

# Package ‘IRdisplay’

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**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>>.

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**Depends** R (>= 3.0.1)

**Suggests** testthat, withr

**Imports** methods, repr

**License** MIT + file LICENSE

**LazyData** true

**Encoding** UTF-8

**RoxygenNote** 6.1.1

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`display`*Create and use multiple available reprs*

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### 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, ..., mimetypes = getOption("jupyter.display_mimetypes"),
        error_handler = stop)

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: <a href="#">IRdisplay-options</a> )
<code>error_handler</code>	Function used when errors in individual reprs occur
<code>metadata, ...</code>	Metadata to attach to the result (can be expanded by additional metadata)

### 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 <a href="#">raw</a> vector ( <a href="#">character</a> vector for display_svg)
file	The path to a file or a <a href="#">connection</a> 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

`data`            The code or markup content as a [character](#) vector  
`file`            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)
```

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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.

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`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)
```

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