

Package ‘IsoplotRgui’

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Title Web Interface to 'IsoplotR'

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Description Provides a graphical user interface to the 'IsoplotR' package for radiometric geochronology. The GUI runs in an internet browser and can either be used offline, or hosted on a server to provide online access to the 'IsoplotR' toolbox.

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Depends R (>= 3.0.0)

Imports IsoplotR (>= 4.2), grDevices (>= 3.6.2), httpuv (>= 1.5.4),
jsonlite (>= 1.6.1), later (>= 1.0)

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URL <https://www.ucl.ac.uk/~ucfbpve/isoplotr/>,
<https://github.com/pvermees/IsoplotRgui/>

RoxygenNote 7.1.1

Encoding UTF-8

NeedsCompilation no

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daemon	<i>Start the IsoplotR GUI without exiting</i>
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Description

Opens a web-browser with a Graphical User Interface (GUI) for the IsoplotR package. This function is intended to be used from Rscript so that Rscript does not terminate and the server stays up.

Usage

```
daemon(port = NULL, host = "127.0.0.1", timeout = 30)
```

Arguments

port	Internet port of the virtual server. If not defined, a random free port will be chosen and the browser will be opened to show the GUI.
host	IP address of the virtual server
timeout	How long (in elapsed time) an operation may take before returning with a time-out error. Default: 30 seconds.

Value

This function does not return.

Examples

```
# this function runs indefinitely unless interrupted by the user.  
daemon(3839)
```

encodePlot	<i>Renders a plot as a base64-encoded image</i>
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Description

Renders a plot as a base64-encoded image

Usage

```
encodePlot(device, mimeType, width, height, plotFn)
```

Arguments

device	Graphics device function, such as [grDevices::png] or [grDevices::pdf]
mimeType	Mime type for the data produced by ‘device’
width	Width of the plot in units applicable to ‘device’
height	Height of the plot in units applicable to ‘device’
plotFn	Function to call to perform the plot

See Also

- [encodePlotAsPng()]
- [encodePlotAsPdf()]

`encodePlotAsPdf` *Renders a plot as a base64-encoded PDF*

Description

The result can be set as the ‘href’ attribute of an ‘a’ element in HTML to allow the PDF to be downloaded (also set a ‘download’ attribute to a reasonable filename).

Usage

`encodePlotAsPdf(width, height, plotFn)`

Arguments

width	Width of the plot in inches
height	Height of the plot in inches
plotFn	Function to call to perform the plot

`encodePlotAsPng` *Renders a plot as a base64-encoded PNG*

Description

The result can be set as the ‘src’ attribute of an ‘img’ element in HTML.

Usage

`encodePlotAsPng(width, height, plotFn)`

Arguments

width	Width of the plot in pixels
height	Height of the plot in pixels
plotFn	Function to call to perform the plot

See Also

[rrpcServer()]

IsoplotR

Start the IsoplotR GUI

Description

Opens a web-browser with a Graphical User Interface (GUI) for the IsoplotR package. An online version of the same interface is provided at <https://www.ucl.ac.uk/~ucfbpve/isoplotr/>

Usage

```
IsoplotR(host = "0.0.0.0", port = NULL, timeout = Inf)
```

Arguments

host	IP address of the virtual server, default is 0.0.0.0
port	Internet port of the virtual server. If not defined, a random free port will be chosen and the browser will be opened to show the GUI.
timeout	How long (in wall-clock time) an operation may take before returning with a timeout error. Default: no limit.

Value

server object

Examples

```
IsoplotR()
```

`stopIsoplotR` *Stop an IsoplotR GUI*

Description

Stop an IsoplotR GUI

Usage

```
stopIsoplotR(server = NULL)
```

Arguments

`server` The server (returned by `IsoplotRgui::IsoplotR()`) to stop. If not supplied all servers will be stopped.

Examples

```
s <- IsoplotR()
stopIsoplotR(s)
```

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