = NULL, file = NULL)
```

```
display_latex(data = NULL, file = NULL)
```

Arguments

<code>data</code>	The code or markup content as a character vector
<code>file</code>	The path to a file or a connection containing the content

See Also

[display_<image>](#)

Examples

```
## Not run: ## (Run inside of an IRkernel)
display_text('Just text')
display_markdown('[MD](http://commonmark.org) *formatted*')
display_javascript('execute(this)')
## End(Not run)
```

IRdisplay-options *IRdisplay options*

Description

Some [options](#) to control the formats [display](#) and [prepare_mimebundle](#) emit, and the function they use to display them.

Usage

```
irdisplay_option_defaults
```

Format

An object of class `list` of length 2.

Options

`jupyter.display_mimetypes` The default is all MIME types supported by Jupyter.

`jupyter.base_display_func` Function used by `display` and all `display_<text>/display_<image>` functions. Has the signature `function(data, metadata = NULL)`. Per default emits a [warning](#), and is set when running an IRkernel.

`publish_mimebundle` *Display data by mimetype, with optional alternative representations.*

Description

Calls the function stored as option value of `jupyter.base_display_func`. (see: [IRdisplay-options](#))

Usage

```
publish_mimebundle(data, metadata = NULL)
```

Arguments

`data` A named list mapping mimetypes to content ([character](#) or [raw](#) vectors)

`metadata` A named list mapping mimetypes to named lists of metadata, e.g. `list('image/png' = list(width = 5`

See Also

[prepare_mimebundle](#)

Examples

```
## Not run: ## (Run inside of an IRkernel)
publish_mimebundle(list('text/html' = '<h1>Hi!</h1>'))
publish_mimebundle(
  list('image/svg+xml' = '<svg xmlns="http://www.w3.org/2000/svg"><circle r="100"/></svg>'),
  list('image/svg+xml' = list(width = 100, height = 100)))
## End(Not run)
```

Index

*Topic **datasets**

IRdisplay-options, 4

character, 3–5

connection, 3, 4

display, 2, 4, 5

display_<image>, 3, 4, 5

display_<text>, 3, 4, 5

display_html (display_<text>), 4

display_javascript (display_<text>), 4

display_jpeg (display_<image>), 3

display_json (display_<text>), 4

display_latex (display_<text>), 4

display_markdown (display_<text>), 4

display_pdf (display_<image>), 3

display_png (display_<image>), 3

display_svg (display_<image>), 3

IRdisplay-options, 2, 4, 5

irdisplay_option_defaults

(IRdisplay-options), 4

options, 4

prepare_mimebundle, 4, 5

prepare_mimebundle (display), 2

publish_mimebundle, 2, 5

raw, 3, 5

warning, 5